THE REPUBLIC OF UGANDA

MINISTRY OF ENERGY AND MINERAL DEVELOPMENT

UGANDA NATIONAL BUREAU OF STANDARDS

OIL AND GAS STANDARDS CATALOGUE

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S/NO.	STANDARD	SCOPE	SECTOR	STATUS	PRICE
	PETROLEUM AND PETROCHEMICAL PRODUCTS				
1.	**US EAS 158:2019, Automotive gasoline (Premium motor spirit) — Specification (3rd Edition)**	This Uganda Standard specifies requirements; and sampling and test methods for automotive gasoline, Premium Motor Spirit (PMS), also commonly known as petrol, for use in spark ignition engines, including those equipped with devices to reduce emitted pollutants. The standard applies to PMS as manufactured, stored, transported and marketed(This standard cancels and replaces US EAS 158:2012, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	25,000
2.	**US EAS 177:2019, Automotive gas oil (automotive diesel) — Specification (3rd Edition)**	This Uganda Standard specifies requirements; and sampling and test methods for Automotive Gas Oil (AGO), automotive diesel as manufactured, stored, transported and marketed(This standard cancels and replaces US EAS 177:2012, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*25,000*

3.	**US 249-1:2019, Engine oil — Performance classifications — Part 1: General**	This Uganda Standard covers classification for crankcase engine lubricating oils, for automotive type internal combustion and spark-ignition engines, two stroke and four-stroke cycle motorcycle engines that employ a crankcase scavenging system(This Uganda Standard, together with US 249-2:2019, US 249-3:2019, US 249-4:2019 and US 249-5:2019, cancels and replaces US 249:1999/EAS159, Engine oil — Specification, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*
4.	**US 249-2:2019, Engine oil — Performance classification — Part 2: API specification for spark ignition (petrol) engine lubricating oils/Amendment 1:2019**	This Uganda Standard specifies performance requirements, sampling and test methods for spark ignition engine lubricating oil of passenger cars, light duty trucks, vans and related equipment meeting or exceeding API service category SJ. It does not cover engine lubricating oil for compression ignition engines, aviation equipment, outboard motors, lawn mowers, railroad locomotives or ocean going vessels(This standard, together with US 249-1:2019, US 249-3:2019, US 249-4:2019 and US 249-5:2019, cancels and replaces US 249:1999/EAS159, Engine oil — Specification, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*25,000*

5.	**US 249-3:2019, Engine oil — Performance classification — Part 3: API Specification for light and heavy duty compression ignition (diesel) engine lubricating oils/ Amendment 1:2019**	This Uganda Standard specifies requirements, sampling and test methods of engine lubricating oil for light and heavy duty naturally aspirated, turbo-charged or super-charged compression-ignition engines, meeting or exceeding API Service Category CH-4This standard does not cover engine lubricating oil for spark ignition engines, aviation equipment, outboard motors, lawn mowers, railroad, locomotives, industrial and marine application(This standard, together with US 249-1:2019, US 249-2:2019, US 249-4:2019 and US 249-5:2019, cancels and replaces US 249:1999/EAS159, Engine oil— Specification, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*
6.	**US 249-4:2019, Engine oil — Performance classification — Part 4: Specification for internal combustion engine lubricating oils used in four- stroke cycle motorcycle gasoline engines and associated drive trains**	This Uganda Standard specifies performance requirements, sampling and test methods for four-stroke cycle spark ignition engines employing a common sump containing the lubricating oil for both the engine and associated drive train (transmission, clutch, starter) of motorcycles, motor scooters, all-terrain vehicles (ATVs) and related equipment(This standard, together with US 249-1:2019, US 249-2:2019, US 249-3:2019 and US 249-5:2019, cancels and replaces US 249:1999/EAS159, Engine oil — Specification, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*

7.	**US 249-5:2019, Engine oil — Performance classification — Part 5: Specification for internal combustion engine lubricating oils used in two- stroke cycle motorcycle gasoline engines and associated drive trains**	This Uganda Standard specifies requirements and test methods for motorcycle engine lubricating oils for two-stroke cycle spark ignition gasoline engines that employ a crankcase scavenging system and are used in transportation and leisure applications. This standard specifies the performance classification of two-stroke cycle gasoline engine oils based on the API classification, JASO and ISO classifications(This standard, together with US 249-1:2019, US 249-2:2019, US 249-3:2019 and US 249-4:2019, cancels and replaces US 249:1999/EAS159, Engine oil— Specification, which has been technically revised)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*25,000*
8.	**US 803:2021, Kerosene (BIK) — Specification (2nd Edition)**	This Uganda Standard specifies requirements, sampling and test methods for kerosene intended for use as an illuminant and as fuel. *(This standard cancels and replaces the first edition, US 803:2008, Kerosene for domestic heating and illuminating (BIK), which has been technically revised*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*15,000*
9.	**US 916:2021, Denatured ethanol for blending with gasolines — Specification (2nd Edition)**	This Uganda Standard specifies requirements, sampling and test methods for nominally anhydrous denatured ethanol intended to be blended with unleaded gasolines at 1 % to 15 % by volume for use as automotive spark-ignition engine fuel. *(This standard cancels and replaces the first edition,US 916:2011, Specification for denatured fuel ethanol as used for blending with gasoline which has been technically revised*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*15,000*

10.	**US 933:2011, Gasohol — Specification for E5 and E10**	This Uganda Standard prescribes the requirements and methods of sampling and test for blends of gasoline with anhydrous ethyl alcohol (denatured fuel ethanol) for use as a fuel in the automobile spark ignition internal combustion engines of vehicles	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*55,000*
11.	**US 946:2011, Specification for biodiesel fuel as used for blending with automotive gas oil**	This Uganda Standard specifies requirements and methods of sampling and testing for 100 % biodiesel as marketed and delivered to be used as a blend component for automotive fuel for diesel engines. This standard applies to the blend of biodiesel and automotive gas oil to be used for automotive diesel engines, as in heavy commercial vehicles, diesel engine vehicles and tractors. It does not cover diesel fuel used in industrial burners or stationary diesel engine.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*45,000*
12.	**US 971:2019, Liquefied Petroleum Gases (LPG) — Specification**	This Uganda Standard specifies requirements, sampling and test methods for those products commonly referred to as liquefied petroleum gases, consisting of commercial propane, commercial butane, and commercial propane butane mixture. This standard is applicable to products intended for use as domestic, commercial and industrial heating (This standard	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*

		cancels and replaces US 971-4: 2014, Liquefied Petroleum Gases (LPG) — Part 4: Specification which has been technically revised)Uganda Standard covers classification of hydraulic fluids used in hydraulic systems			
13.	**US 2159-1:2019, Hydraulic fluid — Performance classification — Part 1: General**	This Uganda Standard covers classification of hydraulic fluids used in hydraulic systems.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*
14.	**US 2159-2:2019, Hydraulic fluid — Performance classification — Part 2: Specifications for categories HH, HL, HM, HV and HG**	This Uganda Standard specifies performance requirements, sampling and test methods for new mineral oil hydraulic fluids of categories classified as HH, HL, HM, HV and HG, and intended for hydraulic systems, particularly for hydrostatic hydraulic fluid power application	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*
15.	**US 2159-3:2019, Hydraulic fluid — Performance classification — Part 3: Specifications for hydraulic fluids in categories HFAE, HFAS, HFB, HFC, HFDR and HFDU**	This Uganda Standard specifies performance requirements, sampling and test methods for unused fire-resistant and less-flammable hydraulic fluids of the categories HFAE, HFAS, HFB, HFC, HFDR and HFDU, and is intended for hydrostatic and hydrodynamic systems in general industrial applications	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*

16.	**US 2159-4:2019, Hydraulic fluid — Performance classification — Part 4: Specifications for hydraulic fluids in categories HETG, HEPG, HEES and HEPR**	This Uganda Standard specifies performance requirements, sampling and test methods for environmentally acceptable hydraulic fluids and is intended for hydraulic systems, particularly hydraulic fluid power systems. This standard stipulates the requirements for environmentally acceptable hydraulic fluids at the time of delivery	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*
17.	**US ISO 8217:2012, Petroleum products — Fuels (class F) — Specifications of marine fuels**	This Uganda Standard specifies the requirements for petroleum fuels for use in marine diesel engines and boilers, prior to appropriate treatment before use. The specifications for fuels in this standard can also be applicable to fuels for stationary diesel engines of the same or similar make and type as those used for marine purposes. This standard specifies four categories of distillate fuel, one of which is for diesel engines for emergency purposes. It also specifies six categories of residual fuel	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*50,000*
18.	**US ISO 8216-1:2005, Petroleum products — Fuels (class F) classification — Part 1: Categories of marine fuels**	This Uganda Standard establishes the detailed classification of marine fuels within class F (petroleum fuels)It is intended to be read in conjunction with US ISO 8216-99	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*50,000*

19.	**US ISO 8216-2:1986, Petroleum products — Fuels (class F) — Classification — Part 2: Categories of gas turbine fuel marine applications**	This Uganda Standard establishes the detailed classification of gas turbine fuels for industrial and marine applications, but excluding aircraft fuels. It should be read in conjunction with ISO 8216/0The fuels in this classification are for use in industrial gas turbines and gas turbines derived from aviation turbines that are used in static and marine applications. The classification includes only fuels that are liquid under atmospheric pressure and at their normal storage temperatures. Petroleum fuels, being the result of the processing of crude oils of diverse origin, cannot be chemically defined, but may be categorized generally within the of this part of US ISO 8216	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*50,000*
20.	**US ISO 8216-99:2002, Petroleum products — Fuels (class F) — Classification — Part 99: General**	This Uganda Standard establishes a general system of classification which applies to petroleum fuels designated by the prefix letter "F" Within class F, five families (designated as categories) of products are defined according to the type of fuel and listed in decreasing order of volatility One category, D, is defined further by subgroups on the basis of volatility and flash point, because of the safety implications of different customary titles for such fuels in different parts of the world	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*50,000*

21.	**US ISO 7941: 1988, Commercial propane and butane — Analysis by gas chromatography**	This Uganda Standard specifies a gas chromatographic method for the quantitative determination of hydrocarbons in liquefied Petroleum gas (LPG), excluding components whose concentrations are below 0% (m/m). It is applicable to the analysis of propane, butane and their commercial mixtures, which may include saturated and unsaturated C2, C3, C4 and C5 hydrocarbons. It does not apply to "online" chromatography	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
22.	**US 2101:2019, Standard Test Method for Determination of Intrinsic Stability of Asphaltene-Containing Residues, Heavy Fuel Oils, and Crude Oils (n-Heptane Phase Separation; Optical Detection)**	This Uganda Standard covers a procedure for quantifying the intrinsic stability of the asphaltenes in an oil by an automatic instrument using an optical device. This test method is applicable to residual products from thermal and hydrocracking processes, to products typical of Specifications D396 Grades No5L, 5H, and 6, and D2880 Grades No3-GT and 4-GT, and to crude oils, providing these products contain 0by mass or greater concentration of asphaltenes	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*

23.	**US 2105: 2019, Standard Test Method for Cloud Point of Petroleum Products and Liquid Fuels (Linear Cooling Rate Method)**	This Uganda Standard covers the description of the determination of the cloud point of petroleum products and biodiesel fuels that are transparent in layers 40 mm in thickness by an automatic instrument using a linear cooling rate. This test method covers the range of temperatures from -60 °C to 49 °C with temperature resolution of 0however, the range of temperatures included in the 1997 inter-laboratory cooperative test program only covered the temperature range of –56 °C to +34 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
24.	**US 2106:2019, Standard Test Method for Cloud Point of Petroleum Products and Liquid Fuels (Constant Cooling Rate Method)**	This Uganda Standard covers the determination of the cloud point of petroleum products and biodiesel fuels that are transparent in layers 40 mm in thickness by an automatic instrument using a constant cooling rate. This test method covers the range of temperatures from −60 °C to +49 °C with temperature resolution of 0however, the range of temperatures included in the 1997 inter-laboratory cooperative test program only covered the temperature range of –56 °C to +34 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
25.	**US 2116:2019, Standard Terminology Relating to Petroleum Products, Liquid Fuels, and Lubricants**	This Uganda Standard covers the compilation of terminology on Petroleum Products, Liquid Fuels, and Lubricants, except that it does not include terms/definitions specific only to the standards in which they appear	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*110,000*

26.	**US 2117:2019, Standard Test Method for Determination of Total Sediment in Residual Fuels**	This Uganda Standard covers the determination of total sediment up to 0% m/m for distillate fuel oils containing residual components and to 0m/m in residual fuel oils having a maximum viscosity of 55 cSt (mm2/s) at 100 °C. Some fuels can exceed the maximum filtration time specified in this test method due to factors other than the presence of significant quantities of insoluble organic or inorganic material. This test method can be used for the assessment of total sediment after regimes of fuel pretreatment designed to accelerate the aging process	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
27.	**US 2118:2019, Standard Practice for Quality Management Systems in Petroleum Products, Liquid Fuels, and Lubricants Testing Laboratories**	This Uganda Standard covers the establishment and maintenance of the essentials of a quality management system in laboratories engaged in the analysis of petroleum products, liquid fuels, and lubricants	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
28.	**US 2119:2019, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications**	This Uganda Standard is intended to assist in the use of uniform methods of indicating the number of digits which are to be considered significant in specification limits, for example, specified maximum values and specified minimum values. Its aim is to outline methods which should aid in clarifying the intended meaning of specification limits with which observed values or calculated test results are compared in determining conformance with specifications	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

29.	**US 2120:2019, Standard Practice for Dealing with Outlying Observations**	This Uganda Standard covers outlying observations in samples and how to test the statistical significance of outliers	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
30.	**US 2040:2019, Standard test method for flash and fire points by Cleveland open cup tester**	This Uganda Standard describes the determination of the flash point and fire point of petroleum products by a manual Cleveland open cup apparatus or an automated Cleveland open cup apparatus	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
31.	**US 2041:2019, Standard test method for foaming characteristics of lubricating oils**	This Uganda Standard covers the determination of the foaming characteristics of lubricating oils at 24 °C and 93Means of empirically rating the foaming tendency and the stability of the foam are described	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
32.	**US 2042:2019, Standard practice for calculating viscosity index from kinematic viscosity at 40 °C and 100 °C**	This Uganda Standard covers the procedures for calculating the viscosity index of petroleum products, such as lubricating oils, and related materials from their kinematic viscosities at 40 °C and 100 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
33.	**US 2043:2019, Standard Test Method for Measuring Viscosity of New and Used Engine Oils at High Shear Rate and High Temperature by Tapered Bearing Simulator Viscometer at 150 °C**	This Uganda Standard covers the laboratory determination of the viscosity of engine oils at 150 °C and 1using a viscometer having a slightly tapered rotor and stator called the Tapered Bearing Simulator (TBS) Viscometer	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
34.	**US 2044:2019, Standard test method for determination of yield stress and apparent viscosity of used engine**	This Uganda Standard covers the measurement of the yield stress and viscosity of engine oils after cooling at controlled rates over a 43 h or 45 h to a final test temperature of –20 °C or –25 °C. The	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

	oils at low temperature	precision is stated for test temperatures –20 °C and –25 °C. The viscosity measurements are made at a shear stress of 525 Pa over a shear rate of 0to 15 s-1This test method is suitable for measurement of viscosities ranging from 4000 mPa·s to >400 000 mPa·s, and is suitable for yield stress measurements of 7 Pa to >350 Pa. This test method is applicable for used diesel oils. The applicability and precision to other used or unused engine oils or to petroleum products other than engine oils has not been determined			
35.	**US 2045:2019, Standard test method for determination of additive elements in lubricating oils by inductively coupled plasma atomic emission spectrometry**	This Uganda Standard covers the quantitative determination of barium, boron, calcium, copper, magnesium, molybdenum, phosphorus, sulfur, and zinc in unused lubricating oils and additive packages	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
36.	**US 2046:2019, Standard test method for evaporation loss of lubricating oils by the Noack method**	The Uganda Standard covers four procedures for determining the evaporation loss of lubricating oils (particularly engine oils)Procedure A uses the Noack evaporative tester equipment; Procedure B uses the automated non-Woods metal Noack evaporative apparatus; Procedure C uses Selby-Noack volatility test equipment, and Procedure D uses the Noack S2 test equipment. The test method relates to one set of operating conditions but may be readily adapted to other conditions when required	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*45,000*

37.	**US 2047:2019, Standard test method for high temperature foaming characteristics of lubricating oils**	This Uganda Standard describes the procedure for determining the foaming characteristics of lubricating oils (specifically transmission fluid and motor oil) at 150 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
38.	**US 2048:2019, Standard test method for determination of high temperature deposits by thermo-oxidation engine oil simulation test**	This Uganda Standard covers the procedure to determine the amount of deposits formed by automotive engine oils utilizing the thermo-oxidation engine oil simulation test (TEOST)An inter-laboratory study has determined it to be applicable over the range from 10 mg to 65 mg total deposits	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
39.	**US 2049:2019, Standard Test Method for Estimation of Engine Oil Volatility by Capillary Gas Chromatography**	This Uganda Standard covers an estimation of the amount of engine oil volatilized at 371 °C (700 °F)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
40.	**US 2050:2019, Standard Test Method for Evaluation of Rust Preventive Characteristics of Automotive Engine Oils**	This Uganda Standard covers a Ball Rust Test (BRT) procedure for evaluating the anti-rust ability of fluid lubricants. The procedure is particularly suitable for the evaluation of automotive engine oils under low-temperature, acidic service conditions	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
41.	**US 2051:2019, Standard Test Method for Evaluation of Automotive Engine Oils for Inhibition of Deposit Formation in a Spark-Ignition Internal Combustion Engine Fueled with Gasoline and Operated Under Low-Temperature,**	This Uganda Standard covers and is commonly referred to as the Sequence VG test, and it has been correlated with vehicles used in stop-and-go service prior to 1996, particularly with regard to sludge and varnish formation. It is one of the test methods required to evaluate oils intended to satisfy the API SL performance category	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*110,000*

	Light-Duty Conditions				
42.	**US 2052:2019, Standard Test Method for Measuring the Effect on Filterability of Engine Oils After Treatment with Water and Dry Ice and a Short (30 min) Heating Time**	This Uganda Standard covers the determination of the tendency of an oil to form a precipitate that can plug an oil filter. It simulates a problem that may be encountered in a new engine run for a short period of time, followed by a long period of storage with some water in the oil	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
43.	**US 2053:2019, Standard test method for the determination of homogeneity and miscibility in automotive engine oils**	This Uganda Standard covers the determination if an automotive engine oil is homogeneous and will remain so, and if it is miscible with certain standard reference oils after being submitted to a prescribed cycle of temperature changes	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

44.	**US 2054:2019, Standard Test Method for Determination of Moderately High Temperature Piston Deposits by Thermo-Oxidation Engine Oil Simulation Test — TEOST MHT**	This Uganda Standard covers the procedure to determine the mass of deposit formed on a specially constructed test rod exposed to repetitive passage of 8of engine oil over the rod in a thin film under oxidative and catalytic conditions at 285 °C. The range of applicability of the Moderately High Temperature Thermo-Oxidation Engine Test (TEOST MHT) test method as derived from an inter-laboratory study is approximately 10 mg to 100 mg. However, experience indicates that deposit values from 1 mg to 150 mg or greater may be obtained	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
45.	**US 2055:2019, Standard Test Method for Evaluation of Automotive Engine Oils in the Sequence IIIG, Spark-Ignition Engine**	This Uganda Standard covers an engine test procedure for evaluating automotive engine oils for certain high-temperature performance characteristics, including oil thickening, varnish deposition, oil consumption, as well as engine wear. Such oils include both single viscosity grade and multiviscosity grade oils that are used in both spark-ignition, gasoline-fueled engines, as well as in diesel engines	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*75,000*

46.	**US 2056:2019, Standard Test Method for Apparent Viscosity of Engine Oils and Base Stocks Between –10 °C and –35 °C Using Cold-Cranking Simulator**	This Uganda Standard covers the laboratory determination of apparent viscosity of engine oils and base stocks by cold cranking simulator (CCS) at temperatures between –10 °C and –35 °C at shear stresses of approximately 50 000 Pa to 100 000 Pa and shear rates of approximately 105 to 104 s–1 for viscosities of approximately 900 mPa·s to 25 000 mPa·s. The range of an instrument is dependent on the instrument model and software version installed	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
47.	**US 2057:2019, Standard Test Method for Low Temperature, Low Shear Rate, Viscosity/Temperature Dependence of Lubricating Oils Using a Temperature-Scanning Technique**	This Uganda Standard covers the measurement of the apparent viscosity of engine oil at low temperatures	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
48.	**US 2058:2019, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry**	This Uganda Standard covers the determination of total sulfur in petroleum and petroleum products that are single-phase and either liquid at ambient conditions, liquefiable with moderate heat, or soluble in hydrocarbon solvents. These materials can include diesel fuel, jet fuel, kerosene, other distillate oil, naphtha, residual oil, lubricating base oil, hydraulic oil, crude oil, unleaded gasoline, gasoline-ethanol blends, and biodiesel	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

49.	**US 2059:2019, Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers —Tension**	This Uganda Standard cover procedures used to evaluate the tensile (tension) properties of vulcanized thermoset rubbers and thermoplastic elastomers. These methods are not applicable to ebonite and similar hard, low elongation materials. The methods appear as follows: Test Method A—Dumbbell and Straight Section Specimens and Test Method B—Cut Ring Specimens	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
50.	**US 2060:2019, Standard Test Method for Rubber Property — Effect of Liquids**	This Uganda Standard covers the required procedures to evaluate the comparative ability of rubber and rubber-like compositions to withstand the effect of liquids. It is designed for testing: (1) specimens of vulcanized rubber cut from standard sheets, (2) specimens cut from fabric coated with vulcanized rubber, or (3) finished articles of commerce. This test method is not applicable to the testing of cellular rubbers, porous compositions, and compressed sheet packing	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
51.	**US 2061:2019, Standard Test Method for Rubber Property — Durometer Hardness**	This Uganda Standard covers twelve types of rubber hardness measurement devices known as durometers: Types A, B, C, D, DO, E, M, O, OO, OOO, OOO-S, and R. The procedure for determining indentation hardness of substances classified as thermoplastic elastomers, vulcanized (thermoset) rubber, elastomeric materials, cellular materials, gel-like materials, and some plastics is also described	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

52.	**US 2062:2019, Standard Test Method for Evaluation of the Ability of Engine Oil to Emulsify Water and Simulated Ed85 Fuel**	This Uganda Standard describes a qualitative procedure to measure the ability of a specific volume of engine oil to emulsify a specific added volume of combined water and simulated Ed85 fuel upon agitation in a high-speed blender and to retain this emulsified state for at least 24 h at temperatures of both 20 °C to 25 °C and –5 °C to 0 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
53.	**US 2063:2019, Standard Test Method for Measuring the Effect on Filterability Of Engine Oils after Treatment with Various Amounts of Water and a long (6-H) Heating Time**	This Uganda Standard covers the determination of the tendency of an oil to form a precipitate that can plug an oil filter. It simulates a problem that may be encountered in a new engine run for a short period of time, followed by a long period of storage with some water in the oil	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
54.	**US 2064:2019, Standard Test Method for Multielement Determination of Used and Unused Lubricating Oils and Base Oils by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES)**	This Uganda Standard covers the determination of additive elements, wear metals, and contaminants in used and unused lubricating oils and base oils by inductively coupled plasma atomic emission spectrometry (ICP-AES)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
55.	**US 2065:2019, Standard Test Method for Bench Oxidation of Engine Oils by ROBO Apparatus**	This Uganda Standard describes a bench procedure to simulate the oil aging encountered in US 2055, the Sequence IIIG engine test method. These aged oils are then tested for kinematic viscosity and for low-temperature pump ability properties as described in the Sequence IIIGA engine test, Appendix X1 of US 2055	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*

56.	**US 2066:2019, Standard Practice for Utilization of Test Data to Determine Conformance with Specifications**	This Uganda Standard covers guidelines and statistical methodologies with which two parties, usually a supplier and a receiver, can compare and combine independently obtained test results to obtain an Assigned Test Value (ATV) for the purpose of resolving a product quality dispute	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
57.	**US 2067:2019, Standard Test Method for Sulfated Ash from Lubricating Oils and Additives**	This Uganda Standard covers the determination of the sulfated ash from unused lubricating oils containing additives and from additive concentrates used in compounding. These additives usually contain one or more of the following metals: barium, calcium, magnesium, zinc, potassium, sodium, and tin. The elements sulfur, phosphorus, and chlorine can also be present in combined form	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
58.	**US 2068:2019, Standard Specification for Fuel System Icing Inhibitors**	This Uganda Standard covers additives for aviation fuels (for example, Specifications D910, D7547, and D1655) used to inhibit ice formation in aircraft fuel systems	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

59.	**US 2069:2019, Standard Test Method for Shear Stability of Polymer Containing Fluids Using a European Diesel Injector Apparatus at 30 Cycles and 90 Cycles**	This Uganda Standard covers the evaluation of the shear stability of polymer-containing fluids. The test method measures the viscosity loss, in mm2/s and percent, at 100 °C of polymer-containing fluids when evaluated by a diesel injector apparatus procedure that uses European diesel injector test equipment. The viscosity loss reflects polymer degradation due to shear at the nozzle Viscosity loss is evaluated after both 30 cycles and 90 cycles of shearing	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
60.	**US 2070:2019, Standard Test Method for Evaluation of Diesel Engine Oils in the T-11 Exhaust Gas Recirculation Diesel Engine**	This Uganda Standard covers an engine test procedure for evaluating diesel engine oils for performance characteristics in a diesel engine equipped with exhaust gas recirculation, including viscosity increase and soot concentrations (loading)This test method is commonly referred to as the Mack T-11	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*45,000*
61.	**US 2071:2019, Standard Test Method for Measuring Viscosity of New and Used Engine Oils at High Shear Rate and High Temperature by Tapered Bearing Simulator Viscometer at 150 °C**	This Uganda Standard covers the laboratory determination of the viscosity of engine oils at 150 °C and 1using a viscometer having a slightly tapered rotor and stator called the Tapered Bearing Simulator (TBS) Viscometer	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

62.	**US 2072:2019, Standard Test Method for Determining Automotive Engine Oil Compatibility with Typical Seal Elastomers**	This Uganda Standard covers quantitative procedures for the evaluation of the compatibility of automotive engine oils with several reference elastomers typical of those used in the sealing materials in contact with these oils Compatibility is evaluated by determining the changes in volume, Durometer A hardness, and tensile properties when the elastomer specimens are immersed in the oil for a specified time and temperature	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
63.	**US 2074:2019, Standard Test Method for Determination of Yield Stress and Apparent Viscosity of Engine Oils at Low Temperature**	This Uganda Standard covers the measurement of the yield stress and viscosity of engine oils after cooling at controlled rates over a period exceeding 45 h to a final test temperature between –10 °C and –40 °C. The precision is stated for test temperatures from –40 °C to –15 °C. The viscosity measurements are made at a shear stress of 525 Pa over a shear rate of 0to 15 s–1The viscosity as measured at this shear stress was found to produce the best correlation between the temperature at which the viscosity reached a critical value and borderline pumping failure temperature in engines	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

64.	**US 2075:2019, Standard Test Method for Shear Stability of Polymer Containing Fluids Using a European Diesel Injector Apparatus**	This Uganda Standard covers the evaluation of the shear stability of polymer-containing fluids. The test method measures the percent viscosity loss at 100 °C of polymer-containing fluids when evaluated by a diesel injector apparatus procedure that uses European diesel injector test equipment. The viscosity loss reflects polymer degradation due to shear at the nozzle	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
65.	**US 2079:2019, Standard Test Method for Measuring Viscosity at High Temperature and High Shear rate by Tapered-Plug Viscometer**	This Uganda Standard covers the laboratory determination of the viscosity of oils at 150 °C and 1 × 106 s–1 and at 100 °C and 1 × 106 s–1, using high shear rate tapered-plug viscometer models BE/C or BS/C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
66.	**US 2082:2019, Standard Test Method for Measuring Apparent Viscosity at High-Temperature and High-Shear Rate by Multicell Capillary Viscometer**	This Uganda Standard covers the laboratory determination of high-temperature high-shear (HTHS) viscosity of engine oils at a temperature of 150 °C using a multicell capillary viscometer containing pressure, temperature, and timing instrumentation. The shear rate for this test method corresponds to an apparent shear rate at the wall of 1million reciprocal seconds (1s−1)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
67.	**US 2083:2019, Standard Test Method for Evaluation of Corrosiveness of Diesel Engine Oil at 135 °C**	This Uganda Standard covers testing diesel engine lubricants to determine their tendency to corrode various metals, specifically alloys of lead and copper commonly used in cam followers and bearings.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

68.	**US ISO 2137:2007, Petroleum products and lubricants — Determination of cone penetration of lubricating greases and petrolatum**	This Uganda Standard specifies several methods for the empirical estimation of the consistency of lubricating greases and petrolatum by measuring the penetration of a standardized cone	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
69.	**US ISO 2176:1995, Petroleum products — Lubricating grease — Determination of dropping point**	This Uganda Standard specifies a method for the determination of the dropping point of lubricating grease	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
70.	**US ISO 3987:2010, Petroleum products — Determination of sulfated ash in lubricating oils and additives**	This Uganda Standard describes a procedure for the determination of the mass percentage of sulfated ash from unused lubricating oils containing additives and from additive concentrates used in compounding. These additives usually contain one or more of the following metals: barium, calcium, magnesium, zinc, potassium, sodium and tin. The elements sulfur, phosphorus and chlorine can also be present in combined form	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
71.	**US ISO 6247:1998, Petroleum products — Determination of foaming characteristics of lubricating oils**	This Uganda Standard specifies a method for the determination of the foaming characteristics of lubricating oils at specified moderate temperatures. It is applicable to lubricants which may or may not contain additives to modify or suppress the tendency to form stable foams. The ratings used to describe the foaming tendency and/or stability are empirical	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

72.	**US ISO 6299:1998, Petroleum products — Determination of dropping point of lubricating greases (wide temperature range)**	This Uganda Standard specifies a method for the determination of the dropping point of lubricating grease over a wide temperature range	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
73.	**US ISO 6743-9:2003, Lubricants, industrial oils and related products (class L) Classification — Part 9: Family X (Greases)**	This Uganda Standard establishes a detailed classification of family X (Greases) which belongs to class L (Lubricants, industrial oils and related products)It should be read in conjunction with ISO 6743-99[1]This classification applies to categories of greases used for lubrication of equipment, components of machines, vehicles, etc	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
74.	**US 1SO 8681:1986, Petroleum products and lubricants — Method of classification — Definition of classes**	This Uganda Standard establishes the general classification system which applies to petroleum products, lubricants and related products; defines the classes of petroleum products, lubricants and related products together with their designation. The rules of this classification system to apply to each class of product concerned will be specified in the relevant standard	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
75.	**US ISO 11007:1997, Petroleum products and lubricants — Determination of rust-prevention characteristics of lubricating greases**	This Uganda Standard specifies a method for the determination of the rust-prevention characteristics of lubricating grease in the presence of an aqueous test fluid	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

76.	**US ISO 11009:2000, Petroleum products and lubricants — Determination of water washout characteristics of lubricating greases**	This Uganda Standard specifies a method for evaluating the resistance of lubricating grease to washout by water from a bearing, when tested at 38 °C and 79 °C under specified laboratory conditions. It is not to be considered the equivalent of service evaluation tests characteristics of lubricating greases	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
77.	**US 1SO 12924:2010, Lubricants, industrial oils and related products (Class L) — Family X (Greases) — Specification**	This Uganda Standard specifies the requirements of greases used for the lubrication of equipment, components of machines, vehicles, etc	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*15,000*
78.	**US ISO 13737:2004, Petroleum products and lubricants — Determination of low-temperature cone penetration of lubricating greases**	This Uganda Standard specifies a method for determining the cone penetration of lubricating greases at low temperatures	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

79.	**US ISO 13738:2011, Lubricants, industrial oils and related products (class L) — Family E (Internal combustion engine oils) — Specifications for two-stroke-cycle gasoline engine oils (categories EGB, EGC and EGD)**	This Uganda Standard specifies the requirements of lubricating oils (hereinafter referred to as "two-stroke oils") to be used in two-stroke-cycle spark-ignition gasoline engines which employ a crankcase scavenging system and are used in transportation, leisure and utility applications, such as motorcycles, snowmobiles and chainsaws. The requirements specified in this standard are applicable to the categories of two-stroke oils, EGB, EGC and EGD, covered in US ISO 6743-15, which defines the classification of lubricating oils for use in internal combustion engines	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
80.	**US ISO 20844:2015, Petroleum and related products — Determination of the shear stability of polymer-containing oils using a diesel injector nozzle**	This Uganda Standard specifies a method to assess the resistance to shear stresses applied to mineral oils, synthetic oils, and other fluids containing polymers, when passed through a specified diesel injector nozzle	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

81.	**US ISO 24254:2007, Lubricants, industrial oils and related products (class L) -- Family E (internal combustion engine oils) -- Specifications for oils for use in four-stroke cycle motorcycle gasoline engines and associated drivetrains (categories EMA and EMB)**	This Uganda Standard specifies the requirements of lubricating engine oils (hereinafter referred to as "four-stroke engine oils") to be used in four-stroke cycle spark ignition gasoline engines employing a common sump containing the lubricating oil for both the engine and associated drivetrain (transmission, clutch, starter) of motorcycles, motor scooters, all-terrain vehicles (ATVs) and related equipment Classification of four-stroke engine oils is defined in ISO 6743-15 [1]Among all of the categories covered by ISO 6743-15, this standard includes categories EMA and EMB	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
82.	**US ISO 4925:2005, Road vehicles — Specification of non-petroleum-base brake fluids for hydraulic systems**	This Uganda Standard gives the specifications, requirements and test methods, for non-petroleum-base fluids used in road-vehicle hydraulic brake and clutch systems that are designed for use with such fluids and equipped with seals, cups or double-lipped type gland seals made of styrene-butadiene rubber (SBR) and ethylene-propylene elastomer (EPDM)(This Uganda Standard is an adoption of the International Standard ISO 4925:2005)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*45,000*

83.	**US ISO 20847:2004, Petroleum products — Determination of sulfur content of automotive fuels — Ultraviolet fluorescence method**	This Uganda Standard specifies an energy dispersive X-ray fluorescence (EDXRF) test method for the determination of the sulfur content of motor gasolines, including those containing up to 2% (m/m) oxygen, and of diesel fuels, including those containing up to 5 % (V/V) fatty acid methyl ester (FAME), having sulfur contents in the range 30 mg/kg to 500 mg/kg. Other products may be analysed and other sulfur contents may be determined according to this test method; however, no precision data for products other than automotive fuels and for results outside the specified range have been established for this standard	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
84.	**US ISO 20846:2004, Petroleum products — Determination of sulfur content of automotive fuels — Ultraviolet fluorescence method**	This Uganda Standard specifies an ultraviolet (UV) fluorescence test method for the determination of the sulfur content of motor gasolines, including those containing up to 2,7 % (m/m) oxygen, and of diesel fuels, including those containing up to 5 % (V/V) fatty acid methyl ester (FAME), having sulfur contents in the range 3 mg/kg to 500 mg/kg. Other products may be analysed and other sulfur contents may be determined according to this test method; however, no precision data for products other than automotive fuels and for results outside the specified range have been established for this standard	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*

85.	**US ISO 14596:2007, Petroleum products — Determination of sulfur content — Wavelength dispersive X-ray fluorescence spectrometry**	This Uganda Standard specifies a method for the determination of the sulfur content of liquid petroleum products, additives for petroleum products, and semi-solid and solid petroleum products that are either liquefied by moderate heating or soluble in organic solvents of negligible or accurately known sulfur content. The method is applicable to products or additives having sulfur contents in the range 0,001 % (m/m) to 2, 50 % (m/m); higher contents can be determined by appropriate dilution. Other elements do not interfere at concentrations anticipated in the materials subject to this analysis	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
86.	**US ISO 12937:2000, Petroleum products — Determination of water — Coulometric Karl Fischer titration method**	This Uganda Standard specifies a method for the direct determination of water in petroleum products boiling below 390 °C. It covers the mass fraction range 0,003 % (m/m) to 0,100 %(m/m)It is not applicable to products containing ketones or to residual fuel oils. This standard may be applicable to lubricating base oils. However, the precision has not been established for these materials	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
87.	**US ISO 6246:1995, Petroleum products - Gum content of light and middle distillate fuels – Jet evaporation method**	This Uganda Standard specifies a method for the determination of the existent gum content of aviation fuels, and the gum content of motor gasolines or other volatile distillates in their finished form, and at the time of test	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
88.	**US ISO 6251: 1996, Liquefied petroleum gases — Corrosiveness**	This Uganda Standard describes a method for the determination of the corrosiveness to copper of liquefied petroleum gases	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

	to copper — Copper strip test				
89.	**US ISO 5165:1998, Petroleum products — Determination of the ignition quality of diesel fuels — Cetane engine method**	This Uganda Standard establishes the rating of diesel fuel oil in terms of an arbitrary scale of Cetane numbers using a standard single cylinder, four-stroke cycle, variable compression ratio, indirect injected diesel engine. The Cetane number provides a measure of the ignition characteristics of diesel fuel oil in compression ignition engines. The Cetane number is determined at constant speed in a precombustion chamber-type compression ignition test engine	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
90.	**US ISO 4261:2013, Petroleum products — Fuels (class F) — Specifications of gas turbine fuels for industrial and marine applications**	This Uganda Standard specifies the requirements for petroleum fuels for gas turbines (see ISO 3977) used in public utility, industrial, and marine applications. It does not cover requirements for gas turbine fuels for aviation use. This standard is intended for the guidance of users such as turbine manufacturers, suppliers, and purchasers of gas turbine fuels. This standard sets out the properties of fuels at the time and place of transfer of custody to the user	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*65,000*

91.	**US ISO 3837:1993, Liquid petroleum products — Determination of hydrocarbon types – Fluorescent indicator adsorption method**	This Uganda Standard specifies a fluorescent indicator adsorption method for the determination of hydrocarbon types over the concentration ranges from 5 % (VW) to 99 % (WV) aromatic hydrocarbons, 0% (VW) to 55 % (V/V) olefins, and 1 % (VIV) to 95 % (V/v) saturated hydrocarbons in petroleum fractions that distill below 315 "C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
92.	**US ISO 2049:1996, Petroleum products - Determination of colour (ASTM scale)**	This Uganda Standard specifies a method for the visual determination of the colour of a variety of petroleum products, such as lubricating oils, heating fuels, diesel fuels and petroleum waxes. It is limited to products that do not contain artificial dyes	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
93.	**US ISO 3104:1994, Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity**	This Uganda Standard specifies a procedure for the determination of the kinematic viscosity, v, of liquid petroleum products, both transparent and opaque, by measuring the time for a volume of liquid to flow under gravity through a calibrated glass capillary viscometer. The dynamic viscosity, η, can be obtained by multiplying the measured kinematic viscosity by the density, ρ, of the liquid	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
94.	**US ISO 2719:2002, Determination of flash point — Pensky-Martens closed cup method**	This Uganda Standard describes two procedures, A and B, using the Pensky-Martens closed cup tester, for determining the flash point of combustible liquids, liquids with suspended solids, liquids that tend to form a surface film under the test conditions and other liquids. It is applicable for liquids with a flash point above 40 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

95.	**US ISO 2160:1998, Petroleum products — Corrosiveness to copper — Copper strip test**	This Uganda Standard specifies a method for the determination of the corrosiveness to copper of liquid petroleum products and certain solvents Volatile products, having a maximum vapour pressure of 124 kPa at 37are included	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
96.	**US ISO 1998-99:2000, Petroleum industry — Terminology — Part 99: General and index**	This Uganda Standard gives a list of terms in use in the petroleum industry, accompanied by the corresponding definitions. It was compiled to serve an evident need for a ready form of reference document. It therefore does not include all the possible terms, those terms of which significance is unambiguous being excluded	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
97.	**US ISO 1998-7:1998, Petroleum industry — Terminology — Part 7: Miscellaneous terms**	This Uganda Standard consists of a list of terms, with the corresponding definitions, in use in the petroleum industry and that are not definitely relevant to one of the six categories of other parts of this standard	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
98.	**US ISO 1998-1:1998, Petroleum industry — Terminology — Part 1: Raw materials and products**	This Uganda Standard consists of a list of equivalent terms, in use in the petroleum industry to indicate raw materials or petroleum products, together with the corresponding definitions	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*60,000*
99.	**US ISO 1998-2:1998, Petroleum industry — Terminology — Part 2: Properties and tests**	This Uganda Standard consists of a list of terms, in use in the petroleum industry to indicate properties of petroleum products and test methods, together with the corresponding definitions.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

100.	**US ISO 1998-3:1998, Petroleum industry — Terminology — Part 3: Exploration and production**	This Uganda Standard consists of a list of terms, in use in the petroleum industry in the area of exploration and production, together with the corresponding definitions	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
101.	**US ISO 1998-4:1998, Petroleum industry — Terminology — Part 4: Refining**	This Uganda Standard consists of a list of terms, in use in the petroleum industry in the area of refining, together with the corresponding definitions.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
102.	**US ISO 1998-5:1998, Petroleum industry — Terminology — Part 5: Transport, storage, distribution**	This Uganda Standard consists of a list of terms, in use in the petroleum industry in the area of transport, storage and distribution, together with the corresponding definitions	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
103.	**US ISO 1998-6:1998, Petroleum industry — Terminology — Part 6: Measurement**	This Uganda Standard introduces a list of terms, in use in the petroleum industry to indicate the measurement of crude oils and petroleum products, together with the corresponding definitions	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*65,000*
104.	**US 1715:2017, Standard Test Method for Determination of Asphaltenes (Heptane Insolubles) in Crude Petroleum and Petroleum Products**	This Uganda Standard covers a procedure for the determination of the heptane insoluble Asphaltene content of gas oil, diesel fuel, residual fuel oils, lubricating oil, bitumen, and crude petroleum that has been topped to an oil temperature of 260 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
105.	**US 1716:2017, Standard Test Method for Determination of Light Hydrocarbons in Stabilized Crude Oils by Gas Chromatography**	This Uganda Standard specifies a method to determine the boiling range distribution of hydrocarbons in stabilized crude oil up to and including n-nonane	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

106.	**US 1797:2017, Test Method for Boiling Point Distribution of Samples with Residues Such as Crude Oils and Atmospheric and Vacuum Residues by High Temperature Gas Chromatography.**	This Uganda Standard covers the determination of the boiling point distribution and cut point intervals of crude oils and residues by using high temperature gas chromatography	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
107.	**US 1798:2017,Standard Practice for Gas Chromatography Terms and Relationships**	This Uganda Standard covers primarily the terms and relationships used in gas elution chromatography	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
108.	**US 1780:2017, Standard Test Method for Water in Crude Oils by Potentiometric Karl Fischer Titration**	This test method covers the determination of water in the range from 0to 2 % in crude oils	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
109.	**US 1785:2017, Standard Test Method for Water in Crude Oils by Coulometric Karl Fischer Titration**	This Uganda Standard covers the determination of water in the range from 0to 5mass or volume % in crude oils	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
110.	**US 1805:2017, Standard Test Method for Water Using Volumetric Karl Fischer Titration**	This Uganda Standard is intended as a general guide for the application of the volumetric Karl Fischer (KF) titration for determining free water and water of hydration in most solid or liquid organic and inorganic compounds	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

111.	**US 1807:2017, Standard Test Method for Sediment in Crude Oil by Membrane Filtration**	This Uganda Standard covers the determination of sediment in crude oils and fuel oils by extraction with toluene. The precision applies to a range of sediment levels from 0to 0mass, although higher levels may be determined	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
112.	**US 1863:2017, Guide for Generation and Dissipation of Static Electricity in Petroleum Fuel Systems**	This Uganda Standard describes how static electricity may be generated in petroleum fuel systems, the types of equipment conducive to charge generation, and methods for the safe dissipation of such charges	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
113.	**US ISO 5272:1979 Toluene for industrial use — Specifications**	This Uganda Standard specifies requirements for two grades of toluene suitable for industrial purposes Grade 1 (synthesis grade) is a high quality grade normally required for use only as a chemical feedstock Grade 2 (ordinary grade) relates to commercially pure toluene and is suitable for most normal commercial uses. This standard is applicable to material which consists essentially of toluene (C6H5	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
114.	**US 1808:2017, Standard Test Method for Salts in Crude Oil (Electrometric Method)**	This Uganda Standard covers the determination of the approximate chloride (salts) concentration in crude oil. The range of concentration covered is 0 to 500 mg/kg or 0 to 150 lb/1000 bbl as chloride concentration/volume of crude oil	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
115.	**US 1864:2017, Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method**	This Uganda Standard covers the determination of sediment in crude oils and fuel oils by extraction with toluene	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

116.	**US 1871:2017, Standard Test Methods for Determination of Nickel, Vanadium, Iron, and Sodium in Crude Oils and Residual Fuels by Flame Atomic Absorption Spectrometry.**	This Uganda Standard covers the determination of nickel, vanadium, iron, and sodium in crude oils and residual fuels by flame atomic absorption spectrometry (AAS)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
117.	**US 1872:2017, Standard Test Methods for Determination of Nickel, Vanadium, and Iron in Crude Oils and Residual Fuels by Inductively Coupled Plasma (ICP) Atomic Emission**	This Uganda Standard covers the determination of nickel, vanadium, and iron in crude oils and residual fuels by inductively coupled plasma (ICP) atomic emission spectrometry	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
118.	**US ISO 10431:1993, Petroleum and natural gas industries — Pumping units — Specification**	This Uganda Standard lays down specification covering the design and rating of pumping units	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*60,000*
119.	**US ISO 383:1976, Laboratory glassware — Interchangeable conical ground joints**	This Uganda Standard specifies the essential geometric requirements for interchangeability in relations to four series of conical ground glass joints for laboratory use	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
120.	**US ISO 5280:1979, Xylene for industrial use — Specification**	This Uganda Standard specifies requirements for xylene suitable for industrial purposes	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

121.	**US ISO 9029:1990, Crude petroleum — Determination of water — Distillation method**	This Uganda Standard specifies a method for determining water in crude oil by distillation. The precision data have only been determined for water contents up to 1 % (v/v)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
122.	**US 1686:2017, Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)**	This Uganda Standard covers the determination by means of a glass hydrometer in conjunction with a series of calculations of the API gravity of crude petroleum and petroleum products normally handled as liquids and having a Reid vapor pressure (Test Method D323) of 101kPa (14psi) or less	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
123.	**US 1696:2017, Standard Test Method for Pour Point of Crude Oils**	This Uganda Standard covers two procedures for the determination of the pour point temperatures of crude oils down to -36°C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
124.	**US 1697:2017, Standard Test Method for Distillation of Crude Petroleum (15-Theoretical Plate Column)**	This Uganda Standard covers the procedure for the distillation of stabilized crude petroleum to a final cut temperature of 400 °C Atmospheric Equivalent Temperature (AET)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
125.	**US 1711:2017, Standard Test Method for Determination of Vapor Pressure of Crude Oil: VPCRx (Expansion Method)**	This Uganda Standard covers the use of automated vapor pressure instruments to determine the vapor pressure exerted in vacuum of crude oils	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
126.	**US 1724:2017, Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)**	This Uganda Standard covers procedures for the determination of vapor pressure of gasoline, volatile crude oil, and other volatile petroleum products	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

127.	**US 1725:2017, Standard Guide for Use of the Petroleum Measurement Tables**	This Uganda Standard provides the algorithm and implementation procedure for the correction of temperature and pressure effects on density and volume of liquid hydrocarbons Natural gas liquids (NGLs) and liquefied petroleum gases (LPGs) are excluded from consideration	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
128.	**US 1726:2017, Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method**	This Uganda Standard covers the laboratory determination using a glass hydrometer in conjunction with a series of calculations, of the density, relative density, or API gravity of crude petroleum, petroleum products, or mixtures of petroleum and nonpetroleum products normally handled as liquids, and having a Reid vapor pressure of 101kPa (14psi) or less	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
129.	**US 1727:2017, Standard Test Method for Density, Relative Density, and API Gravity of Crude Petroleum and Liquid Petroleum Products by Thermohydrometer Method**	This Uganda Standard covers the determination, using a glass thermohydrometer in conjunction with a series of calculations, of the density, relative density, or API gravity of crude petroleum, petroleum products, or mixtures of petroleum and nonpetroleum products normally handled as liquids and having a Reid vapor pressures of 101kPa (14psi) or less	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
130.	**US 1728:2017, Standard Specification for Liquid-in-Glass Thermometers**	This Uganda Standard covers liquid-in-glass thermometers graduated in degrees Celsius or degrees Fahrenheit that are frequently identified and used in methods under the jurisdiction of the various technical committees within ASTM	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

131.	**US 1729:2017, Standard Specification for Hydrometers**	This Uganda Standard covers glass hydrometers of various scale graduation systems, as required by the ASTM Test Methods in which they are used	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
132.	**US 1730:2017, Standard Test Method for Pour Point of Petroleum Products**	This test method covers and is intended for use on any petroleum product	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
133.	**US 1731:2017, Standard Test Method for Corrosiveness to Copper from Petroleum Products by Copper Strip Test**	This Uganda Standard covers the determination of the corrosiveness to copper of aviation gasoline, aviation turbine fuel, automotive gasoline, cleaners (Stoddard) solvent, kerosene, diesel fuel, distillate fuel oil, lubricating oil, and natural gasoline or other hydrocarbons having a vapor pressure no greater than 124 kPa (18 psi) at 37°C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
134.	**US 1732:2017, Standard Practice for Manual Sampling of Petroleum and Petroleum Products**	This Uganda Standard covers procedures and equipment for manually obtaining samples of liquid petroleum and petroleum products, crude oils, and intermediate products from the sample point into the primary container are described	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
135.	**US 1733:2017, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products**	This Uganda Standard describes general procedures and equipment for automatically obtaining samples of liquid petroleum and petroleum products, crude oils, and intermediate products from the sample point into the primary container	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

136.	**US 1734:2017, Standard Test Method for Inspection and Verification of Thermometers**	This Uganda Standard covers visual and dimensional inspection and test for scale accuracy to be used in the verification of liquid-in-glass thermometers as specified in Specifications E1 and E2251	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
137.	**US 1736:2017, Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer**	This Uganda Standard covers the measurement of the density of pure hydrocarbons or petroleum distillates boiling between 90 °C and 110 °C that can be handled in a normal fashion as a liquid at the specified test temperatures of 20 °C and 25 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
138.	**US 1737:2017, Standard Test Method for Boiling Range Distribution of Petroleum Fractions by Gas Chromatography**	This Uganda Standard covers the determination of the boiling range distribution of petroleum products	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
139.	**US 1739:2017, Standard Test Method for Density, Relative Density, and API Gravity of Liquids by Digital Density Meter**	This Uganda Standard covers the determination of the density, relative density, and API Gravity of petroleum distillates and viscous oils that can be handled in a normal fashion as liquids at the temperature of test, utilizing either manual or automated sample injection equipment	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
140.	**US 1740:2017, Standard Test Method for Detailed Analysis of Petroleum Naphthas through n-Nonane by Capillary Gas Chromatography**	This Uganda Standard [detailed hydrocarbon analysis (DHA) test method] covers the determination of hydrocarbon components paraffins, naphthenes, and monoaromatics (PNA) of petroleum naphthas as enumerated in Table 1	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

141.	**US 1741:2017, Standard Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products and Lubricants**	This Uganda Standard covers the necessary preparations and planning for the conduct of interlaboratory programs for the development of estimates of precision (determinability, repeatability, and reproducibility) and of bias (absolute and relative), and further presents the standard phraseology for incorporating such information into standard test methods	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
142.	**US 1742:2017, Standard Test Method for Determination of Individual Components in Spark Ignition Engine Fuels by 100 Metre Capillary High Resolution Gas Chromatography**	This Uganda Standard covers the determination of individual hydrocarbon components of spark-ignition engine fuels and their mixtures containing oxygenate blends (MTBE, ETBE, ethanol, and so forth) with boiling ranges up to 225 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
143.	**US 1743:2017, Standard Test Method for Determination of Individual Components in Spark Ignition Engine Fuels by 100–Metre Capillary (with Precolumn) High-Resolution Gas Chromatography**	This Uganda Standard covers the determination of individual hydrocarbon components of spark-ignition engine fuels and their mixtures containing oxygenate blends (MTBE, ETBE, ethanol, and so forth) with boiling ranges up to 225 °Cm Other light liquid hydrocarbon mixtures typically encountered in petroleum refining operations, such as blending stocks (naphthas, reformates, alkylates, and so forth) may also be analyzed; however, statistical data was obtained only with blended spark-ignition engine fuels	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

144.	**US 1744:2017, Standard Test Method for Determination of Individual Components in Spark Ignition Engine Fuels by 50-Metre Capillary High Resolution Gas Chromatography**	This Uganda Standard covers the determination of individual hydrocarbon components of spark-ignition engine fuels with boiling ranges up to 225 °C	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
145.	**US 1745:2017, Standard Practice for Obtaining LPG Samples Using a Floating Piston Cylinder**	This Uganda Standard covers the equipment and procedures for obtaining a representative sample of liquefied petroleum gas (LPG), such as specified in ASTM Specification D1835, GPA 2140, and comparable international standards	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
146.	**US 1746:2017, Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)**	This Uganda Standard covers the use of automated vapor pressure instruments to determine the total vapor pressure exerted in vacuum by air-containing, volatile, liquid petroleum products, including automotive spark-ignition fuels with or without oxygenates	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
147.	**US 1747:2017, Standard Practice for Statistical Assessment and Improvement of Expected Agreement between Two Test Methods that Purport to Measure the Same Property of a Material**	This Uganda Standard covers statistical methodology for assessing the expected agreement between two standard test methods that purport to measure the same property of a material, and deciding if a simple linear bias correction can further improve the expected agreement	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

148.	**US 1758:2017, Standard Test Method for Distillation of Heavy Hydrocarbon Mixtures (Vacuum Potstill Method)**	This Uganda Standard covers the procedure for distillation of heavy hydrocarbon mixtures having initial boiling points greater than 150 °C (300 °F), such as heavy crude oils, petroleum distillates, residues, and synthetic mixtures. It employs a pot still with a low pressure drop entrainment separator operated under total takeoff conditions Distillation conditions and equipment performance criteria	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
149.	**US 1585:2017, Environmental protection — Onshore oil and gas production operations — Requirements**	This Uganda Standard provides requirements for environmentally sound practices for onshore oil and gas production operations and is applicable to contractors, service providers as well as operators Facilities within the scope of this standard include all production facilities, including produced water handling facilities Offshore and arctic areas are beyond the scope of this document Operational coverage begins with the design and construction of access roads and well locations, and includes reclamation, abandonment, and restoration operations Gas compression for transmission purposes or production operations, such as gas lift, pressure maintenance, or enhanced oil recovery (EOR) is included; however, gas processing for liquids recovery is not addressed	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*70,000*

150.	**US ISO 19008:2016, Standard cost coding system for oil and gas production and processing facilities**	This Uganda Standard describes the standard cost coding system (SCCS) that classifies costs and quantities related to exploration, development, operation and removal of oil and gas production and processing facilities and to the petroleum, petrochemical and natural gas industry Upstream, midstream, downstream and petrochemical business categories are included	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*40,000*
151.	**US ISO 1817:2015, Rubber, vulcanized or thermoplastic — Determination of the effect of liquids**	This Uganda Standard describes methods of evaluating the resistance of vulcanized and thermoplastic rubbers to the action of liquids by measurement of properties of the rubbers before and after immersion in test liquids. The liquids concerned include current service liquids, such as petroleum derivatives, organic solvents and chemical reagents, as well as reference test liquids	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
152.	**US ISO 3105:1994, Glass capillary kinematic viscometers — Specifications and operating instructions**	This Uganda Standard gives specifications and operating instructions for glass capillary viscometers widely used for the determination of kinematic viscosity of petroleum products by the procedure described in ISO 3104The calibration of these viscometers is also described	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
153.	**US ISO 3448:1992, Industrial liquid lubricants — ISO viscosity classification**	This Uganda Standard establishes a system of viscosity classification for industrial liquid lubricants and related fluids	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*

154.	**US ISO 3733:1999, Petroleum products and bituminous materials — Determination of water — Distillation method**	This Uganda Standard specifies a method for determination of water up to 25 % in petroleum products, bitumens, tars and products derived from these materials, excluding emulsions, by the distillation method	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
155.	**US ISO 4259-1:2017, Petroleum and related products — Precision of measurement methods and results — Part 1: Determination of precision data in relation to methods of test**	This Uganda Standard specifies the methodology for the design of an Interlaboratory Study (ILS) and calculation of precision estimates of a test method specified by the study In particular, it defines the relevant statistical terms (Clause 3), the procedures to be adopted in the planning of ILS to determine the precision of a test method (Clause 4), and the method of calculating the precision from the results of such a study	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
156.	**US ISO 4263-1:2003, Petroleum and related products — Determination of the ageing behaviour of inhibited oils and fluids — TOST test — Part 1: Procedure for mineral oils**	This Uganda Standard specifies a method for the determination of the ageing behaviour of rust and oxidation inhibited mineral oils having a density less than that of water, used as turbine oils (categories TSA, TGA, TSE, TGE of ISO 6743-5), hydraulic oils (categories HL, HM, HR, HV, HG of ISO 6743-4), and circulating oils (category CKB of ISO 6743-6)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
157.	**US ISO 4263-3:2010, Petroleum and related products — Determination of the ageing behaviour of inhibited oils and fluids using the TOST test — Part 3: Anhydrous**	This Uganda Standard specifies a method for the determination of the ageing behaviour of synthetic hydraulic fluids of categories HFDU, HEES, HEPG and HETG as defined in ISO 6743-4	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*

	procedure for synthetic hydraulic fluids				
158.	**US ISO 4263-4:2006, Petroleum and related products — Determination of the ageing behaviour of inhibited oils and fluids — TOST test — Part 4: Procedure for industrial gear oils**	This Uganda Standard specifies a method for the determination of the ageing behaviour of gear oils of categories CKC, CKD, CKS and CKT as defined in ISO 6743-6	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
159.	**US ISO 4404-1:2012, Petroleum and related products — Determination of the corrosion resistance of fire resistant hydraulic fluids — Part 1: Water-containing fluids**	This Uganda Standard specifies a test method to determine the influence on metals of fire-resistant fluids in categories HFA, HFB and HFC, as classified in ISO 6743-4	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
160.	**US ISO 4404-2:2010, Petroleum and related products — Determination of the corrosion resistance of fire resistant hydraulic fluids — Part 2: Non-aqueous fluids**	This Uganda Standard specifies a procedure for the determination of the corrosion-inhibiting properties of non-aqueous hydraulic fluids within the category HFD, as classified	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
161.	**US ISO 4406:2017, Hydraulic fluid power — Fluids — Method for coding the level of**	This Uganda Standard specifies the code to be used in defining the quantity of solid particles in the fluid used in a given hydraulic fluid power system	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*

	contamination by solid particles				
162.	**US ISO 5388:1981, Stationary air compressors — Safety rules and code of practice**	This Uganda Standard establishes standards for the safe design, construction, installation and operation of stationary and skid-mounted air compressors for general use. It specifies requirements to help minimize compressor accidents and defines general safety practices for the field	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
163.	**US ISO 5598:2008, Fluid power systems and components — Vocabulary**	This Uganda Standard establishes the vocabulary, in English, French and German, for all fluid power systems and components, excluding aerospace applications and compressed air supply installations	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*110,000*
164.	**US ISO 6072:2002, Hydraulic fluid power — Compatibility between fluids and standard elastomeric materials**	This Uganda Standard specifies test methods for evaluating the effect of hydraulic fluids on standard elastomeric materials that have been manufactured in accordance with specified processes. It allows baseline comparisons of fluids with standard elastomers	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
165.	**US ISO 6614:1994, Petroleum products — Determination of water separability of petroleum oils and synthetic fluids**	This Uganda Standard specifies a method for measuring the ability of petroleum oils or synthetic fluids to separate from water at a specified temperature	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

166.	**US ISO 6618:1997, Petroleum products and lubricants — Determination of acid or base number — Colour-indicator titration method**	This Uganda Standard specifies a colour-indicator titration method for the determination of acidic or basic constituents in petroleum products and lubricants soluble in mixtures of toluene and propan-2-ol	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
167.	**US ISO 6619:1988, Petroleum products and lubricants — Neutralization number — Potentiometric titration method**	This Uganda Standard specifies a method for the determination of acidic constituents in petroleum products and lubricants soluble or nearly soluble in mixtures of toluene and propan-2-ol	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
168.	**US ISO 6743-3:2003, Lubricants, industrial oils and related products (class L) — Classification — Part 3: Family D (Compressors)**	This Uganda Standard establishes the detailed classification of lubricants for use in family D, air compressors, gas compressors and refrigeration compressors	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
169.	**US ISO 6743-6:2018, Lubricants, industrial oils and related products (class L) — Classification — Part 6: Family C (gear systems)**	This Uganda Standard establishes the detailed classification of fluids of Family C (gear systems) which belongs to class L (lubricants, industrial oils and related products)It can be read in conjunction with ISO 6743-99	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
170.	**US ISO 6743-14:1994, Lubricants, industrial oils and related products (class L) — Classification — Part 14: Family U (Heat treatment)**	This Uganda Standard establishes the detailed classification of hardening fluids of family U for use in the field of heat treatment. All the fluids listed belong to class L (lubricants, industrial oils and related products)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

171.	**US ISO 7120:1987, Petroleum products and lubricants — Petroleum oils and other fluids — Determination of rust-preventing characteristics in the presence of water**	This Uganda Standard specifies a method for evaluating petroleum oils and other fluids to indicate their effectiveness in preventing the rusting of ferrous parts should water become mixed with the oil/fluid	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*70,000*
172.	**US ISO 7745:2010, Hydraulic fluid power — Fire-resistant (FR) fluids — Requirements and guidelines for use**	This Uganda Standard specifies the operational characteristics for the various categories of fire-resistant fluids defined by ISO 6743-4	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
173.	**US ISO 9120:1997, Petroleum and related products — Determination of air-release properties of steam turbine and other oils — Impinger method**	This Uganda Standard specifies a method for the estimation of the ability of a petroleum-type steam turbine oil to be separated from entrained air	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
174.	**US ISO 11500:2008, Hydraulic fluid power — Determination of the particulate contamination level of a liquid sample by automatic particle counting using the light-extinction principle**	This Uganda Standard specifies an automatic particle counting procedure for determining the number and sizes of particles present in hydraulic-fluid bottle samples of clear, homogeneous, single phase liquids using an automatic particle counter (APC) that works on the light-extinction principle	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
175.	**US ISO 12152:2012, Lubricants, industrial oils and related products — Determination of the foaming and air release properties of industrial**	This Uganda Standard describes a test method based on a single-stage spur gear rig to determine the foaming properties of oils used for the lubrication of gears	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

	gear oils using a spur gear test rig — Flender foam test procedure				
176.	**US ISO 12185:1996, Crude petroleum and petroleum products — Determination of density — Oscillating U-tube method**	This Uganda Standard specifies a method for the determination, using an oscillating U-tube density meter, of the density of crude petroleum and related products within the range 600 kg/m^3 to 1 100 kg/m^3, which can be handled as single-phase liquids at the test temperature and pressure	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
177.	**US ISO 12925-1:2018, Lubricants, industrial oils and related products (class L) — Family C (gears) — Part 1: Specifications for lubricants for enclosed gear systems**	This Uganda Standard establishes the specifications relative to family C (gears) for lubricants, industrial oils and related products of Class L. This document deals only with lubricants for enclosed gear systems Lubricants for open gears and greases for gears (enclosed or open) are not covered	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*45,000*
178.	**US ISO 13226:2018, Rubber — Standard reference elastomers (SREs) for characterizing the effect of liquids on vulcanized rubbers**	This Uganda Standard specifies requirements for vulcanized rubbers in sheet form for use as standards in characterizing the effect of test liquids and service fluids	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
179.	**US ISO 13357-1:2002, Petroleum products — Determination of the filterability of lubricating oils — Part 1: Procedure for oils in the presence of water**	This Uganda Standard specifies a procedure for the evaluation of the filterability of lubricating oils, particularly those designed for hydraulic applications, in the presence of water	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

180.	**US ISO 13357-2:2005, Petroleum products — Determination of the filterability of lubricating oils — Part 2: Procedure for dry oils**	This Uganda Standard specifies a procedure for the evaluation of the filterability of dry lubricating oils, particularly those designed for hydraulic applications	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*50,000*
181.	**US ISO 13757:1996, Liquefied petroleum gases — Determination of oily residues — High-temperature method**	This Uganda Standard specifies a method for the determination of the residual matter in liquefied petroleum gases (LPG) that remains after evaporation at 105 °C. This material, termed "oily residues", represents those products that are deposited in vaporizers that are subject to a heat input greater than that of ambient evaporation	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
182.	**US ISO 14635-1:2000, Gears — FZG test procedures — Part 1: FZG test method A/8,3/90 for relative scuffing load carrying capacity of oils**	This Uganda Standard specifies a test method based on an FZG four-square test machine to determine the relative load-carrying capacity of lubricating oils defined by the gear-surface damage known as scuffing	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
183.	**US ISO 14935:1998, Petroleum and related products — Determination of wick flame persistence of fire-resistant fluids**	This Uganda Standard specifies a method for the assessment of the persistence of a flame applied to the edge of a wick of non-flammable material immersed in fire-resistant fluid	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
184.	**US ISO 15029-1:1999, Petroleum and related products — Determination of spray ignition characteristics of fire resistant fluids — Part 1: Spray flame**	This Uganda Standard specifies a hollow-cone nozzle method for the assessment of the persistence of a flame applied to various points within a pressurized spray of fire-resistant fluid	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

	persistence — Hollow-cone nozzle method				
185.	**US ISO 15029-2:2018, Petroleum and related products — Determination of spray ignition characteristics of fire-resistant fluids — Part 2: Spray test — Stabilized flame heat release method**	This Uganda Standard specifies a method by which the fire hazards of pressurised sprays of fire-resistant fluids can be compared	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
186.	**US ISO 19291:2016, Lubricants — Determination of tribological quantities for oils and greases — Tribological test in the translator oscillation apparatus**	This Uganda Standard describes test methods based on a high-frequency, linear-oscillation test machine to determine tribological quantities like friction, wear, load carrying capacity and extreme pressure behaviour of liquid lubricants (oils) and consistent lubricants (greases) in the ball-on-disk contact geometry	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
187.	**US ISO 20763:2004, Petroleum and related products — Determination of anti-wear properties of hydraulic — Vane pump method**	This Uganda Standard specifies procedures for the determination of steel-on-steel anti-wear properties of hydraulic fluids by means of performance in a vane-type hydraulic pump	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*

188.	**US ISO 20764:2003, Petroleum and related products — Preparation of a test portion of high-boiling liquids for the determination of water content — Nitrogen purge method**	This Uganda Standard specifies two procedures for the preparation of test portions from petroleum and related products boiling above 200 °C, which can then be used for the determination of total water content within the range of 3 mg/kg to 1 000 mg/kg	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
189.	**US ISO 20783-1:2011, Petroleum and related products — Determination of emulsion stability of fire-resistant fluids — Part 1: Fluids in category HFAE**	This Uganda Standard specifies a test method to assess the stability of emulsions within the category HFAE, as defined in ISO 6743-4, made up with waters having clearly-defined concentrations of salts	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
190.	**US ISO 20783-2:2003, Petroleum and related products — Determination of emulsion stability of fire-resistant fluids — Part 2: Fluids in category HFB**	This Uganda Standard specifies three test methods to assess the stability of emulsions within the category HFB, as defined in ISO 6743-4	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
191.	**US ISO 20823:2003, Petroleum and related products — Determination of the flammability characteristics of fluids in contact with hot surfaces — Manifold ignition testraulic fluids — Vane pump method**	This Uganda Standard specifies a test method to determine the relative flammability of fluids when contacted with a hot metal surface at a fixed temperature, but it is also possible to gauge fluid ignition temperatures by adjustment of the manifold temperature	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*

192.	**US ISO 20843:2011, Petroleum and related products — Determination of pH of fire-resistant fluids within categories HFAE, HFAS and HFC**	This Uganda Standard specifies a test method to determine the pH value of fire-resistant fluids within categories HFAE, HFAS and HFC, as classified in ISO 6743-4	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
193.	**US ISO 6743-5:2006, Lubricants, industrial oils and related products (class L) — Classification — Part 5: Family T (Turbines)**	This Uganda Standard establishes the detailed classification of fluids of family T (Turbines) that belong to class L (Lubricants, industrials oils and related products). This classification excludes the products intended for aircraft turbines and the lubrication of wind turbines.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
194.	**US ISO 6743-12:1989, Lubricants, industrial oils and related products (class L) — Classification — Part 12: Family Q (Heat transfer fluids)**	This Uganda Standard establishes the detailed classification of family Q (heat transfer fluids). All products listed belong to class L (Lubricants, industrial oils and related products).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
195.	**US ISO 6743-13:2002, Lubricants, industrial oils and related products (class L) — Classification — Part 13: Family G (Slideways)**	This Uganda Standard establishes the detailed classification of family G (lubricants for slideways). All the lubricants listed in this classification belong to class L (Lubricants, industrial oils and related products).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

196.	**US ISO 8068:2006, Lubricants, industrial oils and related products (class L) — Family T (Turbines) — Specification for lubricating oils for turbines**	This Uganda Standard specifies the minimum requirements for turbine lubricants, as delivered. It specifies the requirements for a wide variety of turbines for power generation, including steam turbines, gas turbines, combined-cycle turbines with a common lubrication system and hydraulic (water driven) turbines.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*30,000*
197.	**US 2257: 2021, Refined gold — Specification**	This Uganda Standard specifies the requirements and methods of sampling and test for refined gold in cast bar form.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
198.	**US 2258: 2021, Test Method for Chemical Analysis of Refined Gold by Direct Current Plasma Atomic Emission Spectrometry**	This test method covers the analysis of refined gold for the following elements having the following chemical composition limits: Element Content Range, µg/g Copper 17 to 300 Iron 6 to 150 Lead 17 to 100 Palladium 7 to 350 Silver 17 to 500	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

199.	**US ISO 6743-8:1987, Lubricants, industrial oils and related products (class L) — Classification — Part 8: Family R (Temporary protection against corrosion)**	This Uganda Standard establishes the detailed classification of family R (Temporary protection against corrosion), which belongs to class L (Lubricants, industrial oils and related products). This classification applies to categories of products which are assigned to ensure temporary protection against corrosion. It includes only those products the main function of which is to ensure temporary protection, the word "temporary" being relevant not to time-limit product efficiency but to the capacity for removal of the product after a certain time.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
200.	**US ISO 19378:2003, Lubricants, industrial oils and related products (class L) — Machine-tool lubricants — Categories and specifications**	This Uganda Standard provides the manufacturers and users of machine tools with criteria for the choice among the various categories of lubricants and gives specifications for these lubricants.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*
201.	**US 1748:2021, Standard Test Method for Gum Content in Fuels by Jet Evaporation (2nd Edition)**	This Uganda Standard covers the determination of the ethanol content of hydrocarbon blends containing greater than 20 % ethanol. This method is applicable to denatured fuel ethanol, ethanol fuel blends, and mid-level ethanol blends. (*This standard cancels and replaces US 1748:2017, Standard Test Method for Gum Content in Fuels by Jet Evaporation, which has been technically revised*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

202.	**US ISO 3405:2019, Petroleum and related products from natural or synthetic sources — Determination of distillation characteristics at atmospheric pressure (2nd Edition)**	This Uganda Standard specifies a laboratory method for the determination of the distillation characteristics of light and middle distillates derived from petroleum and related products of synthetic or biological origin with initial boiling points above 0 °C and end-points below approximately 400 °C, utilizing either manual or automated equipment. Light distillates are typically automotive engine petrol, automotive engine ethanol fuel blends with up to 85 % (V/V) ethanol, and aviation petrol. Middle distillates are typically aviation turbine fuel, kerosene, diesel, diesel with up to 30 % (V/V) FAME, burner fuel, and marine fuels that have no appreciable quantities of residua. *(This standard cancels and replaces the first edition, US ISO 3405:2000, Petroleum products — Determination of distillation characteristics at atmospheric pressure, which has been technically revised)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*55,000*

203.	**US ISO 6743-1:2002, Lubricants, industrial oils and related products (class L) — Classification — Part 1: Family A (Total loss systems)**	This Uganda Standard establishes the detailed classification of family A (Total loss systems) which belongs to class L (Lubricants, industrial oils and related products).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
204.	**US 1749:2021, Standard Practice for Aviation Fuel Sample Containers for Tests affected by Trace Contamination (2nd Edition)**	This Uganda Standard covers the types of and preparation of containers found most suitable for the handling of aviation fuel samples for the determination of critical properties affected by trace contamination. (*This standard cancels and replaces US 1749:2017, Standard Practice for Aviation Fuel Sample Containers for Tests Affected by Trace Contamination, which has been technically revised*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	***30,000***
205.	**US 1751:2021, Standard Test Method for Determination of Ethanol and Methanol Content in Fuels Containing Greater than 20% Ethanol by Gas Chromatography (2nd Edition)**	This Uganda Standard covers the determination of the ethanol content of hydrocarbon blends containing greater than 20 % ethanol. This method is applicable to denatured fuel ethanol, ethanol fuel blends, and mid-level ethanol blends. . *(This standard cancels and replaces US 1751:2017, Standard Test Method for Determination of Ethanol and Methanol Content in Fuels Containing Greater than 20 % Ethanol by Gas Chromatography, which has been technically revised*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	***30,000***

206.	**US 2282:2021, Fuel oils — Specification**	This Uganda Standard specifies requirements, sampling and test methods for various grades of fuel oils intended for use in various types of fuel-oil-burning equipment under various climatic and operating conditions. This standard does not cover fuel oils containing more than 20 % by volume biodiesel component, and biodiesel blends with grades 4, 5, or 6	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*
207.	**US 2284:2021, Biodiesel fuel blend stock (B100) – Specification**	This Uganda Standard specifies requirements, sampling and test methods for biodiesel (B100) for use as a blend component with middle distillate fuels.	PETROLEUM AND PETROCHEMICAL PRODUCTS	*COMPULSORY*	*20,000*
208.	**US 2303:2021, Standard Test Method for Flash Point by Tag Closed Cup Tester**	This Uganda Standard covers the determination of the flash point, by tag manual and automated closed testers, of liquids with a viscosity below 5.5 mm^2/s (cSt) at 40 °C (104 °F), or below 9.5 mm^2/s (cSt) at 25 °C (77 °F), and a flash point below 93 °C (200 °F). (*This standard is an adoption of ASTM D56 – 16a, Standard Test Method for Flash Point by Tag Closed Cup Tester*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

209.	**US 2304:2021, Standard Test Method for Determination of Fatty Acid Methyl Esters (FAME) in Diesel Fuel by Linear Variable Filter (LVF) Array Based Mid-Infrared Spectroscopy**	This Uganda Standard determines fatty acid methyl esters (FAME or biodiesel) in diesel fuel oils. FAME can be quantitatively determined from 1.0 % to 30.0 % by volume. This test method uses linear variable filter (LVF) array based mid-infrared spectroscopy for monitoring FAME concentration. (*This standard is an adoption of ASTM D7861 – 14 (Reapproved 2019), Standard Test Method for Determination of Fatty Acid Methyl Esters (FAME) in Diesel Fuel by Linear Variable Filter (LVF) Array Based Mid-Infrared Spectroscopy*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
210.	**US 2305:2021, Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure**	This Uganda Standard covers the atmospheric distillation of petroleum products and liquid fuels using a laboratory batch distillation unit to determine quantitatively the boiling range characteristics of such products as light and middle distillates, automotive spark-ignition engine fuels with or without oxygenates (see Note 1), aviation gasolines, aviation turbine fuels, diesel fuels, biodiesel blends up to 30 % volume, marine fuels, special petroleum spirits, naphthas, white spirits, kerosines, and Grades 1 and 2 burner fuels. (*This standard is an adoption of ASTM D86 – 20b, Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*55,000*

211.	**US 2306:2021, Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method)**	This Uganda Standard covers the determination of the color of refined oils such as undyed motor and aviation gasoline, jet propulsion fuels, naphthas and kerosine, and, in addition, petroleum waxes and pharmaceutical white oils. (*This standard is an adoption of ASTM D156 – 15, Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method)*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
212.	**US 2307:2021, Standard Test Method for Burning Quality of Kerosene**	This Uganda Standard covers the qualitative determination of the burning properties of kerosene to be used for illuminating purposes. (*This standard is an adoption of ASTM D187 – 18, Standard Test Method for Burning Quality of Kerosene*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
213.	**US 2308:2021, Standard Test Method for Freezing Point of Aviation Fuels**	This Uganda Standard covers the determination of the temperature below which solid hydrocarbon crystals may form in aviation turbine fuels and aviation gasoline. If no crystallization point or freezing point can be measured, this test can be used to report the lowest measurable temperature reached before the crystallization point. (*This standard is an adoption of ASTM D2386 – 19, Standard Test Method for Freezing Point of Aviation Fuels*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

214.	**US 2309:2021, Standard Test Method for Determination of Total Aromatic Hydrocarbons and Total Polynuclear Aromatic Hydrocarbons in Aviation Turbine Fuels and other Kerosene Range Fuels by Supercritical Fluid Chromatography**	This Uganda Standard covers the determination of the concentration of total aromatics, and total polynuclear aromatic hydrocarbons in aviation turbine fuels and other kerosenes by supercritical fluid chromatography. (*This standard is an adoption of ASTM D8305 – 19, Standard Test Method for The Determination of Total Aromatic Hydrocarbons and Total Polynuclear Aromatic Hydrocarbons in Aviation Turbine Fuels and other Kerosene Range Fuels by Supercritical Fluid Chromatography*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
215.	**US 2310:2021, Standard Test Method for Water and Sediment in Middle Distillate Fuels by Centrifuge**	This Uganda Standard covers the determination of the volume of free water and sediment (as a percentage of the sample) that is suspended in the bulk fuel in middle distillate fuels with viscosities in the range of 1.0 mm^2/s to 4.1 mm^2/s at 40 °C (1.0 cSt to 4.1 cSt at 104 °F) and densities in the range of 770 kg/m^3 to 900 kg/m^3 at 15 °C. *(This standard is an adoption of ASTM D2709-16, Standard Test Method for Water and Sediment in Middle Distillate Fuels by Centrifuge*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*

216.	**US 2311:2021, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester**	This Uganda Standard covers the determination of the flash point of petroleum products in the temperature range from 40 °C to 370 °C by a manual Pensky-Martens closed-cup apparatus or an automated Pensky-Martens closed-cup apparatus, and the determination of the flash point of biodiesel in the temperature range of 60 °C to 190 °C by an automated Pensky-Martens closed cup apparatus. (*This standard is an adoption of ASTM D93 – 20, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
217.	**US 2312:2021, Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation**	This Uganda Standard covers the determination of water in the range from 0 % to 25 % by volume in petroleum products, tars, and other bituminous materials by the distillation method. (*This standard is an adoption of ASTM D95 – 13 (Reapproved 2018), Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
218.	**US 2313:2021, Standard Test Method for Sulfur in Petroleum Products (General High Pressure Decomposition Device Method)**	This Uganda Standard covers the determination of sulfur in petroleum products, including lubricating oils containing additives, additive concentrates, and lubricating greases that cannot be burned completely in a wick lamp. The test method is applicable to any petroleum product sufficiently low in volatility that it can be weighed accurately in an open sample boat and containing at least 0.1 % sulfur. (*This standard is an adoption of ASTM*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		D129 – 18, Standard Test Method for Sulfur in Petroleum Products (General High Pressure Decomposition Device Method)).			
219.	**US 2314:2021, Standard Test Method for Ash from Petroleum Products**	This Uganda Standard covers the determination of ash in the range 0.010 % to 0.180 % by mass, from distillate and residual fuels, gas turbine fuels, crude oils, lubricating oils, waxes, and other petroleum products, in which any ash-forming materials present are normally considered to be undesirable impurities or contaminants. The test method is limited to petroleum products which are free from added ash-forming additives, including certain phosphorus compounds. (*This standard is an adoption of ASTM D482 – 19, Standard Test Method for Ash from Petroleum Products*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
220.	**US 2315:2021, Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products**	This Uganda Standard covers the determination of the amount of carbon residue (Note 1) left after evaporation and pyrolysis of an oil, and it is intended to provide some indication of relative coke-forming propensity. This test method is generally applicable to relatively non-volatile petroleum products which partially decompose on distillation at atmospheric pressure. (*This standard is an adoption of*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

		ASTM D524–15 (Reapproved 2019), Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products).			
221.	**US 2316:2021, Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration**	This Uganda Standard covers procedures for the determination of acidic constituents in petroleum products, lubricants, biodiesel, and blends of biodiesel. (*This standard is an adoption of ASTM D664 – 18$^{\varepsilon 2}$, Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
222.	**US 2317:2021, Standard Test Method for Sulfur in Petroleum Products (Lamp Method)**	This Uganda Standard covers the determination of total sulfur in liquid petroleum products in concentrations from 0.01 % to 0.4 % by mass (Note 1). A special sulfate analysis procedure is described in Annex A1 that permits the determination of sulfur in concentrations as low as 5 mg/kg. (*This standard is an adoption of ASTM D1266 – 18, Standard Test Method for Sulfur in Petroleum Products (Lamp Method)*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

223.	**US 2318:2021, Standard Test Method for Sulfur in Petroleum Products by High Temperature Combustion and Infrared (IR) Detection or Thermal Conductivity Detection (TCD)**	This Uganda Standard covers procedures for the determination of total sulfur in petroleum products including lubricating oils containing additives, and in additive concentrates. This test method is applicable to samples boiling above 177 °C (350 °F) and containing a mass fraction of sulfur between 0.22 % and 24.2 %. Other sulfur concentrations may be analyzed, but the precision stated may or may not apply. (*This standard is an adoption of ASTM D1552-16$^{\varepsilon 1}$, Standard Test Method for Sulfur in Petroleum Products by High Temperature Combustion and Infrared (IR) Detection or Thermal Conductivity Detection (TCD)*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
224.	**US 2319:2021, Standard Test Methods for Electrical Conductivity of Aviation and Distillate Fuels**	This Uganda Standard covers the determination of the electrical conductivity of aviation and distillate fuels with and without a static dissipator additive. The test methods normally give a measurement of the conductivity when the fuel is uncharged, that is, electrically at rest (known as the rest conductivity). (*This standard is an adoption of ASTM D2624 – 15, Standard Test Method for Electrical Conductivity of Aviation and Distillate Fuels)*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

225.	**US 2320:2021, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry**	This Uganda Standard covers the determination of total sulfur in petroleum and petroleum products that are single-phase and either liquid at ambient conditions, liquefiable with moderate heat, or soluble in hydrocarbon solvents. (*This standard is an adoption of ASTM D4294 – 16$^{\varepsilon 1}$, Standard Test Method Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
226.	**US 2322:2021, Standard Test Method for Electrical Conductivity of Liquid Hydrocarbons by Precision Meter**	This Uganda Standard covers and applies to the determination of the "rest" electrical conductivity of aviation fuels and other similar low-conductivity hydrocarbon liquids in the range from 0.1 to 2000 pS/m (see 3.1.2). This test method can be used in the laboratory or in the field. (*This standard is an adoption of ASTM D4308 – 13, Standard Test Method for Electrical Conductivity of Liquid Hydrocarbons by Precision Meter*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
227.	**US 2323:2021, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by**	This Uganda Standard covers the determination of total sulfur in liquid hydrocarbons, boiling in the range from approximately 25 °C to 400 °C, with viscosities between approximately 0.2 cSt and 20 cSt (mm^2/s) at room temperature. (*This standard is an adoption of ASTM D5453 – 19a, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

	Ultraviolet Fluorescence				
228.	**US 2324:2021, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement**	This Uganda Standard covers procedures and equipment for obtaining, mixing, and handling representative samples of volatile fuels for the purpose of testing for compliance with the standards set forth for volatility related measurements applicable to light fuels. (*This standard is an adoption of ASTM D5842 – 19, Standard Practice for Sampling and Handling of Fuels for Volatility Measurement,*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
229.	**US 2325:2021, Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)**	This Uganda Standard covers the evaluation of the lubricity of diesel fuels using a high-frequency reciprocating rig (HFRR). (*This standard is an adoption of ASTM D6079 – 18, Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR))*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

230.	**US 2326:2021, Standard Test Method for Sulfur in Gasoline Diesel Fuel Jet Fuel Kerosine Biodiesel, Biodiesel Blends and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry**	This Uganda Standard covers the determination of total sulfur by monochromatic wavelength-dispersive X-ray fluorescence (MWDXRF) spectrometry in single-phase gasoline, diesel fuel, refinery process streams used to blend gasoline and diesel, jet fuel, kerosine, biodiesel, biodiesel blends, and gasoline-ethanol blends. (*This standard is an adoption of ASTM D7039 – 15a, Standard Test Method for Sulfur in Gasoline Diesel Fuel Jet Fuel Kerosine Biodiesel, Biodiesel Blends and Gasoline-Ethanol Blends by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
231.	**US 2327:2021, Standard Test Method for Sulfur in Automotive, Heating, and Jet Fuels by Monochromatic Energy Dispersive X-ray Fluorescence Spectrometry**	This Uganda Standard provides measurement of total sulfur in automotive, No. 2 heating, and jet fuels with a minimum of sample preparation. A typical analysis time is 180 s to 360 s per sample. (*This standard is an adoption of ASTM D7220 – 12 (Reapproved 2017), Standard Test Method for Sulfur in Automotive, Heating, and Jet Fuels by Monochromatic Energy Dispersive X-ray Fluorescence Spectrometry*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

232.	**US 2329:2021, Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR) by Visual Observation**	This Uganda Standard covers the evaluation of the lubricity of diesel fuels using a high-frequency reciprocating rig (HFRR). (*This standard is an adoption of ASTM D7688 – 14, Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR) by Visual Observation*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
233.	**US 2336:2021, Standard Test Method for Cloud Point of Petroleum Products and Liquid Fuels**	This Uganda Standard covers only petroleum products and biodiesel fuels that are transparent in layers 40 mm in thickness, and with a cloud point below 49 °C. *(This standard is an adoption of ASTM D2500 – 17a, Standard Test Method for Cloud Point of Petroleum Products and Liquid Fuels*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
234.	**US 2337:2021, Standard Test Method for Determination of Total Monoglycerides, Total Diglycerides, Total Triglycerides, and Free and Total Glycerin in B-100 Biodiesel Methyl**	This Uganda Standard covers the quantitative determination of total monoglyceride, total diglyceride, total triglyceride, and free and total glycerin in B-100 methyl esters by gas chromatography. *(This standard is an adoption of ASTM D6584 – 17, Standard Test Method for Determination of Total Monoglycerides, Total Diglycerides, Total Triglycerides, and Free and Total Glycerin in B-100 Biodiesel Methyl Esters by Gas Chromatography*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

	Esters by Gas Chromatography				
235.	**US 2338:2021, Standard Test Method for Determination of Fuel Filter Blocking Potential of Biodiesel (B100) Blend Stock by Cold Soak Filtration Test (CSFT)**	This Uganda Standard covers the determination by filtration time after cold soak of the suitability for a biodiesel (B100) blend stock that meets all other requirements of Specification D6751 and has a cloud point below 20 °C (68 °F) to provide adequate low temperature operability performance to at least the cloud point of the finished blend. *(This standard is an adoption of ASTM D7501 – 18a, Standard Test Method for Determination of Fuel Filter Blocking Potential of Biodiesel (B100) Blend Stock by Cold Soak Filtration Test (CSFT)*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
236.	**US 2341:2021, Standard Test Method for Determination of Existent and Potential Sulfate and Inorganic Chloride in Fuel Ethanol and Butanol by Direct**	This Uganda Standard covers a direct injection ion chromatographic procedure for determining existent and potential inorganic sulfate and total inorganic chloride content in hydrous and anhydrous denatured ethanol and butanol to be used in motor fuel applications. It is intended for the analysis of ethanol and butanol samples containing between 1.0 mg/kg to 20 mg/kg of existent or potential inorganic sulfate and 1.0 mg/kg to 50 mg/kg of inorganic chloride. (*This*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

	Injection Suppressed Ion Chromatography	*standard is an adoption ASTM D7319 – 17, Standard Test Method for Determination of Existent and Potential Sulfate and Inorganic Chloride in Fuel Ethanol and Butanol by Direct Injection Suppressed Ion Chromatography*)			
237.	**US 2342:2021, Standard Test Methods for Copper in Water**	This Uganda Standard covers the determination of copper in water by atomic absorption spectrophotometry. (*This standard is an adoption of ASTM D1688 – 17, Standard Test Methods for Copper in Water*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
238.	**US 2345:2021, Standard Test Method for Determination of pHe of Denatured Fuel Ethanol and Ethanol Fuel Blends**	This Uganda Standard covers a procedure to determine a measure of the hydrogen ion activity of high ethanol content fuels. These include denatured fuel ethanol and ethanol fuel blends. The test method is applicable to denatured fuel ethanol and ethanol fuel blends containing ethanol at 51 % by volume, or more. (*This standard is an adoption of ASTM D6423 – 20a, Standard Test Method for Determination of pHe of Denatured Fuel Ethanol and Ethanol Fuel Blends*).	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

239.	**US 2346:2021, Standard Test Method for Existent Inorganic Sulfate in Ethanol by Potentiometric Titration**	This Uganda Standard covers a potentiometric titration procedure for determining the existent inorganic sulfate content of hydrous, anhydrous ethanol, and anhydrous denatured ethanol, which is added as a blending agent with spark ignition fuels. It is intended for the analysis of denatured ethanol samples containing between 1.0 mg/kg to 20 mg/kg existent inorganic sulfate. (*This standard is an adoption of ASTM D7318 – 19$^{\varepsilon 1}$, Standard Test Method for Existent Inorganic Sulfate in Ethanol by Potentiometric Titration*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
240.	**US 2371:2021, Standard Test Method for Smoke Point of Kerosene and Aviation Turbine Fuel**	This Uganda Standard covers two procedures for determination of the smoke point of kerosene and aviation turbine fuel, a manual procedure and an automated procedure, which give results with different precision. (*This standard is an adoption of ASTM D1322 – 19, Standard Test Method for Smoke Point of Kerosene and Aviation Turbine Fuel*)	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
241.	**US 2372:2021, Standard Test Method for (Thiol Mercaptan) Sulfur in Gasoline, Kerosine, Aviation Turbine, and Distillate Fuels (Potentiometric Method)**	This Uganda Standard covers the determination of mercaptan sulfur in gasolines, kerosines, aviation turbine fuels, and distillate fuels containing from 0.0003 % to 0.01 % by mass of mercaptan sulfur. Organic sulfur compounds such as sulfides, disulfides, and thiophene, do not interfere. Elemental sulfur in amounts less than 0.0005 % by mass does not interfere. Hydrogen sulfide will interfere if not removed, as described in 9.2. (*This standard is*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		an adoption of ASTM D3227 – 16, Standard Test Method for (Thiol Mercaptan) Sulfur in Gasoline, Kerosine, Aviation Turbine, and Distillate Fuels (Potentiometric Method))			
242.	**US 1809:2022, Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)**	This Uganda Standard describes the laboratory determination of water and sediment in crude oils by means of the centrifuge procedure. *(This standard is an adoption of ASTM D4007-11 (Reapproved 2016) $^{\varepsilon 1}$, Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
243.	**US 2321:2022, Standard Practice for Aviation Fuel Sample Containers for Tests affected by Trace Contamination**	This Uganda Standard covers the types of and preparation of containers found most suitable for the handling of aviation fuel samples for the determination of critical properties affected by trace contamination. *(This standard is an adoption of ASTM D4306 – 20, Standard Practice for Aviation Fuel Sample Containers for Tests Affected by Trace Contamination)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

244.	**US 2330:2022, Mineral insulating oil used in electrical apparatus – Specification**	This Uganda Standard specifies requirements, sampling and test methods for mineral insulating oil. This standard covers unused mineral insulating oil of petroleum origin for use as an insulating and cooling medium in new and existing power and distribution electrical apparatus, such as transformers, regulators, reactors, circuit breakers, switchgear, and attendant equipment. This specification applies only to new insulating oil as received prior to any processing	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
245.	**US 2331:2022, Test Method for Pour Point of Petroleum Products (Automatic Tilt Method)**	This Uganda Standard covers the determination of pour point of petroleum products by an automatic instrument that tilts the test jar during cooling and detects movement of the surface of the test specimen with an optical device. *(This standard is an adoption* of *ASTM D5950 – 14 (Reapproved 2020), Standard Test Method for Pour Point of Petroleum Products (Automatic Tilt Method)).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
246.	**US 2347:2022, Standard Guide for Sampling, Test Methods, and Specifications for Electrical Insulating Liquids**	This Uganda Standard describes methods of testing and specifications for electrical insulating liquids intended for use in electrical cables, transformers, liquid circuit breakers, and other electrical apparatus where the liquids are used as insulating, or heat transfer media, or both. *(This standard is an adoption* of *ASTM D117 – 18, Standard Guide for Sampling, Test Methods, and Specifications for Electrical Insulating Liquids).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*

247.	**US 2348:2022, Standard test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents**	This Uganda Standard covers the determination of the aniline point of petroleum products and hydrocarbon solvents. Method A is suitable for transparent samples with an initial boiling point above room temperature and where the aniline point is below the bubble point and above the solidification point of the aniline-sample mixture. Method B, a thin-film method, is suitable for samples too dark for testing by Method A. Methods C and D are for samples that may vaporize appreciably at the aniline point. Method D is particularly suitable where only small quantities of sample are available. Method E describes a procedure using an automatic apparatus suitable for the range covered by Methods A and B. *(This standard is an adoption* of *ASTM D611 – 12 (Reapproved 2016), Standard Test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
248.	**US 2349:2022, Standard Practices for Sampling Electrical Insulating Liquids**	This Uganda Standard covers sampling of new electrical insulating liquids including oils, askarels, silicones, synthetic liquids, and natural ester insulating liquids as well as those insulating liquids in service or subsequent to service in cables, transformers, circuit breakers, and other electrical apparatus. These practices apply to liquids having a viscosity of less than 6.476×10^{-4} m^2/s (540 cSt) at 40°C (104°F). *(This standard is an adoption* of *ASTM D923 – 15,*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*

		Standard Practices for Sampling Electrical Insulating Liquids)			
249.	**US 2350:2022, Standard Test Method for Dissipation Factor (or Power Factor) and Relative Permittivity (Dielectric Constant) of Electrical Insulating Liquids**	This Uganda Standard describes testing of new electrical insulating liquids as well as liquids in service or subsequent to service in cables, transformers, oil circuit breakers, and other electrical apparatus. *(This standard is an adoption* of *ASTM D924 – 15, Standard Test Method for Dissipation Factor (or Power Factor) and Relative Permittivity (Dielectric Constant) of Electrical Insulating Liquids).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
250.	**US 2351:2022, Standard Test Method for Interfacial Tension of Insulating Liquids Against Water by the Ring Method**	This Uganda Standard covers the measurement of the interfacial tension between mineral oil and water, under non-equilibrium conditions. *(This standard is an adoption of ASTM D971* – 20*, Standard Test Method for Interfacial Tension of Insulating Liquids Against Water by the Ring Method)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

251.	**US 2352:2022, Standard Test Method for Acid and Base Number by Color-Indicator Titration**	This Uganda Standard covers the determination of acidic or basic constituents (Note 1) in petroleum products and lubricants soluble or nearly soluble in mixtures of toluene and isopropyl alcohol. It is applicable for the determination of acids or bases whose dissociation constants in water are larger than 10^{-9}; extremely weak acids or bases whose dissociation constants are smaller than 10^{-9} do not interfere. Salts react if their hydrolysis constants are larger than 10^{-9}. *(This standard is an adoption of ASTM D974 – 14$^{\varepsilon 2}$, Standard Test Method for Acid and Base Number by Color-Indicator Titration)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
252.	**US 2353:2022, Standard Test Method for Corrosive Sulfur in Electrical Insulating Liquids**	This Uganda Standard covers the detection of corrosive sulfur compounds in electrical insulating oils of petroleum origin. *(This standard is an adoption* of *ASTM D1275-15, Standard Test Method for Corrosive Sulfur in Electrical Insulating Liquids).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

253.	**US 2354:2022, Standard Test Method for Visual Examination of Used Electrical Insulating Liquids in the Field**	This Uganda Standard covers test method for visual examination is applicable to electrical insulating liquids that have been used in transformers, oil circuit breakers, or other electrical apparatus as insulating or cooling media, or both. *(This standard is an adoption* of ASTM D1524-15 *Standard Test Method for Visual Examination of Used Electrical Insulating Liquids in the Field)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
254.	**US 2355:2022, Standard Test Method for Water in Insulating Liquids by Coulometric Karl Fischer Titration**	This Uganda Standard covers test method for the measurement of water present in insulating liquids by coulometric Karl Fischer titration. This test method is used commonly for test specimens below 100 % relative saturation of water in oil. The coulometric test method is known for its high degree of sensitivity (typically 10 µg H2O). This test method requires the use of equipment specifically designed for coulometric titration. *(This standard is an adoption* of *ASTM D1533-20 Standard Test Method for Water in Insulating Liquids by Coulometric Karl Fischer Titration).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
255.	**US 2356:2022, Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids Using VDE Electrodes**	This Uganda Standard covers the determination of the dielectric breakdown voltage of insulating liquids (oils of petroleum origin, silicone fluids, high fire-point mineral electrical insulating oils, synthetic ester fluids and natural ester fluids). This test method is applicable to insulating liquids commonly used in cables, transformers, oil circuit breakers, and similar apparatus as an insulating and	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		cooling mediumThis test method is applicable to insulating liquids commonly used in cables, transformers, oil circuit breakers, and similar apparatus as an insulating and cooling medium. *(This standard is an adoption* of *ASTM D1816-12 (Reapproved 2019) Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids Using VDE Electrodes)*			
256.	**US 2358:2022, Standard Test Method for Oxidation Stability of Inhibited Mineral Insulating Oil by Pressure Vessel**	This Uganda Standard covers test method intended as a rapid method for the evaluation of the oxidation stability of new mineral insulating oils containing a synthetic oxidation inhibitor. This test is considered of value in checking the oxidation stability of new mineral insulating oils containing 2,6-ditertiary-butyl para-cresol or 2,6-ditertiary-butyl phenol, or both. *(This standard is an adoption* of *ASTM D2112-15, Standard Test Method for Oxidation Stability of Inhibited Mineral Insulating Oil by Pressure Vessel,).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
257.	**US 2359:2022, Standard Test Method for Gassing of Electrical Insulating Liquids Under Electrical Stress and Ionization (Modified Pirelli Method)**	This Uganda Standard measures the rate at which gas is evolved or absorbed by insulating liquids when subjected to electrical stress of sufficient intensity to cause ionization in cells having specific geometries. *(This standard is an adoption of ASTM D2300-08 (Reapproved 2017) Standard Test Method for Gassing of Electrical Insulating Liquids Under Electrical Stress and Ionization (Modified Pirelli Method)).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

258.	**US 2360:2022, Standard Test Method for Oxidation Stability of Mineral Insulating Oil**	This Uganda Standard covers a test method for determining the resistance of mineral transformer oils to oxidation under prescribed accelerated aging conditions. Oxidation stability is measured by the propensity of oils to form sludge and acid products during oxidation. This test method is applicable to new oils, both uninhibited and inhibited, but is not well defined for used or reclaimed oils. *(This standard is an adoption* of ASTM D2440-13 *Standard Test Method for Oxidation Stability of Mineral Insulating Oil).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
259.	**US 2361:2022, Standard Test Method for 2,6-di-tert-Butyl- p-Cresol and 2,6- di-tert-Butyl Phenol in Electrical Insulating Oil by Infrared Absorption**	This Uganda Standard covers the determination of the weight percent of 2,6-ditertiary-butyl paracresol and 2,6-ditertiary-butyl phenol in new or used electrical insulating oil in concentrations up to 0.5% by recording the infrared spectrum of the oil at certain specific bands. *(This standard is an adoption* of ASTM E177 – 20, *Standard Practice for Use of the Terms Precision and Bias in ASTM Test Methods)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
260.	**US 2362:2022, Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids under Impulse Conditions**	This Uganda Standard covers the determination of the dielectric breakdown voltage of insulating liquids in a highly divergent field under impulse conditionsand has been found applicable to liquids of petroleum origin, natural and synthetic esters. *(This standard is an adoption* of *ASTM D3300-20, Standard Test Method for Dielectric Breakdown Voltage of Insulating Liquids Under*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		Impulse Conditions)			
261.	**US 2363:2022, Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography**	This Uganda Standard describes a quantitative determination of the concentration of polychlorinated biphenyls (PCBs) in electrical insulating liquids by gas chromatography. It also applies to the determination of PCB present in mixtures known as askarels, used as electrical insulating liquids. *(This standard is an adoption* of *ASTM D4059-00 (Reapproved 2018) Standard Test Method for Analysis of Polychlorinated Biphenyls in Insulating Liquids by Gas Chromatography)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*25,000*
262.	**US 2364:2022, Standard Test Method for Analysis of 2,6-Ditertiary-Butyl Para-Cresol and 2,6-Ditertiary-Butyl Phenol in Insulating Liquids by Gas Chromatography**	This Uganda Standard covers the determination by gas chromatography of 2,6-ditertiary-butyl para-cresol and 2,6-ditertiary-butyl phenol in new and used insulating liquids at concentrations up to 0.5 %. *(This standard is an adoption* of *ASTM D4768-11 (Reapproved 2019) Standard Test Method for Analysis of 2,6-Ditertiary-Butyl Para-Cresol and 2,6-Ditertiary-Butyl Phenol in Insulating Liquids by Gas Chromatography)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

263.	**US 2365:2022, Standard Test Method for Furanic Compounds in Electrical Insulating Liquids by High-Performance Liquid Chromatography (HPLC)**	This Uganda Standard covers the determination in electrical insulating liquids of products of the degradation of cellulosic materials such as paper, pressboard, and cotton materials typically found as insulating materials in electrical equipment. *(This standard is an adoption* of ASTM D5837 – 15, *Standard Test Method for Furanic Compounds in Electrical Insulating Liquids by High-Performance Liquid Chromatography (HPLC))*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
264.	**US 2378:2022, Standard Specification for Engine Coolant Grade Glycol**	This Uganda Standard specifies requirements for commercial products, engine coolant grade ethylene glycol and propylene glycol, including virgin glycols and those derived from the recycling of vehicle engine coolants and industrial source glycols. *(This standard is an adoption* of *ASTM E1177 – 20, Standard Specification for Engine Coolant Grade Glycol).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
265.	**US 2379:2022, Standard Specification for Glycol Base Engine Coolant for Automobile and Light-Duty Service**	This Uganda Standard specifies requirements for ethylene glycol or propylene glycol base engine coolants used in automobiles or other light duty service cooling systems. When concentrates are used at 40 to 70 % concentration by volume in water, or when pre-diluted glycol base engine coolants 50 volume % or higher engine coolant concentrate are used without further dilution, they will function effectively to provide protection against freezing, boiling, and corrosion. *(This standard is an adoption of ASTM D3306-20,*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		Standard Specification for Glycol Base Engine Coolant for Automobile and Light-Duty Service).			
266.	**US 2396:2022, Standard Specification for Fully-Formulated Glycol Base Engine Coolant for Heavy-Duty Engines**	This Uganda Standard specifies requirements for fully formulated glycol base coolants for cooling systems of heavy duty engines. When concentrates are used at 40 to 60 % glycol concentration by volume in water of suitable quality, or when pre-diluted glycol base engine coolants (50 volume % minimum) are used without further dilution, they will function effectively during both winter and summer to provide protection against corrosion, cavitation, freezing, and boiling. *(This standard is an adoption* of *ASTM D6210-17, Standard Specification for Fully-Formulated Glycol Base Engine Coolant for Heavy-Duty Engines).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

267.	**US 2399:2022, Standard Test Methods for Water in Engine Coolant Concentrate by the Karl Fischer Reagent Method**	This Uganda Standard covers the determination of the water present in new or unused glycol-based coolant concentrates using a manual (Test Method A) or an automatic (Test Method B) coulometric titrator procedure. *(This standard is an adoption* of *ASTM D1123-99 (Reapproved 2015) Standard Test Methods for Water in Engine Coolant Concentrate by the Karl Fischer Reagent Method).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
268.	**US 2400:2022, Standard Test Method for pH of Engine Coolants and Antirusts**	This Uganda Standard covers the determination of the pH of unused engine coolants and antirusts, and used or unused aqueous dilutions of the concentrated products. *(This standard is an adoption* of *ASTM D1287-11 (Reapproved 2020) Standard Test Method for pH of Engine Coolants and Antirusts).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
269.	**US 2401:2022, Standard Test Method for Trace Chloride Ion in Engine Coolants**	This Uganda Standard covers the determination of chloride ion in engine coolants in the range from 5 to 200 ppm in the presence of up to 0.6 weight % mercaptobenzothiazole. *(This standard is an adoption* of *ASTM D3634-99 (Reapproved 2015*) *Standard Test Method for Trace Chloride Ion in Engine Coolants)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

270.	**US 2402:2022, Standard Terminology for Engine Coolants and Related Fluids**	This Uganda Standard covers terminology relating to engine coolants. It is intended to provide a reference for anyone seeking information on engine coolants, and also to provide a uniform set of definitions for use in preparing ASTM specifications, test methods and other standard documents. *(This standard is an adoption of ASTM D4725-15 Standard Terminology for Engine Coolants and Related Fluids).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
271.	**US 2403:2022, Standard Test Method for Analysis of Engine Coolant for Chloride and Other Anions by Ion Chromatography**	This Uganda Standard covers the chemical analysis of engine coolant for chloride ion by high-performance ion chromatography (HPIC). Several other common anions found in engine coolant can be determined in one chromatographic analysis by this test method. *(This standard is an adoption* of *ASTM D5827-09 (Reapproved 2015) Standard Test Method for Analysis of Engine Coolant for Chloride and Other Anions by Ion Chromatography).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
272.	**US 2404:2022, Standard Test Method for Density and Relative Density of Engine Coolant Concentrates and Aqueous Engine Coolants by Digital Density Meter**	This Uganda Standard covers the determination of the density or relative density of glycols, glycerin, heat transfer fluids, engine coolant concentrates, and aqueous engine coolants. *(This standard is an adoption* of *ASTM D5931-20 Standard Test Method for Density and Relative Density of Engine Coolant Concentrates and Aqueous Engine Coolants by Digital Density Meter).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

273.	**US 2405:2022, Standard Test Method for Determination of Silicon and Other Elements in Engine Coolant by Inductively Coupled Plasma-Atomic Emission Spectroscopy**	This Uganda Standard covers the determination of silicon in engine coolant by inductively coupled plasma-atomic emission spectroscopy (ICP-AES). Silicon can be determined as low as the range of 5 ppm by this test method. Other elements also found in engine coolant can be determined by this method. This test method is applicable to the determination of dissolved or dispersed elements. *(This standard is an adoption* of *ASTM D6130-11 (Reapproved 2018), Standard Test Method for Determination of Silicon and Other Elements in Engine Coolant by Inductively Coupled Plasma-Atomic Emission Spectroscopy).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
274.	**US 2406:2022, Standard Test Method for Determination of Acids and Glycol Esters in Glycols**	This Uganda Standard covers the determination of free acids and glycol esters in ethylene glycol by titration. *(This standard is an adoption* of *ASTM D7736-19a, Standard Test Method for Determination of Acids and Glycol Esters in Glycols).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

275.	**US 2407:2022, Standard Test Methods for Analysis of Ethylene Glycols and Propylene Glycols**	This Uganda Standard covers the chemical and physical analysis of the commonly available grades of ethylene glycol, diethylene glycol, triethylene glycol, propylene glycol, and dipropylene glycol. *(This standard is an adoption* of ASTM E202-18, *Standard Test Methods for Analysis of Ethylene Glycols and Propylene Glycols).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*35,000*
276.	**US 2408:2022, Standard Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)**	This Uganda Standard describes a procedure for the visual measurement of the color of essentially light colored liquids (Note 1). It is applicable only to materials in which the color-producing bodies present have light absorption characteristics nearly identical with those of the platinum-cobalt color standards used.. *(This standard is an adoption* of ASTM D1209-05 (Reapproved 2019), *Standard Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
277.	**US 2409:2022, Standard Test Method for Iron in Trace Quantities Using the 1,10-Phenanthroline Method**	This Uganda Standard covers the determination of iron in the range from 1 to 100 µg. *(This standard is an adoption of ASTM E394-15, Standard Test Method for Iron in Trace Quantities Using the 1,10-Phenanthroline Method)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

278.	**US 2410:2022, Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products**	This Uganda Standard covers the determination of total acidity as acetic acid, in concentrations below 0.05 %, in organic compounds and hydrocarbon mixtures used in paint, varnish, and lacquer solvents and diluents. *(This standard is an adoption* of D1613-17, *Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
279.	**US 2412:2022, Standard Test Method for Sulfate Ion in Water**	This Uganda Standard covers the determination of sulfate in water in the range from 5 to 40 mg/L of sulfate ion (SO_4^{--}). *(This standard is an adoption* of *ASTM D516-16, Standard Test Method for Sulfate Ion in Water)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
280.	**US 2413:2022, Standard Test Method for Percent Ash Content of Engine Coolants**	This Uganda Standard covers the determination of ash content after ignition of commercial engine coolants and antirusts, as packaged or after use. *(This standard is an adoption* of *ASTM D1119-05 (Reapproved 2015), Standard Test Method for Percent Ash Content of Engine Coolants)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*

281.	**US 2414:2022, Standard Test Method for Boiling Point of Engine Coolants**	This Uganda Standard covers the determination of the equilibrium boiling point of engine coolants. The equilibrium boiling point indicates the temperature at which the sample will start to boil in a cooling system under equilibrium conditions at atmospheric pressure. *(This standard is an adoption* of ASTM D1120-17, *Standard Test Method for Boiling Point of Engine Coolants)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
282.	**US 2415:2022, Standard Test Method for Reserve Alkalinity of Engine Coolants and Antirusts**	This Uganda Standard covers the determination of the reserve alkalinity of new, unused engine coolants, and liquid antirusts as received, of used or unused aqueous dilutions of the concentrated materials, and of aqueous dilutions of solid antirusts. *(This standard is an adoption* of *ASTM D1121-11 (Reapproved 2020), Standard Test Method for Reserve Alkalinity of Engine Coolants and Antirusts)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
283.	**US 2416:2022, Standard Test Method for Hardness in Water**	This Uganda Standard covers the determination of hardness in water by titration. This test method is applicable to waters that are clear in appearance and free of chemicals that will complex calcium or magnesium. *(This standard is an adoption of ASTM D1126-17, Standard Test Method for Hardness in Water).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

284.	**US 2417:2022, Standard Test Method for Freezing Point of Aqueous Engine Coolants**	This Uganda Standard covers the determination of the freezing point of an aqueous engine coolant solution in the laboratory. *(This standard is an adoption of ASTM D1177-17, Standard Test Method for Freezing Point of Aqueous Engine Coolants).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
285.	**US 2418:2022, Standard Test Methods for pH of Water**	This Uganda Standard covers the determination of pH by electrometric measurement using the glass electrode as the sensor. *(This standard is an adoption of ASTM D1293-18, Standard Test Methods for pH of Water)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*
286.	**US 2419:2022, Standard Test Method for Corrosion Test for Engine Coolants in Glassware**	This Uganda Standard covers a simple beaker-type procedure for evaluating the effects of engine coolants on metal specimens under controlled laboratory conditions. *(This standard is an adoption of ASTM D1384-05 (Reapproved 2019), Standard Test Method for Corrosion Test for Engine Coolants in Glassware)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

287.	**US 2420:2022, Standard Test Method for Foaming Tendencies of Engine Coolants in Glassware**	This Uganda Standard covers a simple glassware test for evaluating the tendency of engine coolants to foam under laboratory-controlled-conditions of aeration and temperature. *(This standard is an adoption of ASTM D1881-17 Standard Test Method for Foaming Tendencies of Engine Coolants in Glassware)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
288.	**US 2421:2022, Standard Test Method for Effect of Cooling System Chemical Solutions on Organic Finishes for Automotive Vehicles**	This Uganda Standard determines the effect of cooling system chemical solutions on organic finishes used on motor vehicles. Cooling system chemicals include: coolants or corrosion inhibitors, or both, cooling system cleaners or flushes, or both, and stop leak additives. *(This standard is an adoption of ASTM D1882-17 Standard Test Method for Effect of Cooling System Chemical Solutions on Organic Finishes for Automotive Vehicles)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*10,000*
289.	**US 2422:2022, Standard Test Method for Cavitation Corrosion and Erosion-Corrosion Characteristics of Aluminum Pumps With Engine Coolants**	This Uganda Standard covers the evaluation of the cavitation corrosion and erosion-corrosion characteristics of aluminum automotive water pumps with coolants. *(This standard is an adoption of ASTM D2809-09 (Reapproved 2017) Standard Test Method for Cavitation Corrosion and Erosion-Corrosion Characteristics of Aluminum Pumps With Engine Coolants).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*20,000*

290.	**US 2423:2022, Standard Test Method for Use of the Refractometer for Field Test Determination of the Freezing Point of Aqueous Engine Coolants**	This Uganda Standard covers the use of a portable refractometer for determining the approximate freezing protection provided by ethylene and propylene glycol-based coolant solutions as used in engine cooling systems and special applications. *(This standard is an adoption of ASTM D3321-19 Standard Test Method for Use of the Refractometer for Field Test Determination of the Freezing Point of Aqueous Engine Coolants)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
291.	**US 2424:2022, Standard Test Method for Anions in Water by Suppressed Ion Chromatography**	This Uganda Standard covers the sequential determination of fluoride, chloride, nitrite, *ortho* -phosphate, bromide, nitrate, and sulfate ions in water by chemically suppressed ion chromatography. *(This standard is an adoption of ASTM D4327-17 Standard Test Method for Anions in Water by Suppressed Ion Chromatography)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*30,000*
292.	**US 2425:2022, Standard Test Method for Corrosion of Cast Aluminum Alloys in Engine Coolants Under Heat-Rejecting Conditions**	This Uganda Standard covers a laboratory screening procedure for evaluating the effectiveness of engine coolants in combating corrosion of aluminum casting alloys under heat-transfer conditions that may be present in aluminum cylinder head engines. *(This standard is an adoption of ASTM D4340-19 Standard Test Method for Corrosion of Cast Aluminum Alloys in Engine Coolants Under Heat-Rejecting Conditions)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

293.	**US 2426:2022, Standard Specification for Low Silicate Ethylene Glycol Base Engine Coolant for Heavy Duty Engines Requiring a Pre-Charge of Supplemental Coolant Additive (SCA)**	This Uganda Standard covers the requirements for low silicate ethylene glycol base engine coolants for cooling systems of heavy-duty engines. *(This standard is an adoption of ASTM D4985-10 (Reapproved 2015) Standard Specification for Low Silicate Ethylene Glycol Base Engine Coolant for Heavy Duty Engines Requiring a Pre-Charge of Supplemental Coolant Additive (SCA)).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
294.	**US 2427:2022, Standard Test Method for Freezing Point of Aqueous Ethylene Glycol Base Engine Coolants by Automatic Phase Transition Method**	This Uganda Standard covers the determination of the freezing point of an aqueous engine coolant solution. *(This standard is an adoption of ASTM D6660-01 (Reapproved 2019) Standard Test Method for Freezing Point of Aqueous Ethylene Glycol Base Engine Coolants by Automatic Phase Transition Method)*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*
295.	**US 2429:2022, Standard Test Method for Compatibility of Supplemental Coolant Additives (SCAs) and Engine Coolant Concentrates**	This Uganda Standard covers the determination of the compatibility of commercial SCA and commercial ethylene and propylene glycol engine coolant concentrates. This test method focuses on the solubility of specific chemical species formed in the engine coolant. *(This standard is an adoption of ASTM D5828-97 (Reapproved 2019) Standard Test Method for Compatibility of Supplemental Coolant Additives (SCAs) and*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

		Engine Coolant Concentrates)			
296.	**US 2430:2022, Standard Test Method for John Deere Coolant Cavitation Test**	This Uganda Standard defines a heavy-duty diesel engine to evaluate coolant protection as related to cylinder liner pitting caused by cavitation. *(This standard is an adoption of ASTM D7583-16 Standard Test Method for John Deere Coolant Cavitation Test).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*40,000*
297.	**US 2432:2022, Standard Test Method for Density or Relative Density of Engine Coolant Concentrates and Engine Coolants By The Hydrometer**	This Uganda Standard covers the determination of the density or relative density of glycols, glycerin, heat transfer fluids engine coolant concentrates and engine coolants. *(This standard is an adoption of ASTM D1122-20, Standard Test Method for Density or Relative Density of Engine Coolant Concentrates and Engine Coolants by the Hydrometer).*	PETROLEUM AND PETROCHEMICAL PRODUCTS	*VOLUNTARY*	*15,000*

	PETROLEUM TRANSPORTATION AND REFINING				
298.	**US ISO 14732: 2013, Welding personnel — Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials**	This Uganda Standard specifies requirements for qualification of welding operators and also weld setters for mechanized and automatic welding	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*40,000*
299.	**US ISO 17636-1:2013, Non-destructive testing of welds — Radiographic testing — Part 1: X- and gamma-ray techniques with film**	This Uganda Standard specifies techniques of radiographic examination of fusion welded joints in metallic materials using industrial radiographic film techniques. This part of US ISO 17636 applies to the joints of plates and pipes Besides its conventional meaning, "pipe" as used in this standard covers other cylindrical bodies such as tubes, penstocks, boiler drums, and pressure vessels.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*5,000*

300.	**US ISO 17636-2:2013, Non-destructive testing of welds — Radiographic testing — Part 2: X- and gamma-ray techniques with digital detectors**	This Uganda Standard specifies fundamental techniques of digital radiography with the object of enabling satisfactory and repeatable results to be obtained economically. The techniques are based on generally recognized practice and fundamental theory of the subject. This part of US ISO 17636 applies to the digital radiographic examination of fusion welded joints in metallic materials. It applies to the joints of plates and pipes Besides its conventional meaning, "pipe", as used in this International Standard, covers other cylindrical bodies such as tubes, penstocks, boiler drums, and pressure vessel.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*70,000*
301.	**ISO 5173: 2009, Destructive tests on welds in metallic materials — Bend tests**	This Uganda Standard specifies a method for making transverse root, face and side bend tests on test specimens taken from butt welds, butt welds with cladding (subdivided into welds in clad plates and clad welds) and cladding without butt welds, in order to assess ductility and/or absence of imperfections on or near the surface of the test specimen. It also gives the dimensions of the test specimen	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
302.	**US ISO 5178: 2001, Destructive tests on welds in metallic materials — Longitudinal tensile test on weld metal in fusion welded joints**	This Uganda Standard specifies the sizes of test specimens and the test procedure for carrying out longitudinal tensile tests on cylindrical test specimens in order to determine the mechanical properties of weld metal in a fusion welded joint	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*

303.	**US ISO 6520-1:2007, Welding and allied processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding**	This Uganda Standard serves as the basis for a precise classification and description of weld imperfections. In order to avoid any confusion, the types of imperfection are defined with explanations and illustrations where necessary Metallurgical imperfections are not included	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*40,000*
304.	**US ISO 9015-1: 2001, Destructive tests on welds in metallic materials — Hardness testing — Part 1: Hardness test on arc welded joints**	This Uganda Standard specifies hardness tests on transverse sections of arc welded joints of metallic materials. It covers Vickers hardness tests in accordance with ISO 6507-1, normally with test loads of 49,03 N or 98,07 N (HV 5 or HV 10).	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
305.	**ISO 9712: 2012, Non-destructive testing — Qualification and certification of NDT personnel**	This Uganda Standard specifies requirements for principles for the qualification and certification of personnel who perform industrial non-destructive testing (NDT)	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
306.	**US ISO 13588: 2012, Non-destructive testing of welds — Ultrasonic testing — Use of automated phased array technology other non-destructive testing (NDT) methods or techniques, for manufacturing inspection, pre-service and for in-service inspection.**	This Uganda Standard specifies the application of the phased array technology for the semi- or fully automated ultrasonic testing of fusion-welded joints in metallic materials of minimum thickness 6 mm. It applies to full penetration welded joints of simple geometry in plates, pipes, and vessels, where both the weld and parent material are low-alloyed carbon steel	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*40,000*

307.	**US ISO 14175: 2008, Welding consumables — Gases and gas mixtures for fusion welding and allied processes**	This Uganda Standard specifies requirements for the classification of gases and gas mixtures used in fusion welding and allied processes including, but not limited to: · tungsten arc welding, · gas-shielded metal arc welding, · plasma arc welding, · plasma arc cutting, · laser welding, · laser cutting, and · arc braze welding.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
308.	**ISO 4136: 2012, Destructive tests on welds in metallic materials — Transverse tensile test**	This Uganda Standard specifies the sizes of test specimen and the procedure for carrying out transverse tensile tests in order to determine the tensile strength and the location of fracture of a welded butt joint. This standard applies to metallic materials in all forms of product with joints made by any fusion welding process	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*20,000*
309.	**US ISO 10438-1:2007, Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries — Part 1: General requirements**	This Uganda Standard specifies general requirements for lubrication systems, oil-type shaft-sealing systems, dry-gas face-type shaft-sealing systems and control-oil systems for general- or special-purpose applications General-purpose applications are limited to lubrication systems. These systems can serve equipment such as compressors, gears, pumps and drivers. This part of US ISO 10438 is intended to be used in conjunction with US ISO 10438-2, US ISO 10438-3 or US ISO 10438-4, as appropriate.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*80,000*

310.	**US ISO 10438-2:2007, Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries — Part 2: Special-purpose oil systems**	This Uganda Standard, in conjunction with of US ISO 10438-1, specifies requirements for oil systems for special purpose applications. These oil systems can provide lubrication oil, seal oil or both. These systems can serve equipment such as compressors, gears, pumps and drivers	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*80,000*
311.	**US ISO 10438-3:2007, Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries — Part 3: General-purpose oil systems**	This Uganda Standard, in conjunction with US ISO 10438-1, specifies requirements for oil systems for general purpose applications. These oil systems can provide lubrication oil, but not seal oil and can serve equipment such as compressors, gears, pumps.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*60,000*
312.	**US ISO 10438-4:2007, Petroleum, petrochemical and natural gas industries — Lubrication, shaft-sealing and control-oil systems and auxiliaries — Part 4:Self-acting gas seal support systems**	This Uganda Standard in conjunction with US ISO 10438-1 specifies requirements for support systems for self-acting gas seals (dry gas seals), for example as described in ISO 10439 and ISO 10440-1These systems can serve equipment such as compressors, gears, pumps and drivers	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*60,000*

313.	**US ISO 10439-1:2015, Petroleum, petrochemical and natural gas industries — Axial and centrifugal compressors and expander compressors – Part 1: General requirements**	This Uganda Standard specifies minimum requirements and gives recommendations for axial compressors, single-shaft, and integrally geared process centrifugal compressors, and expander compressors for special purpose applications that handle gas or process air in the petroleum, petrochemical, and natural gas industries	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
314.	**US ISO 10439-2:2015, Petroleum, chemical and gas service industries – Axial and centrifugal compressors and expander compressors – Part 2: Non-integrally geared centrifugal and axial compressors**	This Uganda Standard specifies minimum requirements and gives recommendations for axial compressors, single-shaft, and integrally geared process centrifugal compressors and expander-compressors for special purpose applications that handle gas or process air in the petroleum, petrochemical, and natural gas industries	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*90,000*
315.	**US ISO 10439-3:2015, Petroleum, chemical and natural gas service industries — Axial and centrifugal compressors and expander compressors — Part 3: Integrally geared centrifugal compressors**	This Uganda Standard specifies minimum requirements and gives recommendations for axial compressors, single-shaft and integrally geared process centrifugal compressors, and expander compressors for special purpose applications that handle gas or process air in the petroleum, petrochemical, and natural gas industries. This part of US ISO 10439 specifies integrally geared centrifugal compressors in conjunction with US ISO 10439-1.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*90,000*

316.	**US ISO 13623: 2009, Petroleum and natural gas industries — Pipeline transportation systems**	This Uganda Standard specifies requirements and gives recommendations for the design, materials, construction, testing, operation, maintenance and abandonment of pipeline systems used for transportation in the petroleum and natural gas industries	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
317.	**US ISO 13706:2011, Petroleum, petrochemical and natural gas industries — Air-cooled heat exchangers**	This Uganda Standard gives requirements and recommendations for the design, materials, fabrication, inspection, testing and preparation for shipment of air-cooled heat exchangers for use in the petroleum, petrochemical and natural gas industries. This standard is applicable to air-cooled heat exchangers with horizontal bundles, but the basic concepts can also be applied to other configurations	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
318.	**ISO 13707:2000, Petroleum and natural gas industries – Reciprocating compressors**	This Uganda Standard covers the minimum requirements for reciprocating compressors and their drivers used in the petroleum and natural gas industries with either lubricated or no lubricated cylinders	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
319.	**US ISO 13709:2009, Centrifugal pumps for petroleum, petrochemical and natural gas industries**	This Uganda Standard specifies requirements for centrifugal pumps, including pumps running in reverse as hydraulic power recovery turbines, for use in petroleum, petrochemical and gas industry process services	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*

320.	**US ISO 13710: 2004, Petroleum, petrochemical and natural gas industries — Reciprocating positive displacement pumps**	This Uganda Standard specifies requirements for reciprocating positive-displacement pumps and pump units for use in the petroleum, petrochemical and natural gas industries. It is applicable to both direct-acting and power-frame types	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
321.	**US ISO 13847: 2013, Petroleum and natural gas industries — Pipeline transportation systems — Welding of pipelines**	This Uganda Standard specifies requirements for the petroleum, petrochemical and natural gas industries, for producing and inspecting girth, branch and fillet welds in the pipeline part of pipeline transportation systems which meet the requirements of US ISO 13623 or equivalent	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
322.	**US ISO 13916: 1996, Welding — Guidance on the measurement of preheating temperature, interpass temperature and preheat maintenance temperature**	This Uganda Standard specifies requirements for the measurement of preheating temperature, interpass temperature and preheat maintenance temperature for fusion welding. This standard may also be applied as appropriate in the case of other welding processes. This standard does not cover the measurement of post weld heat treatment temperatures	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*25,000*

323.	**US ISO 14313:2007, Petroleum and natural gas industries — Pipeline transportation systems — Pipeline valves**	This Uganda Standard specifies requirements and provides recommendations for the design, manufacturing, testing and documentation of ball, check, gate and plug valves for application in pipeline systems meeting the requirements of US ISO 13623 for the petroleum and natural gas industries. This standard is not applicable to subsea pipeline valves, as they are covered by a separate standard (ISO 14723)This standard is not applicable to valves for pressure ratings exceeding PN 420	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
324.	**US ISO 15136-1: 2009, Petroleum and natural gas industries — Progressing cavity pump systems for artificial lift —Part 1: Pumps**	This Uganda Standard provides requirements for the design, design verification and validation, manufacturing and data control, performance ratings, functional evaluation, repair, handling and storage of progressing cavity pumps for use in the petroleum and natural gas industry. This part of US ISO 15136 is applicable to those products meeting the definition of progressing cavity pumps (PCP) included herein Connections to the drive string and tubulars are not covered by this part of US ISO 15136	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
325.	**US ISO 15136-2: 2006, Petroleum and natural gas industries — Progressing cavity pump systems for artificial lift —Part 2: Surface-drive systems**	This Uganda Standard provides requirements for the design, design verification and validation, manufacturing and data control, performance ratings and repair of progressing cavity pump surface-drive systems for use in the petroleum and natural gas industry. This part of US ISO 15136 is applicable to those products	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*65,000*

		meeting the definition of surface-drive systems. Additionally, informative annexes provide information on brake system selection, installation, and operation; and sucker rod selection and use			
326.	**US ISO 15589-1:2015, Petroleum and natural gas industries — Cathodic protection of pipeline transportation systems — Part 1: On-land pipelines**	This Uganda Standard specifies requirements and gives recommendations for the pre-installation surveys, design, materials, equipment, installation, commissioning, operation, inspection, and maintenance of cathodic protection systems for on-land pipelines, as defined in US ISO 13623 for the petroleum, petrochemical, and natural gas industries	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
327.	**US ISO 15589-2:2012, Petroleum and natural gas industries — Cathodic protection of pipeline transportation systems — Part 2: Offshore pipelines**	This Uganda Standard specifies requirements and gives recommendations for the pre-installation surveys, design, materials, equipment, fabrication, installation, commissioning, operation, inspection and maintenance of cathodic protection (CP) systems for offshore pipelines for the petroleum, petrochemical and natural gas industries as defined in US ISO 13623	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*60,000*
328.	**US ISO 15590-1:2009, Petroleum and natural gas industries — Induction bends, fittings and flanges for pipeline transportation systems — Part 1: Induction bends**	This Uganda Standard specifies the technical delivery conditions for bends made by the induction bending process for use in pipeline transportation systems for the petroleum and natural gas industries as defined in US ISO 13623	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*55,000*

329.	**US ISO 15590-2:2003, Petroleum and natural gas industries — Induction bends, fittings and flanges for pipeline transportation systems — Part 2: Fittings**	This Uganda Standard specifies the technical delivery conditions for unalloyed or low-alloy steel seamless and welded pipeline fittings for use in pipeline transportation systems for the petroleum and natural gas industries as defined in US ISO 13623	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
330.	**US ISO 15590-3:2004, Petroleum and natural gas industries — Induction bends, fittings and flanges for pipeline transportation systems — Part 3: Flanges**	This Uganda Standard applies to weldneck and blind flanges (full face, raised face, and RTJ groove) as well as anchor, swivel-ring flanges and orifice flanges	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*40,000*
331.	**US ISO 15609-1:2004, Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 1: Arc welding**	This Uganda Standard specifies requirements for the content of welding procedure specifications for arc welding processes	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
332.	**US ISO 15609-2: 2001, Specification and qualification of welding procedures for metallic materials —Welding procedure specification — Part 2: Gas welding**	This Uganda Standard specifies requirements for the content of welding procedure specifications for gas welding processes Variables listed in this standard are those influencing the quality of the welded joint.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
333.	**US ISO 15609-3: 2004, Specification and qualification of welding procedures for metallic materials —Welding procedure specification — Part 3: Electron beam**	This Uganda Standard specifies requirements for the content of welding procedure specifications for electron beam welding Variables listed in this standard are those influencing the quality and properties of the welded joint	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*

	welding				
334.	**US ISO 15609-4: 2009, Specification and qualification of welding procedures for metallic materials —Welding procedure specification — Part 4: Laser beam welding**	This Uganda Standard specifies requirements for the content of the welding procedure specification (WPS) for laser beam welding processes, including overlay welding. It is not applicable to other processes for cladding (ethermal spraying)	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
335.	**US ISO 15609-5: 2011, Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 5: Resistance welding**	This Uganda Standard specifies requirements for the content of welding procedure specifications for resistance spot, seam, butt and projection welding processes. It is necessary to establish the acceptability of applying the principles of this part of US ISO 15609 to other resistance and related welding processes before any qualification is undertaken.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
336.	**US ISO 15609-6: 2013, Specification and qualification of welding procedures for metallic materials —Welding Procedure specification — Part 6: Laser-arc hybrid welding**	This Uganda Standard specifies requirements for the content of welding procedure specifications for laser-arc hybrid welding processes Variables listed in this part of US ISO 15609 are those influencing the quality and the properties of the welded joint	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*

337.	**US ISO 16812:2007, Petroleum, petrochemical and natural gas industries — Shell and-tube heat exchangers**	This Uganda Standard specifies requirements and gives recommendations for the mechanical design, material selection, fabrication, inspection, testing and preparation for shipment of shell-and-tube heat exchangers for the petroleum, petrochemical and natural gas industries. This standard is applicable to the following types of shell-and-tube heat exchangers: heaters, condensers, coolers and reboilers. This standard is not applicable to vacuum-operated steam surface condensers and feed-water heaters	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*50,000*
338.	**US ISO 21809-1:2011, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 1: Polyolefin coatings (3-layer PE and 3-layer PP)**	This Uganda Standard specifies requirements of plant-applied external three-layer polyethylene- and polypropylene-based coatings for corrosion protection of welded and seamless steel pipes for pipeline transportation systems in the petroleum and natural gas industries in accordance with US ISO 13623.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*70,000*
339.	**US ISO 21809-2:2014, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 2: Single layer fusion-bonded epoxy coatings**	This Uganda Standard specifies the requirements for qualification, application, testing and handling of materials for plant application of single layer fusion-bonded epoxy (FBE) coatings applied externally for the corrosion protection of bare steel pipe for use in pipeline transportation systems for the petroleum and natural gas industries as defined in US ISO 13623.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*70,000*

340.	**US ISO 21809-3:2011, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 3: Field joint coatings**	This Uganda Standard specifies requirements for field joint coating of seamless or welded steel pipes for pipeline transportation systems in the petroleum and natural gas industries as defined in US ISO 13623.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*110,000*
341.	**US ISO 21809-4:2009, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 4: Polyethylene coatings (2-layer PE)**	This Uganda Standard specifies the requirements for qualification, application, inspection, testing, handling and storage of materials for plant application of two-layer polyethylene coatings (2-layer PE) applied externally for the corrosion protection of bare steel pipe for use in pipeline transportation systems for the petroleum and natural gas industries as defined in US ISO 13623.	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*50,000*
342.	**US ISO 21809-5:2010, Petroleum and natural gas industries — External coatings for buried or submerged pipelines used in pipeline transportation systems — Part 5: External concrete coatings**	This Uganda Standard specifies the requirements for qualification, application, testing and handling of materials required for the application of reinforced concrete coating externally to either bare pipe or pre-coated pipe for use in pipeline transportation systems for the petroleum and natural gas industries as defined in US ISO 13623	PETROLEUM TRANSPORTATION AND REFINING	*COMPULSORY*	*50,000*

343.	**US ISO 148-1:2009, Metallic materials — Charpy pendulum impact test — Part 1:Test method**	This Uganda Standard specifies the Charpy pendulum impact (V-notch and U-notch) test method for determining the energy absorbed in an impact test of metallic materials. This part of US ISO 148 does not apply to instrumented impact testing, which is specified in ISO 14556	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
344.	**ISO 857-1: 1998, Welding and allied processes — Vocabulary — Part 1: Metal welding processes**	This Uganda Standard defines metal welding processes and relating terms	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
345.	**US ISO 3183: 2012, Petroleum and natural gas industries — Steel pipe for pipeline transportation systems**	This Uganda Standard specifies requirements for the manufacture of two product specification levels (PSL 1 and PSL 2) of seamless and welded steel pipes for use in pipeline transportation systems in the petroleum and natural gas industries. This standard is not applicable to cast pipe	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
346.	**US ISO 3834-1:2005, Quality requirements for fusion welding of metallic materials — Part 1: Criteria for the selection of the appropriate level of quality requirements**	This Uganda Standard provides a general outline of US ISO 3834 and criteria to be taken into account for the selection of the appropriate level of quality requirements for fusion welding of metallic materials, among the three levels specified in US ISO 3834-2 [3], US ISO 3834-3 [4] and US ISO 3834-4 [5]It applies to manufacturing, both in workshops and at field installation sites	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*35,000*
347.	**US ISO 3834-2: 2005, Quality requirements for fusion welding of metallic materials — Part 2: Comprehensive quality requirements**	This Uganda Standard defines comprehensive quality requirements for fusion welding of metallic materials both in workshops and at field installation sites	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*25,000*

348.	**US ISO 3834-3:2005, Quality requirements for fusion welding of metallic materials — Part 3: Standard quality requirements**	This Uganda Standard defines standard quality requirements for fusion welding of metallic materials both in workshops and at field installation sites	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*25,000*
349.	**US ISO 9606-1:2012, Qualification testing of welders —Fusion welding — Part 1: Steels (2nd edition)**	This Uganda Standard specifies the requirements for qualification testing of welders for fusion welding of steels. It provides a set of technical rules for a systematic qualification test of the welder, and enables such qualifications to be uniformly accepted independently of the type of product, location and examiner or examining body(Uganda Standard cancels and replaces US ISO 9606-1:1994, Approval testing of welders — Fusion welding — Part 1: Steels, which has been technically revised)	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*50,000*
350.	**US ISO 9606-3:1999, Approval testing of welders — Fusion welding — Part 3: Copper and copper alloys**	This Uganda Standard specifies essential requirements, ranges of approval, test conditions, acceptance requirements and certification for the approval testing of welder performance for the welding of copper. This standard applies to the approval testing of welders for the fusion welding of copper	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*40,000*
351.	**US ISO 9606-4:1999, Approval testing of welders — Fusion welding — Part 4: Nickel and nickel alloys**	This Uganda Standard specifies essential requirements, ranges of approval, test conditions, acceptance requirements and certification for the approval testing of welder performance for the welding of nickel. This standard applies to the approval testing of welders for the fusion welding of nickel	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*35,000*

352.	**US ISO 9606-5:2000, Approval testing of welders — Fusion welding — Part 5: Titanium and titanium alloys, zirconium and zirconium alloys**	This Uganda Standard specifies essential requirements, ranges of approval, test conditions, acceptance requirements and certification for the approval testing of welder performance for the welding of titanium and zirconium. This standard applies to the approval testing of welders for the fusion welding of titanium	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*35,000*
353.	**US ISO 6507-1: 2005, Metallic materials — Vickers hardness test — Part 1: Test method**	This Uganda Standard specifies the Vickers hardness test method, for the three different ranges of test force for metallic materials.	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*40,000*
354.	**US ISO 6947:2011, Welding and allied processes — Welding positions**	This Uganda Standard defines welding positions for testing and production, for butt and fillet welds, in all product forms	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
355.	**US 1SO 3171:1988, Petroleum liquids — Automatic pipeline sampling**	This Uganda Standard recommends procedures to be used for obtaining, by automatic means, representative samples of crude oil and liquid petroleum products being conveyed by pipeline	PETROLEUM TRANSPORTATION AND REFINING	*VOLUNTARY*	*30,000*
	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS				
356.	**US ISO 11960: 2014, Petroleum and natural gas industries — Steel pipes for use as casing or tubing for wells**	This Uganda Standard specifies the technical delivery conditions for steel pipes (casing, tubing and pup joints), coupling stock, coupling material and accessory material and establishes requirements for three Product Specification Levels (PSL-1, PSL-2, PSL-3)	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*

357.	**US ISO 11961: 2008, Petroleum and natural gas industries — Steel drill pipe**	This Uganda Standard specifies the technical delivery conditions for steel drill-pipes with upset pipe-body ends and weld-on tool joints for use in drilling and production operations in petroleum and natural gas industries for three product specification levels (PSL-1, PSL-2 and PSL-3)	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*
358.	**US ISO 10426-1:2009, Petroleum and natural gas industries — Cements and materials for well cementing — Part 1: Specification**	This part of US ISO 10426 specifies requirements and gives recommendations for six classes of well cements, including their chemical and physical requirements and procedures for physical testing.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*55,000*
359.	**US ISO 10426-2:2003, Petroleum and natural gas industries — Cements and materials for well cementing — Part 2: Testing of well cements**	This part of US ISO 10426 specifies requirements and gives recommendations for the testing of cement slurries and related materials under simulated well conditions	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*
360.	**US ISO 13533: 2001, Petroleum and natural gas industries — Drilling and production equipment — Drill through equipment**	This Uganda Standard specifies requirements for performance, design, materials, testing and inspection, welding, marking, handling, storing and shipping of drill-through equipment used for drilling for oil and gas. It also defines service conditions in terms of pressure, temperature and wellbore fluids for which the equipment will be designed	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*

361.	**US ISO 14693: 2003, Petroleum and natural gas industries — Drilling and well servicing equipment**	This Uganda Standard provides general principles and specifies requirements for design, manufacture and testing of new drilling and well-servicing equipment and of replacement primary load-carrying components manufactured subsequent to the publication of this standard	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*100,000*
362.	**US ISO 10407:1993, Petroleum and natural gas industries — Drilling and production equipment — Drill stem design and operating limits**	This Uganda Standard lays down the properties of drill pipe and tool joints, drill collars, kellys, and establishes principles for the design and use of drill stem and their components.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*110,000*
363.	**US ISO 10407- 2: Petroleum and natural gas industries — Rotary drilling equipment — Part 2: Inspection and classification of used drill stem elements**	This part of US ISO 10407 specifies the required inspection for each level of inspection and procedures for the inspection and testing of used drill stem elements. For the purpose of this part of US ISO 10407, drill stem elements include drill pipe body, tool joints, rotary-shouldered connections, drill collar, HWDP and the ends of drill stem elements that make up with them. This part of US ISO 10407 has been prepared to address the practices and technology commonly used in inspection	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*
364.	**US ISO 13500:2008 Petroleum and natural gas industries -- Drilling fluid materials -- Specifications and tests**	This Uganda Standard covers physical properties and test procedures for materials manufactured for use in oil- and gas-well drilling fluids. The materials covered are barite, haematite, bentonite, nontreated bentonite, OCMA-grade bentonite, attapulgite, sepiolite, technical-grade low-	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*

		viscosity carboxymethylcellulose (CMC-LVT), technical-grade high-viscosity carboxymethylcellulose (CMC-HVT), starch, low-viscosity polyanionic cellulose (PAC-LV), high-viscosity polyanionic cellulose (PAC-HV) and drilling-grade Xanthomonascampestris(Xanthan gum)			
365.	**US ISO 10414-1:2008, Petroleum and natural gas industries — Field testing of drilling fluids — Part 1: Water-based fluids**	This part of US ISO 10414 provides standard procedures for determining the following characteristics of water-based drilling fluids; drilling fluid density (mud weight), viscosity and gel strength, filtration, water, oil and solids contents, sand content, methylene blue capacity, pH, alkalinity and lime content, chloride content and total hardness as calcium.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*110,000*
366.	**US ISO 10414-2:2011, Petroleum and natural gas industries — Field testing of drilling fluids — Part 2: Oil-based fluids**	This part of US ISO 10414 provides standard procedures for determining the following characteristics of oil-based drilling fluids; drilling fluid density (mud weight), viscosity and gel strength, filtration, oil, water and solids concentrations, alkalinity, chloride concentration and calcium concentration, electrical stability, lime and calcium concentrations, calcium chloride and sodium chloride concentrations, low-gravity solids and weighting material concentrations	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*110,000*
367.	**US ISO14998:2013 Petroleum and natural gas industries — Downhole equipment — Completion accessories**	This Uganda Standard provides requirements and guidelines for completion accessories, as defined herein for use in the petroleum and natural gas industry. This Uganda Standard provides requirements for	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*60,000*

		the functional specification and technical specifications including: design, design verification and validation, materials, documentation and data control, redress, repair, shipment, and storage. This Uganda Standard covers the pressure containing, load bearing, disconnect/reconnect, tubing movement, and opening a port functionalities of completion accessories			
368.	**US ISO 17078-1:2004, Petroleum and natural gas industries — Drilling and production equipment — Part 1: Side-pocket mandrels**	This part of US ISO 17078 provides requirements for side-pocket mandrels used in the petroleum and natural gas industry. This part of US ISO 17078 includes specifying, selecting, designing, manufacturing, quality control, testing, and preparation for shipping of side-pocket mandrels.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*65,000*
369.	**US ISO 17078-2: 2007, Petroleum and natural gas industries — Drilling and production equipment — Part 2: Flow-control devices for side-pocket mandrels**	This part of US ISO 17078 provides requirements for subsurface flow-control devices used in side-pocket mandrels (hereafter called flow-control devices) intended for use in the worldwide petroleum and natural gas industry. This includes requirements for specifying, selecting, designing, manufacturing, quality-control, testing and preparation for shipping of flow-control devices. Additionally, it includes information regarding performance testing and calibration procedures	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*

370.	**US ISO 17078-3:2009 Petroleum and natural gas industries — Drilling and production equipment — Part 3: Running tools, pulling tools and kick-over tools and latches for side-pocket mandrels**	This part of US ISO 17078 provides requirements and guidelines for running tools, pulling tools, kick-over tools and latches used for the installation and retrieval of flow control and other devices to be installed in side-pocket mandrels for use in the petroleum and natural gas industries. This includes requirements for specifying, selecting, designing, manufacturing, quality control, testing and preparation for shipping of these tools and latches. Additionally, it includes information regarding performance testing and calibration procedures	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*65,000*
371.	**US ISO 28781: 2010, Petroleum and natural gas industries — Drilling and production equipment — Subsurface barrier valves and related equipment**	This Uganda Standard provides the requirements for subsurface barrier valves and related equipment as they are defined herein for use in the petroleum and natural gas industries Included are the requirements for design, design validation, manufacturing, functional evaluation, repair, redress, handling and storage Subsurface barrier valves provide a means of isolating the formation or creating a barrier in the tubular to facilitate the performance of pre- and/or post-production/injection operational activities in the well	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*75,000*

372.	**US ISO 10423: 2009 Petroleum and natural gas industries -- Drilling and production equipment -- Wellhead and christmas tree equipment**	This Uganda Standard specifies requirements and gives recommendations for the performance, dimensional and functional interchangeability, design, materials, testing, inspection, welding, marking, handling, storing, shipment, purchasing, repair and remanufacture of wellhead and christmas tree equipment for use in the petroleum and natural gas industries	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*
373.	**US ISO 13535:2000, Petroleum and natural gas industries — Drilling and production equipment — Hoisting equipment**	This Uganda Standard provides requirements for the design, manufacture and testing of hoisting equipment suitable for use in drilling and production operations	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*65,000*
374.	**US ISO 13534: 2000, Petroleum and natural gas industries — Drilling and production equipment — Inspection, maintenance, repair and remanufacture of hoisting equipment**	This Uganda Standard gives guidelines and establishes requirements for inspection, maintenance, repair and remanufacture of items of hoisting equipment used in drilling and production operations, in order to maintain the serviceability of this equipment	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*35,000*
375.	**US ISO 13626: 2003, Petroleum and natural gas industries — Drilling and production equipment — Drilling and well-servicing structures**	This Uganda Standard specifies requirements and gives recommendations for suitable steel structures for drilling and well-servicing operations in the petroleum industry, provides a uniform method of rating the structures, and provides two product specification levels.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*65,000*

376.	**US ISO 14310:2008, Petroleum and natural gas industries -- Downhole equipment -- Packers and bridge plugs**	This Uganda Standard provides requirements and guidelines for packers and bridge plugs as defined herein for use in the petroleum and natural gas industry. This International Standard provides requirements for the functional specification and technical specification, including design, design verification and validation, materials, documentation and data control, repair, shipment, and storage	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*45,000*
377.	**US ISO 13085:2014 Petroleum and natural gas industries -- Aluminium alloy pipe for use as tubing for wells**	This Uganda Standard specifies the technical delivery condition, manufacturing process, material requirements, configuration and dimensions, and verification and inspection procedures for aluminium alloy pipes for use as tubing for wells in petroleum and natural gas industries	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
378.	**US ISO 15546:2011 Petroleum and natural gas industries -- Aluminium alloy drill pipe**	This Uganda Standard specifies the technical delivery conditions, manufacturing process, material requirements, configuration and dimensions, and verification and inspection procedures for aluminium alloy drill pipes with or without attached steel tool joints, for use in drilling and production operations in the petroleum and natural gas industries	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
379.	**US ISO 20312:2011 Petroleum and natural gas industries -- Design and operating limits of drill strings with aluminium alloy components**	This Uganda Standard applies to design and operating limits for drill strings containing aluminium alloy pipes manufactured in accordance with ISO 15546	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*

380.	**US ISO 27627:2014 Petroleum and natural gas industries -- Aluminium alloy drill pipe thread connection gauging**	This Uganda Standard specifies the technical delivery condition, manufacturing process, material requirements, configuration and dimensions, and verification and inspection procedures for aluminium alloy drill pipes manufactured in accordance with ISO 15546	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
381.	**US ISO 10424-1:2004, Petroleum and natural gas industries — Rotary drilling equipment — Part 1: Rotary drill stem elements**	This part of US ISO 10424 specifies requirements for the following drill stem elements: upper and lower Kelly valves; square and hexagonal kellys; drill stem subs; standard steel and non-magnetic drill collars; drilling and coring bits	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
382.	**US ISO 10424-2:2007, Petroleum and natural gas industries -- Rotary drilling equipment -- Part 2: Threading and gauging of rotary shouldered thread connections**	This part of US ISO 10424 specifies requirements on rotary shouldered connections for use in petroleum and natural gas industries, including dimensional requirements on threads and thread gauges, stipulations on gauging practice, gauge specifications, as well as instruments and methods for inspection of thread connections. These connections are intended primarily for use in drill-string components	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
383.	**US ISO 10405:2000, Petroleum and natural gas industries -- Care and use of casing and tubing**	This Uganda Standard establishes practices for care and use of casing and tubing. It specifies practices for running and pulling casing and tubing, including drifting, stabbing, making up and lowering, field makeup, drifting and landing procedures. Also included are causes of trouble, as well as transportation, handling and storage, inspection and field welding of attachments.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*60,000*

384.	**US ISO 13678:2010, Petroleum and natural gas industries -- Evaluation and testing of thread compounds for use with casing, tubing, line pipe and drill stem elements**	This Uganda Standard provides requirements, recommendations and methods for the testing of thread compounds intended for use on threaded casing, tubing, and line pipe connections; and for thread compounds intended for use on rotary shouldered connections. The tests outlined are used to evaluate the critical performance properties and physical and chemical characteristics of thread compounds under laboratory conditions	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*65,000*
385.	**US ISO 15463:2003, Petroleum and natural gas industries -- Field inspection of new casing, tubing and plain-end drill pipe**	This Uganda Standard specifies the technical delivery conditions, manufacturing process, material requirements, configuration and dimensions, and verification and inspection procedures for aluminium alloy drill pipes with or without attached steel tool joints, for use in drilling and production operations in the petroleum and natural gas industries	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
386.	**US ISO 13679:2002 Petroleum and natural gas industries -- Procedures for testing casing and tubing connections**	This Uganda Standard establishes minimum design verification testing procedures and acceptance criteria for casing and tubing connections for the oil and natural gas industries. These physical tests are part of a design verification process and provide objective evidence that the connection conforms to the manufacturer's claimed test load envelope and limit loads	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*65,000*

387.	**US ISO 16070:2005, Petroleum and natural gas industries -- Downhole equipment -- Lock mandrels and landing nipples**	This International Standard provides the requirements for lock mandrels and landing nipples within the production/injection conduit for the installation of flow control or other equipment used in the petroleum and natural gas industries. It includes the interface connections to the flow control or other equipment, but does not cover the connections to the well conduit	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
388.	**US ISO 17078-4:2010, Petroleum and natural gas industries -- Drilling and production equipment -- Part 4: Practices for side-pocket mandrels and related equipment**	This part of US ISO 17078 provides informative documentation to assist the user/purchaser and the supplier/manufacturer in specification, design, selection, testing, calibration, reconditioning, installation and use of side-pocket mandrels, flow-control devices and associated latches and installation tools. The product design and manufacturing-related requirements for these products are included within the other parts of ISO 17078	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*50,000*
389.	**US ISO 21457:2010 - Petroleum, petrochemical and natural gas industries -- Materials selection and corrosion control for oil and gas production systems**	This International Standard identifies the corrosion mechanisms and parameters for evaluation when performing selection of materials for pipelines, piping and equipment related to transport and processing of hydrocarbon production, including utility and injection systems. This includes all equipment from and including the well head, to and including pipelines for stabilized products. This International Standard is not applicable to downhole components.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*50,000*

390.	**US ISO 10416:2008 - Petroleum and natural gas industries -- Drilling fluids -- Laboratory testing**	This International Standard provides procedures for the laboratory testing of both drilling fluid materials and drilling fluid physical, chemical and performance properties. It is applicable to both water-based and oil-based drilling fluids, as well as the base or "make-up" fluid	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*110,000*
391.	**US ISO 13501:2011 - Petroleum and natural gas industries -- Drilling fluids -- Processing equipment evaluation**	This International Standard specifies a standard procedure for assessing and modifying the performance of solids control equipment systems commonly used in the field in petroleum and natural gas drilling fluids processing	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*80,000*
392.	**US ISO 10426-4:2004 - Petroleum and natural gas industries -- Cements and materials for well cementing -- Part 4: Preparation and testing of foamed cement slurries at atmospheric pressure**	This part of ISO 10426 defines the methods for the generation and testing of foamed cement slurries and their corresponding unfoamed base cement slurries at atmospheric pressure	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
393.	**US ISO 10426-5: Petroleum and natural gas industries — Cements and materials for well cementing — Part 5: Determination of shrinkage and expansion of well cement formulations at atmospheric pressure**	This part of ISO 10426 provides the methods for the testing of well cement formulations to determine the dimension changes during the curing process (cement hydration) at atmospheric pressure only. This is a base document, because under real well cementing conditions shrinkage and expansion take place under pressure and different boundary conditions.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*

394.	**US ISO 10427-3:2003 – Petroleum and natural gas industries – Equipment for well cementing – Part 3: Performance testing of cementing float equipment**	This part of ISO 10427 describes testing practices to evaluate the performance of cementing float equipment for the petroleum and natural gas industries. This part of ISO 10427 is applicable to float equipment that will be in contact with water-based fluids used for drilling and cementing wells. It is not applicable to float equipment performance in non-water-based fluids.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
395.	**US ISO 13503-1:2011 - Petroleum and natural gas industries -- Completion fluids and materials -- Part 1: Measurement of viscous properties of completion fluids**	This part of ISO 13503 provides consistent methodology for determining the viscosity of completion fluids used in the petroleum and natural gas industries. For certain cases, methods are also provided to determine the rheological properties of a fluid	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*

396.	**US ISO 13503-3:2005 - Petroleum and natural gas industries -- Completion fluids and materials -- Part 3: Testing of heavy brines**	This part of ISO 13503 covers the physical properties, potential contaminants and test procedures for heavy brine fluids manufactured for use in oil and gas well drilling, completion and workover fluids. This part of ISO 13503 provides methods for assessing the performance and physical characteristics of heavy brines for use in field operations. It includes procedures for evaluating the density or specific gravity, the clarity or amount of particulate matter carried in the brine, the crystallization point or the temperature (both ambient and under pressure) at which the brines make the transition between liquid and solid, the pH, and iron contamination	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
397.	**US ISO 13503-4:2006 - Petroleum and natural gas industries -- Completion fluids and materials -- Part 4: Procedure for measuring stimulation and gravel-pack fluid leak-off under static conditions**	This part of ISO 13503 provides for consistent methodology to measure fluid loss of stimulation and gravel-pack fluid under static conditions. However, the procedure in this part of ISO 13503 excludes fluids that react with porous media	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
398.	**US ISO 13503-6:2014 - Petroleum and natural gas industries -- Completion fluids and materials -- Part 6: Procedure for measuring leak-off of completion fluids under dynamic**	This part of ISO 13503 provides consistent methodology for measuring the fluid loss of completion fluids under dynamic conditions. This part of ISO 13503 is applicable to all completion fluids except those that react with porous media	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*

	conditions				
399.	**US ISO 13680:2010 - Petroleum and natural gas industries -- Corrosion-resistant alloy seamless tubes for use as casing, tubing and coupling stock -- Technical delivery conditions**	This International Standard specifies the technical delivery conditions for corrosion-resistant alloy seamless tubulars for casing, tubing and coupling stock	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*110,000*
400.	**US ISO 10427-1:2001 - Petroleum and natural gas industries -- Equipment for well cementing -- Part 1: Casing bow-spring centralizers**	This part of ISO 10427 provides minimum performance requirements, test procedures and marking requirement s for casing bow-spring centralizers for the petroleum and natural gas industries. The procedures provide verification testing for the manufacturer's design, materials and process specifications, and periodic testing to confirm the consistency of product performance	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*40,000*
401.	**US ISO 10427-2:2004 - Petroleum and natural gas industries -- Equipment for well cementing -- Part 2: Centralizer placement and stop-collar testing**	This part of ISO 10427 provides calculations for determining centralizer spacing, based on centralizer performance and desired standoff, in deviated and dogleg holes in wells for the petroleum and natural gas industries. It also provides a procedure for testing stop collars and reporting test results.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*40,000*

402.	**US ISO 91:2017, Petroleum and related products — Temperature and pressure volume correction factors (petroleum measurement tables) and standard reference conditions**	This Uganda Standard refers to temperature volume correction factors, which allow users to convert volumes, measured at ambient conditions, to those at reference conditions for transactional purposes. This standard also refers to compressibility factors required to correct hydrocarbon volumes measured under pressure to the corresponding volumes at the equilibrium pressure for the measured temperature	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*30,000*
403.	**US ISO 2714:1980, Liquid hydrocarbons — Volumetric measurement by displacement meter systems other than dispensing pumps**	This Uganda Standard specifies the characteristics of displacement meters and gives rules for systematically applying appropriate consideration to the nature of the liquids to be measured, to the installation of a metering system, and to the selection, performance, operation and maintenance of the same	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*
404.	**US ISO 2715:1981, Liquid hydrocarbons — Volumetric measurement by turbine meter system**	This Uganda Standard specifies the characteristics of turbine meters and gives rules for systematically applying consideration to the nature of the liquids to be measured, to the installation of a metering system, and to the selection, performance, operation and maintenance of the same	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*30,000*

405.	**US ISO 4124:1994, Liquid hydrocarbons — Dynamic measurement — Statistical control of volumetric metering systems**	This Uganda Standard has been prepared as a guide for establishing and monitoring the performance of such meters, using appropriate statistical control procedures for both central and on-line proving. These procedures may be applied to measurements made by any type of volumetric or mass metering system	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*100,000*
406.	**US ISO 4267-2:1988, Petroleum and liquid petroleum products — Calculation of oil quantities — Part 2: Dynamic measurement**	This Uganda Standard defines the various terms (be they words or Symbols) employed in the calculation of metered Petroleum quantities	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
407.	**US ISO 7278-1:1987, Liquid hydrocarbons — Dynamic measurement — Proving systems for volumetric meters — Part 1: General principles**	This Uganda Standard provides general principles for proving systems for meters used in dynamic measurement of liquid hydrocarbons	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*20,000*
408.	**US ISO 9200:1993, Crude petroleum and liquid petroleum products — Volumetric metering of viscous hydrocarbons**	This Uganda Standard defines viscous hydrocarbons and describes the difficulties that arise when viscous hydrocarbons are raised to high temperatures. The effects of such temperatures upon meters, auxiliary equipment and fittings are discussed, and advice and warnings to overcome or mitigate difficulties are included	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*30,000*

409.	**US 2030-1:2019, Proving systems — Methods of Calibration for Displacement and Volumetric Tank Provers — Part 1: Introduction to the Determination of the Volume of Displacement and Tank Provers**	This Uganda Standard covers procedures required to determine the field data necessary to calculate a Base Prover Volume (BPV) of either Displacement Provers or Volumetric Tank Provers	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*35,000*
410.	**US 2031:2019, Metering assemblies — Lease Automatic Custody Transfer (LACT) Systems**	This Uganda Standard gives guidelines for the design, installation, calibration and operation of a lease automatic custody transfer (LACT) system	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*35,000*
411.	**US 2160:2019, Measurement of fluid flow — Methods of specifying flowmeter performance**	This Uganda Standard specifies methods of describing the performance of any flowmeter, for use in either closed conduits or open channels. It indicates how flowmeters may be classified according to their traceability group, and specifies how manufacturer's statements on traceability, quality assurance and conditions of use should be expressed, although further statements may be required for other conditions of use	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*35,000*
412.	**US ISO 5168:2005 Measurement of fluid flow — Procedures for the evaluation of uncertainties**	This Uganda Standard establishes general principles and describes procedures for evaluating the uncertainty of a fluid flow-rate or quantity	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*60,000*

413.	**US ISO 5208:2015, Industrial valves — Pressure testing of metallic valves**	This Uganda Standard specifies examinations and tests that a valve manufacturer needs to act upon in order to establish the integrity of the pressure boundary of an industrial metallic valve and to verify the degree of valve closure tightness and the structural adequacy of its closure mechanism	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*60,000*
414.	**US ISO 6708:1995, Pipe components — Definition and selection of DN (nominal size)**	This Uganda Standard gives the definition of DN (nominal size) when applied to components of a pipework system, as specified in those standards which use the DN designation system	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
415.	**US ISO 9951:1993, Measurement of gas flow in closed conduits — Turbine meters**	This Uganda Standard specifies dimensions, ranges, construction, performance, calibration and output characteristics of turbine meters for gas flow measurement	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*60,000*

416.	**US ISO 5167-1:2003, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 1: General principles and requirements**	This Uganda Standard defines terms and symbols and establishes the general principles for methods of measurement and computation of the flowrate of fluid flowing in a conduit by means of pressure differential devices (orifice plates, nozzles and Venturi tubes) when they are inserted into a circular cross-section conduit running full. This part of US ISO 5167 also specifies the general requirements for methods of measurement, installation and determination of the uncertainty of the measurement of flow rate. It also defines the general specified limits of pipe size and Reynolds number for which these pressure differential devices are to be used	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*45,000*
417.	**US ISO 5167-2:2003, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 2: Orifice plates**	This Uganda Standard specifies the geometry and method of use (installation and operating conditions) of orifice plates when they are inserted in a conduit running full to determine the flowrate of the fluid flowing in the conduit	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*60,000*
418.	**US ISO 6551:1982, Petroleum liquids and gases — Fidelity and security of dynamic measurement — Cabled transmission of electric and/or electronic pulsed data**	This Uganda Standard establishes guidelines for ensuring the fidelity and security of pulsed data cabled transmission Systems utilized for the metering of fluids (see the note), a main objective being to ensure the integrity of the primary indication	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*30,000*

419.	**US ISO 6976:2016, Natural gas — Calculation of calorific values, density, relative density and Wobbe index from composition**	This Uganda Standard specifies methods for the calculation of gross calorific value, net calorific value, density, relative density, gross Wobbe index and net Wobbe index of natural gases, natural gas substitutes and other combustible gaseous fuels, when the composition of the gas by mole fraction is known. The methods specified provide the means of calculating the properties of the gas mixture at commonly used reference conditions	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*70,000*
420.	**US ISO 7278-2:1988, Liquid hydrocarbons — Dynamic measurement — Proving systems for volumetric meters — Part 2: Pipe provers**	This Uganda Standard provides guidance for the design, installation and calibration of pipe provers	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*30,000*
421.	**US ISO 7278-3:1998, Liquid hydrocarbons — Dynamic measurement — Proving systems for volumetric meters — Part 3: Pulse interpolation techniques**	This Uganda Standard gives guidance on the procedures and conditions of use to be observed if pulse interpolation is used in conjunction with a pipe or small volume prover and a turbine or displacement meter to improve the discrimination of proving	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*
422.	**US ISO 7278-4:1999, Liquid hydrocarbons — Dynamic measurement — Proving systems for volumetric meters — Part 4: Guide for operators of pipe provers**	This Uganda Standard provides guidance on operating pipe provers to prove turbine meters and displacement meters. It applies both to the types of pipe prover specified in US ISO 7278-2, which are referred to here as "conventional pipe provers", and to other types referred to here as "compact pipe provers" or "small volume provers"	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*

423.	**US ISO 8222:2002, Petroleum measurement systems — Calibration — Temperature corrections for use when calibrating volumetric proving tanks**	This Uganda Standard specifies multiplication factors for the correction of the volume of water transferred from a primary measure to a tank for changes arising from temperature differences during the determination of the capacity of the tank at reference temperature	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*15,000*
424.	**US ISO 10715:1997, Natural gas — Sampling guidelines**	This Uganda Standard provides concise guidelines for the collection, conditioning and handling of representative samples of processed natural gas streams. It also contains guidelines for sampling strategy, probe location and the handling and design of sampling equipment	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*50,000*
425.	**US ISO 12213-1:2006, Natural gas — Calculation of compression factor — Part 1: Introduction and guidelines**	This Uganda Standard specifies methods for the calculation of compression factors of natural gases, natural gases containing a synthetic admixture and similar mixtures at conditions under which the mixture can exist only as a gas	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*
426.	**US ISO 12213-2:2006, Natural gas — Calculation of compression factor — Part 2: Calculation using molar-composition analysis**	This Uganda Standard specifies methods for the calculation of compression factors of natural gases, natural gases containing a synthetic admixture and similar mixtures at conditions under which the mixture can exist only as a gas. This standard specifies a method for the calculation of compression factors when the detailed composition of the gas by mole fractions is known, together with the relevant pressures and temperatures	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*45,000*

427.	**US ISO 12213-3:2006, Natural gas — Calculation of compression factor — Part 3: Calculation using physical properties**	This Uganda Standard specifies a method for the calculation of compression factors when the superior calorific value, relative density and carbon dioxide content are known, together with the relevant pressures and temperatures. If hydrogen is present, as is often the case for gases with a synthetic admixture, the hydrogen content also needs to be known	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*50,000*
428.	**US ISO 15970:2008, Natural gas — Measurement of properties — Volumetric properties: density, pressure, temperature and compression factor**	This Uganda Standard gives requirements and procedures for the measurement of the properties of natural gas that are used mainly for volume calculation and volume conversion: density at reference and at operating conditions, pressure, temperature and compression factor, pressure, temperature and compression factor	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*60,000*
429.	**US ISO 17089-1:2010, Measurement of fluid flow in closed conduits — Ultrasonic meters for gas — Part 1: Meters for custody transfer and allocation measurement**	This Uganda Standard specifies requirements and recommendations for ultrasonic gas flowmeters (USMs), which utilize the transit time of acoustic signals to measure the flow of single phase homogenous gases in closed conduits	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*110,000*
430.	**US ISO 5167-5:2016, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 5: Cone meters**	This Uganda Standard specifies the geometry and method of use (installation and operating conditions) of cone meters when they are inserted in a conduit running full to determine the flow rate of the fluid flowing in the conduit.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*

431.	**US ISO 5167-6:2019, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full — Part 6: Wedge meters**	This Uganda Standard specifies the geometry and method of use (installation and operating conditions) of wedge meters when they are inserted in a conduit running full to determine the flow rate of the fluid flowing in the conduit.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*
432.	**US EAS 924-3:2020, Handling, storage, and distribution o€f Liquefied Petroleum Gas (LPG) in domestic, commercial, and industrial installations — Code of practice — Part 3: Liquefied petroleum gas installations involving storage vessels of individual water**	This Uganda Standard covers recommendations for the layout, design and installation of liquefied petroleum gas equipment and of above ground, buried and mounded storage vessels of individual water capacity exceeding 9 000 L. This standard does not cover refrigerated LPG storage	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*50,000*

	capacity exceeding 9000 L				
433.	**US EAS 924-4:2020, Handling, storage, and distribution of Liquefied Petroleum Gas (LPG) in domestic, commercial, and industrial installations — Code of practice — Part 4: Road, rail and maritime transportation of LPG in bulk**	This Uganda Standard outlines guidelines to be followed during road, rail and maritime transportation of LPG in bulk. This standard does not cover transportation of LPG in cylinders	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*40,000*
434.	**US EAS 938:2020, Transportable refillable steel and aluminium Liquefied Petroleum Gas (LPG) cylinders — Procedures for gas freeing and disposal**	This Uganda Standard specifies procedures for gas freeing and disposal of refillable steel or aluminium LPG cylinders, of water capacity 0.5 L up to and including 150 L	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*15,000*
435.	**US EAS 939:2020, Grill for domestic Liquefied Petroleum Gas (LPG) cylinders — Specification**	This Uganda Standard specifies the requirements and test methods for grills which are directly coupled on domestic liquefied petroleum gas (LPG) cylinders	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*20,000*
436.	**US EAS 940:2020, Mountable burner for use with Liquefied Petroleum Gas (LPG) — Specification**	This Uganda Standard specifies requirements and performance tests for mountable burner intended for domestic use with LPG. This standard does not cover auto-ignition (inbuilt) burners and burners connected to regulators by means of hose	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*20,000*

		pipe connections			
437.	**US EAS 976:2020, Petroleum industry — Storage and distribution of petroleum products in above-ground bulk installations**	This Uganda Standard covers the layout and design of above-ground bulk petroleum depots, and the installation of equipment used for the handling, storage and distribution of petroleum products that are stable at atmospheric temperature and pressure. This standard does not cover the storage and distribution of LPG and equipment that is used for storage and dispensing at consumer premises including service stations. *(This standard cancels and replaces US 947-2:2019, Petroleum Industry — Above ground storage tanks of petroleum products — Part 2: Siting, design and construction of large consumer installations and handling of petroleum products and their derivatives, which has been withdrawn*)	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*90,000*
438.	**US EAS 977:2020, Petroleum industry — Installation of underground storage tanks, pumps/dispensers and pipe work at service stations and consumer installations — Code of practice**	This Uganda Standard provides guidelines for the installation of underground storage tanks of individual capacity not exceeding 125 000 l. This standard covers guideline on installation for pumps/dispensers and pipe work at service stations and consumer sites. This standard also covers the installation of pressurized underground storage tanks for auto-gas. *(This standard cancels and replaces US 947-1:2019, Handling of petroleum products and their derivatives — Part 1: Siting, design and construction of service stations (2nd Edition), which has been withdrawn*)	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*COMPULSORY*	*55,000*

439.	**US EAS 978:2020, Storage and handling of liquid fuel — Large consumer installations — Code of practice**	This Uganda Standard gives recommendations for the storage and handling of petroleum products that are stable at atmospheric temperature and pressure at large consumer installations. This standard does not cover the handling and storage of LPG.	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*45,000*
440.	**US EAS 979:2020, Road tankers for petroleum-based flammable liquids — Specification**	This Uganda Standard specifies the requirements and methods of test for tank vehicles intended for use on public roads, for transportation of normally stable petroleum-based flammable liquids, at temperatures below their boiling point. This standard does not cover tankers for liquefied petroleum gas (LPG) (see EAS 903), unstable products and all other flammable liquids other than hydrocarbons	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*55,000*
441.	**US EAS 980:2020, Petroleum facilities — Retail and consumer outlets — Classification**	This Uganda Standard specifies the classification requirements for petroleum fuel outlets both retail and consumer sites based on risk and functionality	DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS	*VOLUNTARY*	*25,000*
	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY				
442.	**US 1575:2016, Occupational safety for onshore oil and gas production operations — Requirements**	This Uganda Standard covers occupational safety practices that apply to oil and gas production operations during drilling, well servicing and work over operations to ensure occupational safety of personnel within the oil and gas sector and/or industry	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*40,000*

443.	**US ISO 25457:2008, Petroleum, petrochemical and natural gas industries — Flare details for general refinery and petrochemical service**	This Uganda Standard specifies requirements and provides guidance for the selection, design, specification, operation and maintenance of flares and related combustion and mechanical components used in pressure-relieving and vapour-depressurizing systems for petroleum, petrochemical and natural gas industries. Although this standard is primarily intended for new flares and related equipment, it is also possible to use it to evaluate existing flare facilities	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*60,000*
444.	**US ISO 13705: 2012, Petroleum, petrochemical and natural gas industries — Fired heaters for general refinery service**	This Uganda Standard specifies requirements and gives recommendations for the design, materials, fabrication, inspection, testing, preparation for shipment, and erection of fired heaters, air heaters (APHs), fans and burners for general refinery service. This standard is not intended to apply to the design of steam reformers or pyrolysis furnaces.	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*80,000*
445.	**US ISO 13880:1999, Petroleum and natural gas industries —Content and drafting of a technical specification**	This Uganda Standard provides guidance for the content and drafting of a technical specification in order to ensure that all technical requirements of a product, process or service are included and can be verified as complying with specified performance requirements, such as may be specified in a functional specification (see US ISO 13879).	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*80,000*

446.	**US ISO 15663-1:2000,Petroleum and natural gas industries — Life cycle costing —Part 1: Methodology**	This Uganda Standard specifies requirements for undertaking life-cycle costing for the development and operation of facilities for drilling, production and pipeline transportation within the petroleum and natural gas industries	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*70,000*
447.	**US ISO 15663-2:2001, Petroleum and natural gas industries —Life-cycle costing —Part 2:Guidance on application of methodology and calculation methods**	This Uganda Standard provides guidance on application of the methodology for life-cycle costing for the development and operation of facilities for drilling, production and pipeline transportation within the petroleum and natural gas industries. This part of US ISO 15663 also provides guidance on the application and calculations of the life-cycle costing process defined in US ISO 15663-1This part of US ISO 15663 is not concerned with determining the life-cycle cost of individual items of equipment, but rather with life-cycle costing in order to estimate the cost differences between competing project options	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*70,000*
448.	**US ISO 15663-3:2001, Petroleum and natural gas industries —Life-cycle costing —Part 3: Implementation guidelines**	This Uganda Standard provides guidelines for the implementation of life-cycle costing for the development and operation of the facilities for drilling, production and pipeline transportation within the petroleum and natural gas industries. This part of US ISO 15663 is applicable when making decisions on any option which has cost implications for more than one cost element or project phase	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*70,000*

449.	**US ISO 13879:2015, Petroleum and natural gas industries — Content and drafting of a functional specification**	This Uganda Standard provides guidance on the content and drafting of a functional specification. A functional specification may not be necessary if a user/purchaser wishes to obtain a known standard product, process or service manufactured/supplied to a recognized standard.	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*80,000*
450.	**US ISO/TS 16901:2015, Guidance on performing risk assessment in the design of onshore LNG installations including the ship/shore interface**	This Uganda Standard provides a common approach and guidance to those undertaking assessment of the major safety hazards as part of the planning, design, and operation of LNG facilities onshore and at shoreline using risk-based methods and standards, to enable a safe design and operation of LNG facilities	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*60,000*
451.	**US ISO 15544:2000, Petroleum and natural gas industries — Offshore production installations — Requirements and guidelines for emergency response**	This Uganda Standard describes objectives, functional requirements and guidelines for emergency response (ER) measures on installations used for the development of offshore hydrocarbon resources. It is applicable to fixed offshore structures or floating production, storage and off-take systems	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*70,000*
452.	**US 1662:2017, Waste management — Requirements**	This Uganda Standard specifies requirements for the management of hazardous waste and non- hazardous waste. This standard covers amongst other things, collection, storage, transportation, treatment and disposal of waste. It also includes provisions for monitoring and regulation of waste. The standard applies to a range of industry sectors whose activities generate, store, or handle any quantity of waste	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*30,000*

453.	**US ISO 13997:1999, Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects**	This Uganda Standard specifies a cut test method, and related calculations, for use on materials and assemblies designed for protective clothing. The test determines resistance to cutting by sharp edges, such as knives, sheet metal parts, swarf, glass, bladed tools and castings. This test does not provide data on the resistance to penetration by pointed objects such as needles and thorns. The test described in this standard is not considered suitable for testing materials made from chain mail and metal plates. The text of this standard does not include provisions for the safeguard of the operator	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*20,000*
454.	**US ISO 16972:2010, Respiratory protective devices — Terms, definitions, graphical symbols and units of measurement**	This Uganda Standard is applicable to respiratory protective devices It defines commonly used terms and specifies units of measurement to achieve a uniform interpretation and to prevent ambiguous use. It indicates graphical symbols that may be required to be placed on respiratory protective devices (RPD) or parts of RPD or instruction manuals, in order to instruct the person(s) using the RPD about its operation	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*50,000*

455.	**US ISO 16900-1:2014, Respiratory protective devices — Methods of test and test equipment — Part 1: Determination of inward leakage**	This Uganda Standard specifies the test methods for determining inward leakage of respiratory interfaces (RI) and total inward leakage of complete respiratory protective devices (RPD) using specified test agents and incorporating specified body movements, at specified metabolic work rates. These tests are conducted in laboratories using specific test agents under specified conditions and therefore do not indicate the performance of the device in actual use	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*50,000*
456.	**US ISO 16900-2:2009, Respiratory protective devices — Methods of test and test equipment — Part 2: Determination of breathing resistance**	This Uganda Standard specifies the method(s) of test for breathing resistance for: · complete respiratory protective devices; · filters for respiratory protective devices; · respiratory interfaces	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*30,000*
457.	**US ISO 16900-3:2012, Respiratory protective devices — Methods of test and test equipment — Part 3: Determination of particle filter penetration**	This Uganda Standard specifies the test methods for particle filter penetration of separate or integral filters for respiratory protective devices	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*50,000*

458.	**US ISO 16900-5:2016, Respiratory protective devices — Methods of test and test equipment — Part 5: Breathing machine, metabolic simulator, RPD head forms and torso, tools and verification tools**	This Uganda Standard specifies the characteristics of breathing machines, metabolic simulators, RPD head forms/torso, RPD tools and RPD verification tools that are common to RPD test laboratories Standardization of these items is essential for the standardization of the test methods Standardization of the RPD verification tools is essential for demonstrating the delivery of comparable results in different test laboratories Descriptions on the use of the RPD tools for the different tests are specified in the relevant parts of US ISO 16900	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*50,000*
459.	**US ISO 16900-6:2015, Respiratory protective devices — Methods of test and test equipment — Part 6: Mechanical resistance/strength of components and connections**	This Uganda Standard specifies the method of test for the mechanical resistance and strength of components of respiratory protective devices	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*40,000*
460.	**US ISO 16900-7:2015, Respiratory protective devices — Methods of test and test equipment — Part 7: Practical performance test methods**	This Uganda Standard specifies practical performance tests for respiratory protective devices (RPD)The purpose of these tests is to subjectively assess certain properties, characteristics, and functions of the RPD when worn by test subjects in simulated practical use, which cannot be assessed by tests described in other standards	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*25,000*

461.	**US ISO 16900-9:2015, Respiratory protective devices — Methods of test and test equipment — Part 9: Determination of carbon dioxide content of the inhaled gas**	This Uganda Standard specifies the test methods for determining the increased carbon dioxide content of the inhaled gas caused by wearing the RPD Closed circuit supplied breathable gas RPD are excluded from this part of US ISO 16900	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*40,000*
462.	**US ISO 16900-10:2015, Respiratory protective devices — Methods of test and test equipment — Part 10: Resistance to ignition, flame, radiant heat and heat**	This Uganda Standard specifies the methods for resistance to ignition, flame, radiant heat, and heat	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*35,000*
463.	**US ISO 16900-11:2013,Respiratory protective devices — Methods of test and test equipment — Part 11: Determination of field of vision**	This Uganda Standard specifies the test methods for determining the increased carbon dioxide content of the inhaled gas caused by wearing the RPD Closed circuit supplied breathable gas RPD are excluded from this part of US ISO 16900	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*30,000*
464.	**US ISO 16900-12:2016, Respiratory protective devices — Methods of test and test equipment — Part 12: Determination of volume-averaged work of breathing and peak respiratory pressures**	This Uganda Standard specifies the test methods for determining the volume-averaged work of breathing and peak respiratory pressures imposed by the respiratory protective device (RPD)Elastic work, elastic physiological effects, and information on physiological effects of work of breathing (WOB) are specified in ISO 16976-4 and are not included in this test method	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*30,000*
465.	**US ISO 16900-13:2015, Respiratory protective**	This Uganda Standard specifies tests which are specific to RPDs using regenerated	PETROLEUM MANAGEMENT AND	*VOLUNTARY*	*30,000*

	devices — Methods of test and test equipment — Part 13: RPD using regenerated breathable gas and special application mining escape RPD: Consolidated test for gas concentration, temperature, humidity, work of breathing, breathing resistance, elastance and duration	breathable gas, compressed breathable gas with class L respiratory interfaces, and special application mining escape RPD	OCCUPATIONAL HEALTH AND SAFETY		
466.	**US ISO 17420-3:2012, Respiratory protective devices — Performance requirements — Part 3: Thread connection**	This Uganda Standard is applicable to an unassisted filtering device and specifies a standard thread connection between a filter and the respiratory interface as required in US ISO 17420-2This part of US ISO 17420 also includes the description of test simulators that are necessary for the assessment of some of the requirements	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*35,000*
467.	**US ISO 20349:2010, Personal protective equipment — Footwear protecting against thermal risks and molten metal splashes as found in foundries and welding — Requirements and test method**	This Uganda Standard specifies requirements and test methods for footwear protecting users against thermal risks and molten iron or aluminium metal splashes such as those encountered in foundries, welding and allied process	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*30,000*

468.	**US ISO 13287:2012, Personal protective equipment — Footwear — Test method for slip resistance**	This Uganda Standard specifies a method of test for the slip resistance of PPE footwear. It is not applicable to special purpose footwear containing spikes, metal studs or similar	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*35,000*
469.	**US ISO 20344:2011, Personal protective equipment — Test methods for footwear**	This Uganda Standard specifies methods for testing footwear designed as personal protective equipment(This standard cancels and replaces US 612:2005, Leather footwear — Method of sampling)	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*95,000*
470.	**US ISO 20345: 2011, Personal protective equipment — Safety footwear**	This Uganda Standard specifies basic and additional (optional) requirements for safety footwear used for general purpose. It includes, for example, mechanical risks, slip resistance, thermal risks, ergonomic behaviour risks are covered by complementary job-related standards (footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and molten metal splash, protection for motor cycle riders)	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*45,000*

471.	**US ISO 20346:2014, Personal protective equipment — Protective footwear**	This Uganda Standard specifies basic and additional (optional) requirements for protective footwear used for general purpose. It includes, for example, mechanical risks, slip resistance, thermal risks, ergonomic behaviour Special risks are covered by complementary job-related standards (footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and molten metal splash, protection for motor cycle riders)(This standard cancels and replaces US 614:2005 Industrial safety footwear - Specification for leather protective and safety footwear for general and heavy-duty use)	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*45,000*
472.	**US ISO 20347:2012, Personal protective equipment — Occupational footwear**	This Uganda Standard specifies basic and additional (optional) requirements for occupational footwear that is not exposed to any mechanical risks (impact or compression)Special risks are covered by complementary job-related standards (footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and against molten metal splash, protection for motor cycle riders)(This standard cancels and replaces US 614:2005 Industrial safety footwear - Specification for leather protective and safety footwear for general and heavy-duty use)	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*45,000*

473.	**US ISO 4007:2012, Personal protective equipment — Eye and face protection — Vocabulary**	This Uganda Standard defines and explains the principal terms used in the field of personal eye and face protection	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*110,000*
474.	**US ISO 10333-1:2000, Personal fall-arrest systems — Part 1: Full-body harnesses**	This Uganda Standard specifies the requirements, test methods, instructions for general use, marking, packaging and maintenance for full-body harnesses (FBH)The main purpose of a FBH is to allow the user to connect into a personal fall-arrest system (PFAS), which will be specified in a future International Standard (see US ISO 10333-6 in the Bibliography), such that if an arrest takes place, the arresting force will not exceed 6 k	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

475.	**US ISO 10333-2:2016, Personal fall-arrest systems — Part 2: Lanyards and energy absorbers**	This Uganda Standard specifies requirements, test methods, instructions for use and maintenance, marking, labelling and packaging, as appropriate, for lanyards and energy absorbers Lanyards and energy absorbers are used together as a connecting subsystem in personal fall-arrest systems (PFAS) which will be specified in a future standard. Two classes of energy absorbers are specified for the purposes of this part of US ISO 10333: Type 1: used in PFAS where, due to installation, the potential free-fall distance can be limited to a maximum of 1,8 m and, if a fall takes place, the arresting force is limited to a maximum of 4,0 kN; Type 2: used in PFAS where, due to installation, the potential free-fall distance can be limited to a maximum of 4,0 m and, if a fall takes place, the arresting force is limited to a maximum of 6,0 Kn. This standard is applicable only to lanyards and energy absorbers limited to single-person use of a total mass not exceeding 100 kg	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

476.	**US ISO 10333-3:2016, Personal fall-arrest systems — Part 3: Self-retracting lifelines**	This Uganda Standard specifies requirements, test methods, instructions for use and maintenance, marking, labelling and packaging, as appropriate, for self-retracting lifelines, including self-retracting lifelines that have an integral-rescue facility Self-retracting lifelines are used as a connecting sub-system in personal fall-arrest systems (PFAS), which will be specified in a future standard, and are attached to anchor devices that are above the work place. This standard is applicable only to self-retracting lifelines limited to single-person use of a total mass not exceeding 100 kg	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*
477.	**US ISO 10333-4:2016, Personal fall-arrest systems — Part 4: Vertical rails and vertical lifelines incorporating a sliding-type fall arrester**	This Uganda Standard specifies requirements, test methods, instructions for use and maintenance, marking, labelling and packaging, as appropriate, for vertical rails and vertical lifelines which incorporate a sliding-type fall arrester. When connected to a full-body harness as specified in US ISO 10333-1, vertical rails and vertical lifelines which incorporate a sliding-type fall arrester constitute a personal fall-arrest system (PFAS), which will be specified in a future standard Vertical rails and vertical lifelines which incorporate a sliding-type fall arrester in accordance with this part of US ISO 10333 are limited to use by a single person of total mass not exceeding 100 kg	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

478.	**US ISO 10333-5:2001, Personal fall-arrest systems — Part 5: Connectors with self-closing and self-locking gates**	This Uganda Standard specifies requirements, test methods, instructions for use and maintenance, marking, labelling and packaging, as appropriate, for connectors with self-closing and self-locking gates made from metallic materials Connectors are used in personal fall-arrest systems (PFAS), which will be specified in a future standard, such that, if an arrest takes place, the arresting force will not exceed 6 kN. This part of US ISO 10333 is applicable only to connectors limited to single person use of a total mass not exceeding 100 kg	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*
479.	**US ISO 10333-6:2004, Personal fall-arrest systems — Part 6: System performance tests**	This Uganda Standard specifies tests and requirements for complete personal fall arrest systems (PFAS) made up from specific combinations of components and subsystems selected from those conforming to the other parts of US ISO 10333 and to US ISO 14567, where it is both important and desirable to ascertain satisfactory system performance and interactive component compatibility. It includes PFAS performance tests using a rigid torso test mass as a surrogate for the faller Examples of personal fall arrest systems, as well as descriptions of how components or subsystems may be connected together to constitute a system, are also given. This standard is applicable to PFAS limited to single-person use of a total mass not exceeding 100 kg and, when activated, will arrest the person and limit the arresting force to a maximum of 6 kN. It is	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

		not applicable to PFAS which use waist belts or chest harnesses as the sole body holding component, PFAS incorporating lanyards without energy absorbers or without a means of energy dissipation, subsystems and components outside the PFAS scopes of the other parts of US ISO 10333 and US ISO 14567, or equipment used for material lifting purposes			
480.	**US ISO 11999-1:2015, PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures — Part 1: General**	This Uganda Standard specifies minimum design and performance requirements for personal protective equipment (PPE) to be used by firefighters, primarily but not solely to protect against exposure to flame and high thermal loads assist with choice based on user risk assessment, types and performance levels for different categories of protection are included	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*50,000*
481.	**US ISO/TS 11999-2:2015, PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures — Part 2: Compatibility**	This Uganda Standard describes compatibility for ensembles of firefighter's personal protective equipment (PPE) to be used by firefighters, who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures. This standard includes methods for compatibility testing in laboratories and procedures for compatibility testing including the identification of any limitations to be performed by wearers	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

482.	**US ISO 11999-3:2015, PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures — Part 3: Clothing**	This Uganda Standard specifies the minimum design and performance requirements for clothing as part of personal protective equipment (PPE) to be used by firefighters, primarily but not solely to protect against exposure to flame and high thermal loads. To assist with choice based on user risk assessment, a number of levels of protection are included	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*
483.	**US ISO 12480-3:2016, Personal equipment for protection against falls — Descending devices**	This Uganda Standard establishes required practices for the safe use of tower cranes. It is intended to be used in conjunction with ISO 12480-1Subjects covered include safe systems of work, management, planning, selection, erection and dismantling, special base, operation and maintenance of cranes and the selection of operators, slingers and signalers. It does not cover manually (non-powered) operated cranes, or cranes in which at least one of its motions is manually operated	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*
484.	**US ISO 14567:1999, Personal protective equipment for protection against falls from a height — Single-point anchor devices**	This Uganda Standard specifies requirements, test methods, and marking, labelling and packaging, as appropriate, of both permanent and temporary single-point anchor devices exclusively for the attachment of personal protective equipment (PPE) for protection against falls from a height for fall arrest, work positioning and travel restriction	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

485.	**US ISO 16024:2005, Personal protective equipment for protection against falls from a height — Flexible horizontal lifeline systems**	This Uganda Standard specifies design and performance requirements, test methods, user instructions, marking and labelling as appropriate, of flexible horizontal lifeline systems for use at any one time by up to three persons, exclusively for the attachment of personal protective equipment for protection against falls from a height. It does not stipulate designs for flexible horizontal lifelines, except for design limitations that are necessary for safe and durable service. This standard does not cover rigid rail systems, nor is it intended to cover flexible guardrails, hand lines and work-positioning anchor lines	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*30,000*
486.	**US ISO 22159:2007, Personal equipment for protection against falls — Descending devices**	This Uganda Standard specifies requirements, test methods, marking and information to be supplied by the manufacturer for descending devices. It also specifies some basic requirements for the descent lines to be used with the descending devices	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*65,000*
487.	**US ISO 22846-1:2003, Personal equipment for protection against falls — Rope access systems — Part 1: Fundamental principles for a system of work**	This Uganda Standard gives the fundamental principles for the use of rope access methods for work at height. It is intended for use by employers, employees and self-employed persons who use rope-access methods, by that commissioning rope-access work and by rope-access associations	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*20,000*

488.	**US ISO 22846-2:2012, Personal equipment for protection against falls — Rope access systems — Part 2: Code of practice**	This Uganda Standard provides recommendations and guidance on the use of rope access methods for work at height and expands on the fundamental principles given in ISO 22846-1, in conjunction with which it is intended to be used. It is intended for use by employers, employees and self-employed persons who use rope access methods, by those commissioning rope access works and by rope access associations. This part of US ISO 22846 is applicable to the use of rope access methods in any situation where ropes are used as the primary means of access, egress or support and as the primary means of protection against a fall, on both man-made and natural features	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*50,000*
489.	**US ISO 27065:2011, Protective clothing — Performance requirements for protective clothing worn by operators applying liquid pesticides**	This Uganda Standard establishes minimum performance, classification, and labelling requirements for protective clothing worn by operators applying liquid pesticide products diluted in water Protective clothing covered by this standard includes, but is not limited to, shirts, jackets, trousers, coveralls, and spray-tight or liquid-tight garments. The standard addresses protection provided by protective accessories, with the exception of those used for the protection of the head, hands, and feet. It does not address protection against biocides, fumigants or highly volatile liquids	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*40,000*

490.	**US ISO 11612:2015, Protective clothing — Clothing to protect against heat and flame — Minimum performance requirements**	This Uganda Standard specifies performance requirements for protective clothing made from flexible materials, which are designed to protect the wearer's body, except the hands, from heat and/or flame For protection of the wearer's head and feet, the only items of protective clothing falling within the scope of this standard are gaiters, hoods, and over boots. However, concerning hoods, requirements for visors and respiratory equipment are not given. The performance requirements set out in this standard are applicable to protective clothing which could be worn for a wide range of end uses, where there is a need for clothing with limited flame spread properties and where the user can be exposed to radiant or convective or contact heat or to molten metal splashes	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	COMPULSORY	*80,000*
491.	**US ISO 13997:1999, Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects**	This Uganda Standard specifies a cut test method, and related calculations, for use on materials and assemblies designed for protective clothing. The test determines resistance to cutting by sharp edges, such as knives, sheet metal parts, swarf, glass, bladed tools and castings This test does not provide data on the resistance to penetration by pointed objects such as needles and thorns. The test described in this standard is not considered suitable for testing materials made from chain mail and metal plates. The text of this standard does not include provisions for the safeguard of the operator	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*20,000*

492.	**US ISO 11611:2015, Protective clothing for use in welding and allied processes (2nd Edition)**	This Uganda Standard specifies minimum basic safety requirements and test methods for protective clothing including hoods, aprons, sleeves and gaiters that are designed to protect the wearer's body including head (hoods) and feet (gaiters) and that are to be worn during welding and allied processes with comparable risks(This Uganda Standard cancels and replaces US ISO 11611:2007 which has been technically revised)	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*80,000*

493.	**US ISO 17782:2018, Petroleum, petrochemical and natural gas industries — Scheme for conformity assessment of manufacturers of special materials**	This Uganda Standard establishes a procedure for verifying that the manufacturer of special materials for the petroleum, petrochemical and natural gas industries has sufficient competence and experience of the relevant material grades of metal, and the necessary facilities and equipment, to manufacture these materials in the required shapes and sizes with acceptable properties according to the applicable standard, material specification and/or material data sheet specified by the purchaser.	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*65,000*
494.	**US ISO 20074:2019, Petroleum and natural gas industry — Pipeline transportation systems — Geological hazard risk management for onshore pipeline**	This Uganda Standard specifies requirements and gives recommendations on the management of geohazard risks during the pipeline design, construction and operational periods. This document is applicable to all operators and pipelines (existing and proposed/under construction). This document applies to onshore gathering and transmission pipelines used in the	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*80,000*

		petroleum and natural gas industries.			
495.	**US ISO 20815:2018, Petroleum, petrochemical and natural gas industries — Production assurance and reliability management (2nd Edition)**	This Uganda Standard describes the concept of production assurance within the systems and operations associated with exploration drilling, exploitation, processing and transport of petroleum, petrochemical and natural gas resources. This document covers upstream (including subsea), midstream and downstream facilities, petrochemical and associated activities. It focuses on production assurance of oil and gas production, processing and associated activities and covers the analysis of reliability and maintenance of the components. This includes a variety of business categories and associated systems/equipment in the oil and gas value chain. Production assurance addresses not only hydrocarbon production, but also associated activities such as drilling, pipeline installation and subsea intervention. *(This Uganda Standard cancels and replaces the first edition, US ISO 20815:2008, Petroleum, petrochemical and natural gas industries —*	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*COMPULSORY*	*110,000*

		Production assurance and reliability management, which has been technically revised).			
496.	**US ISO 29001:2020, Petroleum, petrochemical and natural gas industries — Sector-specific quality management systems — Requirements for product and service supply organizations**	This Uganda Standard defines quality management system requirements for product and service supply organizations to the petroleum, petrochemical and natural gas industries. This document is written as a supplement to US ISO 9001:2015. The supplementary requirements and guidance to US ISO 9001:2015 have been developed to manage supply chain risks and opportunities associated with the petroleum, petrochemical and natural gas industries and to provide a framework for aligning requirements with complementary standards employed within the industries. *(This standard cancels and replaces US ISO/TS 29001:2010 Petroleum, petrochemical and natural gas industries — Sector-specific quality management systems — Requirements for product and service supply organizations, which has been technically revised).*	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*70,000*
497.	**US ISO 15663:2021, Petroleum,**	This Uganda Standard specifies requirements for and gives guidance on the	PETROLEUM MANAGEMENT AND	*VOLUNTARY*	*110,000*

	petrochemical and natural gas industries — Life cycle costing	application of life cycle costing to create value for the development activities and operations associated with drilling, exploitation, processing and transport of petroleum, petrochemical and natural gas resources. This document covers facilities and associated activities within different business categories (upstream, midstream, downstream and petrochemical). The life cycle costing process as described in this document is applicable when making decisions between competing options that are differentiated by cost and/or economic value. This document is not concerned with decision-making related to the economic performance of individual options or options differentiated by factors other than cost or economic value. Guidance is provided on the management methodology and application of life cycle costing in support of decision-making across life cycle phases. The extent of planning and management depends on the magnitude of the costs involved, the potential value that can be created and the life cycle phase. It also provides the means of identifying cost drivers and provides a cost-control framework for these cost drivers, allowing effective cost control and optimization over the entire life of an asset. *(This standard cancels and replaces, US ISO 15663-1:2000 Petroleum and natural gas industries — Life cycle costing — Part 1: Methodology, US ISO 15663-2:2001 Petroleum and natural gas*	OCCUPATIONAL HEALTH AND SAFETY		

		industries — Life-cycle costing — Part 2: Guidance on application of methodology and calculation methods and US ISO 15663-3:2001 Petroleum and natural gas industries — Life-cycle costing — Part 3: Implementation guidelines which have been technically revised).			
498.	**US ISO 10418:2019, Petroleum and natural gas industries — Offshore production installations — Process safety systems**	This Uganda Standard provides objectives, functional requirements and guidelines for techniques for the analysis and design of surface process safety systems for offshore installations used for the recovery of hydrocarbon resources. It also provides recommendations and requirements on support systems which complement the process safety systems in reducing risk.	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*30,000*
499.	**US ISO 17776:2016, Petroleum and natural gas industries — Offshore production installations — Major accident hazard management during the design of new installations**	This Uganda Standard describes processes for managing major accident (MA) hazards during the design of offshore oil and gas production installations. It provides requirements and guidance on the development of strategies both to prevent the occurrence of MAs and to limit the possible consequences. It also contains some requirements and guidance on managing MA hazards in operation. This standard is applicable to the design of - fixed offshore structures, and - floating systems for production, storage and offloading for the petroleum and natural gas industries.	PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY	*VOLUNTARY*	*110,000*

	DISTRIBUTION				
500.	**ISO 3993: 1984, Liquefied petroleum gas and light hydrocarbons Determination of density or relative density — Pressure hydrometer method**	This Uganda Standard specifies a method for the determination of density or relative density of liquefied petroleum gases and other light hydrocarbons. The prescribed apparatus shall not be used for materials having gauge vapour pressures higher than 1MPa (14 bar) (absolute vapour pressure 1MPa) at the test temperature. Alternative calibration procedures are described, but only the one using a certified hydrometer is suitable for the determination of density to be used in calculations of quantities for custody transfer or fiscal purposes	DISTRIBUTION	*VOLUNTARY*	*25,000*
501.	**US ISO 4512:2007, Petroleum and liquid petroleum products — Equipment for measurement of liquid levels in storage tanks — Manual methods**	This Uganda Standard specifies the requirements for the equipment required to measure manually the liquid level or the corresponding volume of petroleum and petroleum products stored in tanks and containers.	DISTRIBUTION	*VOLUNTARY*	*45,000*
502.	**US ISO 4257: 2001, Liquefied petroleum gases — Method of sampling**	This Uganda Standard specifies the procedure to be used for obtaining samples of unrefrigerated liquefied petroleum gases (LPG)It is suitable for sampling from bulk containers, to provide samples for laboratory testing of products	DISTRIBUTION	*VOLUNTARY*	*20,000*
503.	**US ISO 4256:1996, Liquefied petroleum gases — Determination of gauge vapour pressure — LPG method**	This Uganda Standard describes a method for the determination of gauge vapour pressures of liquefied petroleum gas products (see clause 3) at temperatures within the approximate range of 35 ºC to 70	DISTRIBUTION	*VOLUNTARY*	*20,000*

		ºC.			
504.	**US ISO 4706:2008, Gas cylinders — Refillable welded steel cylinders — Test pressure 60 bar and below**	This Uganda Standard specifies the minimum requirements concerning material selection, design, construction and workmanship, procedure and test at manufacture of refillable welded-steel gas cylinders of a test pressure not greater than 60 bar, and of water capacities from 0l up to and including 500 l exposed to extreme worldwide temperatures (-50 °C to 65 °C) used for compressed, liquefied or dissolved gases Transportable large cylinders of water capacity above 150 l and up to 500 l may be manufactured and certified to this standard provided handling facilities are provided. This standard is primarily intended to be used for industrial gases other than Liquefied Petroleum Gas (LPG), but may also be applied for LPG For specific LPG applications see ISO 22991.	DISTRIBUTION	*COMPULSORY*	*50,000*

505.	**US ISO 5145: 2014, Cylinder valve outlets for gases and gas mixtures — Selection and dimensioning**	This Uganda Standard establishes practical criteria for determining valve outlet connections for gas cylinders. It applies to the selection of gas cylinder valve outlet connections and specifies the dimensions for a number of them. This standard does not apply to connections used for cryogenic gas withdrawal or gases for breathing equipment, which are the subjects of other International Standards.	DISTRIBUTION	*VOLUNTARY*	*50,000*
506.	**US ISO 7507-1:2003, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks — Part 1: Strapping method**	This Uganda Standard specifies a method for the calibration of substantially vertical cylindrical tanks by measuring the tank using a strapping tape	DISTRIBUTION	*VOLUNTARY*	*80,000*
507.	**US ISO 7225:2005, Gas cylinders — Precautionary labels**	This Uganda Standard specifies the design, content (that is, hazard symbols and text) and application of precautionary labels intended for use on individual gas cylinders containing single gases or gas mixtures Labels for cylinders of bundles and labels for bundles are not covered by this standard.	DISTRIBUTION	*COMPULSORY*	*30,000*
508.	**US ISO 7507-2:2005, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks — Part 2: Optical reference line method**	This Uganda Standard specifies a method for the calibration of tanks above eight metres in diameter with cylindrical courses that are substantially vertical. It provides a method for determining the volumetric quantity contained within a tank at gauged liquid levels.	DISTRIBUTION	*VOLUNTARY*	*80,000*

509.	**US ISO 7507-3:2006, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks — Part 3: Optical triangulation method**	This Uganda Standard specifies a calibration procedure for application to tanks above 8 m in diameter with cylindrical courses that are substantially vertical. It provides a method for determining the volumetric quantity contained within a tank at gauged liquid levels. The measurements required to determine the radius are made either internally or externally. The external method is applicable only to tanks that are free of insulation.	DISTRIBUTION	*VOLUNTARY*	*80,000*
510.	**US ISO 7507-4:1995, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks - Part 4: Internal electro-optical distance-ranging method**	This Uganda Standard specifies a method for the calibration of vertical cylindrical tanks having diameters greater than 5 m by means of internal measurements using an electro-optical distance ranging instrument, and for the subsequent compilation of tank capacity tables. This method is known as the internal electro-optical distance ranging (EODR) method.	DISTRIBUTION	*VOLUNTARY*	*80,000*
511.	**US ISO/TR 7507-6:1997, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks — Part 6: Recommendations for monitoring, checking and verification of tank calibration and capacity table**	This Uganda Standard gives guidance on monitoring the accuracy of the calibration and the tank capacity table of a vertical cylindrical tank.	DISTRIBUTION	*VOLUNTARY*	*80,000*
512.	**US ISO 7507-5:2000, Petroleum and liquid petroleum products — Calibration of vertical**	This Uganda Standard specifies a method for the calibration of non-insulated vertical cylindrical tanks having diameters greater	DISTRIBUTION	*VOLUNTARY*	*80,000*

	cylindrical tanks — Part 5: External electro-optical distance-ranging method	than 5 m, by means of external measurement using an electro-optical distance-ranging method (EODR), and for the subsequent compilation of tank capacity tables(This Uganda Standard is an adoption of the International Standard ISO 7507-5:2000).			
513.	**US ISO 7866:2012, Gas cylinders — Refillable seamless aluminium alloy gas cylinders — Design, construction and testing**	This Uganda Standard specifies minimum requirements for the material, design, construction and workmanship, manufacturing processes and tests at time of manufacture of refillable seamless aluminium alloy gas cylinders of water capacities up to and including 150 litres for compressed, liquefied and dissolved gases for worldwide use (normally up to +65 °C)STATUS: COMPULSORY	DISTRIBUTION	*COMPULSORY*	*80,000*
514.	**US ISO 8819: 1993 Liquefied petroleum gases — Detection of hydrogen sulfide — Lead acetate method**	This Uganda Standard specifies a method for the detection of hydrogen sulfide in liquefied petroleum gases	DISTRIBUTION	*VOLUNTARY*	*30,000*
515.	**US ISO 8973: 1997, Liquefied petroleum gases — Calculation method for density and vapour pressure**	This Uganda Standard describes a simplified method for the calculation of density and vapour pressure of liquefied petroleum gases (LPG) based on compositional data and density and vapour pressure factors for individual LPG components. A list of factors is provided in this standard. This method is intended for application in specifications of product quality and is not intended for application to quantity measurement in custody transfer (see ISO 6578).	DISTRIBUTION	*VOLUNTARY*	*30,000*

516.	**US ISO 9809-1: 2010, Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing — Part 1: Quenched and tempered steel cylinders with tensile strength less than 1 100 MPa**	This Uganda Standard specifies minimum requirements for the material, design, construction and workmanship, manufacturing processes, examination and testing at manufacture of refillable quenched and tempered seamless steel gas cylinders of water capacities from 0l up to and including 150 l for compressed, liquefied and dissolved gases. This standard is applicable to cylinders with a maximum actual tensile strength Rma of less than 1 100 MPa.	DISTRIBUTION	*COMPULSORY*	*60,000*
517.	**US ISO 9809-2:2010, Gas cylinders — Refillable seamless steel gas cylinders —Design, construction and testing — Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa**	This Uganda Standard specifies minimum requirements for the material, design, construction and workmanship, manufacturing processes, examination and testing at manufacture of refillable quenched and tempered seamless steel gas cylinders of water capacities from 0l up to and including 150 l for compressed, liquefied and dissolved gases. This part of US ISO 9809 is applicable to cylinders with a maximum tensile strength Rma ≥ 1 100 MPaIt is not applicable to cylinders with Rma, max >1 300 MPa for diameters >140 mm and guaranteed wall thicknesses a' ≥ 12 mm and Rma, max >1 400 MPa for diameters ≤ 140 mm and guaranteed wall thicknesses a' ≥ 6 mm, because beyond these limits, additional requirements can apply.	DISTRIBUTION	*COMPULSORY*	*60,000*

518.	**US ISO 9809-3:2010, Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing — Part 3: Normalized steel cylinders**	This Uganda Standard specifies minimum requirements for the material, design, construction and workmanship, manufacturing processes, examination and testing at manufacture of refillable normalized or normalized and tempered seamless steel gas cylinders of water capacities from 0l up to and including 150 l for compressed, liquefied and dissolved gases.	DISTRIBUTION	*COMPULSORY*	*60,000*
519.	**US ISO 10156: 2010, Gases and gas mixtures — Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets**	This Uganda Standard specifies methods for determining whether or not a gas or gas mixture is flammable in air and whether a gas or gas mixture is more or less oxidizing than air under atmospheric conditions. This standard is intended to be used for the classification of gases and gas mixtures including the selection of gas cylinder valve outlets. This standard does not cover the safe preparation of these mixtures under pressure and at temperatures other than ambient.	DISTRIBUTION	*VOLUNTARY*	*40,000*
520.	**US ISO 9809-4:2014, Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing — Part 4: Stainless steel cylinders with an Rm value of less than 1 100 MPa**	This Uganda Standard specifies the minimum requirements for the material, design, construction and workmanship, manufacturing processes, examinations, and tests at manufacture of refillable seamless stainless steel gas cylinders of water capacities from 0l up to and including 150 l for compressed, liquefied, and dissolved gases. This part of US ISO 9809 is applicable to cylinders with a maximum actual tensile strength, Rma, of less than 1 100 MPa.	DISTRIBUTION	*COMPULSORY*	*60,000*

521.	**US ISO 10461:2005, Gas cylinders — Seamless aluminium alloy gas cylinders — Periodic inspection and testing**	This Uganda Standard deals with seamless aluminium-alloy transportable gas cylinders intended for compressed and liquefied gases under pressure, of water capacity from 0l to 150 l; it also applies, as far as practical, to cylinders of less than 0l water capacity. This standard specifies the requirements for periodic inspection and testing to verify the integrity of such gas cylinders for further service. This standard does not apply to periodic inspection and testing of acetylene cylinders or composite cylinders with aluminium-alloy liners.	DISTRIBUTION	*COMPULSORY*	*55,000*
522.	**US ISO 10460: 2005, Gas cylinders — Welded carbon-steel gas cylinders — Periodic inspection and testing**	This Uganda Standard deals with welded, carbon-steel, transportable gas cylinders intended for compressed and liquefied gases under pressure, of water capacity from 0l to 150 l; it also applies, as far as practical, to cylinders of less than 0l water capacity and greater than 150 l up to 450 l. This standard specifies the requirements for periodic inspection and testing to verify the integrity of such gas cylinders for further service. This standard does not apply to the periodic inspection and testing of acetylene cylinders or composite (fully wrapped or hoop-wrapped) cylinders. This standard is primarily for industrial gases other than liquefied petroleum gas (LPG), but may also be applied for LPG For specific LPG applications, see ISO 10464.	DISTRIBUTION	*VOLUNTARY*	*40,000*

523.	**US ISO 11114-2 :2012, Gas cylinders — Compatibility of cylinders and valve materials with gas contents — Part 2: Non-metallic materials**	This Uganda Standard gives guidance in the selection and evaluation of compatibility between non-metallic materials for gas cylinders and valves and the gas contents. It also covers bundles, tubes and pressure drums. This standard can be helpful for composite and laminated materials used for gas cylinders. It does not cover the subject completely and is intended to give guidance only in evaluating the compatibility of gas/material combinations Only the influence of the gas in changing the material and mechanical properties is considered (for example chemical reaction or change in physical state). The basic properties of the materials, such as mechanical properties, required for design purposes are normally available from the materials supplier and are not considered in this part of the standard. The compatibility data given are related to single component gases but can be used to some extent for gas mixtures Ceramics, glasses, and adhesives are not covered by this part of the standard Other aspects such as quality of delivered gas are not considered. This part of US ISO 11114 is not intended to be used for cryogenic fluids.	DISTRIBUTION	*VOLUNTARY*	*30,000*

524.	**US ISO 11119-1: 2012, Gas cylinders — Refillable composite gas cylinders and tubes — Design, construction and testing — Part 1:Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450**	This Uganda Standard specifies requirements for composite gas cylinders and tubes between 0l and 450 l water capacity, for the storage and conveyance of compressed or liquefied gases. This standard applies to type 2 hoop wrapped cylinder or tube with a load-sharing metal liner and composite reinforcement on the cylindrical portion only. This standard is limited to cylinders and tubes with composite reinforcement of carbon fibre, aramid fibre or glass fibre (or a mixture thereof) within a matrix or steel wire to provide circumferential reinforcement.	DISTRIBUTION	*COMPULSORY*	*45,000*
525.	**US ISO 11119-2: 2012, Gas cylinders — Refillable composite gas cylinders and tubes — Design, construction and testing — Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with load-sharing metal liners**	This Uganda Standard specifies requirements for composite gas cylinders and tubes between 0l and 450 l water capacity, for the storage and conveyance of compressed or liquefied gases. This standard applies to type 3 fully wrapped cylinders or tubes with a load-sharing metal liner and composite reinforcement on both the cylindrical portion and the dome ends. This standard is limited to cylinders and tubes with composite reinforcement of carbon fibre, aramid fibre or glass fibre (or a mixture thereof) within a matrix.	DISTRIBUTION	*COMPULSORY*	*50,000*

526.	**US ISO 11119-3: 2013 Gas cylinders— Refillable composite gas cylinders and tubes Part 3: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 l with non-load – sharing metallic or non-metallic liners**	This Uganda Standard specifies requirements for composite gas cylinders up to 150 l water capacity and composite tubes above 150 l water capacity and up to 450 l water capacity, for the storage and conveyance of compressed or liquefied gases. This standard does not address the design, fitting and performance of removable protective sleeves.	DISTRIBUTION	*COMPULSORY*	*65,000*
527.	**US ISO 11223:2004, Petroleum and liquid petroleum products — Direct static measurements — Measurement of content of vertical storage tanks by hydrostatic tank gauging**	This Uganda Standard gives guidance on the selection, installation, commissioning, maintenance, validation and calibration of hydrostatic tank-gauging (HTG) systems for the direct measurement of static mass in petroleum storage tanks. It is intended to cover custody transfer applications, although details of other, less accurate, measurements are included for information. It also gives guidance on calculations of standard volume from measured mass and independently measured reference density Information is also included on measurements of observed and standard volume using density measured by the HTG system itself.	DISTRIBUTION	*VOLUNTARY*	*75,000*
528.	**US ISO 11120:1999, Gas cylinders — Refillable seamless steel tubes of water capacity between 150 l and 3 000 l — Design, construction and testing**	This Uganda Standard specifies minimum requirements for the material, design, construction and workmanship, manufacturing processes and tests at manufacture of refillable quenched and tempered seamless steel tubes of water capacities from 150 l up to and including 3 000 l for compressed and liquefied gases	DISTRIBUTION	*VOLUNTARY*	*55,000*

		exposed to extreme world-wide ambient temperatures (normally between -50 °C and +65 °C) This standard is applicable to tubes with a maximum tensile strength Rm of less than 1 100 MPa. These tubes can be used alone or in batteries to equip trailers or skids (ISO modules) for the transportation and distribution of compressed gases. This standard does not include consideration of any additional stresses that may occur during service or transport, bending stresses, etc			
529.	**US ISO 11621:1997, Gas cylinders — Procedures for change of gas service**	This Uganda Standard applies to seamless steel, aluminium alloy and welded steel refillable cylinders of all sizes, including large cylinders (water capacity greater than150 l)It provides general requirements and procedures to be considered whenever a cylinder is being transferred from one gas service to another for permanent and liquefied gases. It does not apply to cylinders for dissolved acetylene, radioactive gases or gases listed in group G of Table 1	DISTRIBUTION	*VOLUNTARY*	*30,000*
530.	**US ISO 13341:2010, Gas cylinders — Fitting of valves to gas cylinders**	This Uganda Standard specifies the procedures to be followed when connecting cylinder valves to gas cylinders. It specifically applies to all valve and cylinder combinations connected with ISO screw threads as specified in ISO 10920 and ISO 11363-1It defines routines for inspection and preparation prior to valving for both taper and parallel screw threads.	DISTRIBUTION	*VOLUNTARY*	*35,000*

531.	**US ISO 13758:1996, Liquefied petroleum gases — Assessment of the dryness of propane — Valve freeze method**	This Uganda Standard describes a procedure for the assessment of whether liquefied petroleum gas (LPG) hydrocarbons consisting predominantly of propane and/or propene are sufficiently dry to avoid malfunctions in pressure-reducing systems installed in domestic, industrial and automotive LPG applications. The test is normally used as a functional pass/fail test in which the behaviour of the product is assessed in a specially designed and calibrated regulator valve.	DISTRIBUTION	*VOLUNTARY*	*25,000*
532.	**US ISO 14245:2006, Gas cylinders — Specification and testing of LPG cylinder valves — Self closing**	This Uganda Standard specifies the requirements for design, specification and type testing for dedicated LPG self-closing cylinder valves specifically for use with transportable refillable LPG cylinders from 0,5 l up to 150 l water capacity. It includes references to associated equipment for vapour or liquid service	DISTRIBUTION	*COMPULSORY*	*35,000*
533.	**US ISO 15169:2003, Petroleum and liquid petroleum products — Determination of volume, density and mass of the hydrocarbon content of vertical cylindrical tanks by hybrid tank measurement systems**	This Uganda Standard gives guidance on the selection, installation, commissioning, calibration and verification of hybrid tank measurement systems (HTMS) for the measurement of level, static mass, observed and standard volume, and observed and reference density in tanks storing petroleum and petroleum products in fiscal or custody transfer application	DISTRIBUTION	*VOLUNTARY*	*45,000*

534.	**US ISO 15403-1:2006, Natural gas — Natural gas for use as a compressed fuel for vehicles —- Part 1: Designation of the quality**	This Uganda Standard provides manufacturers, vehicle operators, fuelling station operators and others involved in the compressed-natural-gas vehicle industry with information on the fuel quality for natural gas vehicles (NGVs) required to develop and operate compressed-natural-gas vehicle equipment successfully.	DISTRIBUTION	*VOLUNTARY*	*45,000*
535.	**US ISO 7-1:2007, Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation**	This Uganda Standard specifies the requirements for thread form, dimensions, tolerances and designation for jointing pipe threads, sizes 1/16 to 6 inclusive, for joints made pressure-tight by the mating of the threads. These threads are taper external, parallel internal or taper internal and are intended for use with pipes suitable for threading and for valves, fittings or other pipeline equipment interconnected by threaded joints(This Uganda Standard is an adoption of the International Standard ISO 7-1:2007).	DISTRIBUTION	*COMPULSORY*	*30,000*
536.	**US ISO 844:2007, Rigid cellular plastics — Determination of compression properties**	This Uganda Standard specifies a method of determining the compressive strength and corresponding relative deformation, the compressive stress at 10 % relative deformation and when desired, the compressive modulus of rigid cellular plastics(This Uganda Standard is an adoption of the International Standard ISO 844:2007).	DISTRIBUTION	*VOLUNTARY*	*25,000*

537.	**US ISO 845:2006, Cellular plastics and rubbers — Determination of apparent density**	This Uganda Standard specifies a method for determining the apparent overall density and the apparent core density of cellular plastics and rubbers(This Uganda Standard is an adoption of the International Standard ISO 845:2007)	DISTRIBUTION	*VOLUNTARY*	*25,000*
538.	**US ISO 4590:2002, Rigid cellular plastics — Determination of the volume percentage of open cells and of closed cells**	This Uganda Standard specifies a general procedure for the determination of the volume percentage of open and of closed cells of rigid cellular plastics, by measurement first of the geometrical volume and then of the air impenetrable volume of test specimens. The procedure includes the correction of the apparent open-cell volume by taking into account the surface cells opened by cutting during specimen preparation Two alternative methods (method 1 and method 2), and corresponding apparatus, are specified for the measurement of the impenetrable volume(This Uganda Standard is an adoption of the International Standard ISO 4590:2002)	DISTRIBUTION	*VOLUNTARY*	*35,000*
539.	**US ISO 1209-1:2007, Rigid cellular plastics — Determination of flexural properties — Part 1: Basic bending test**	This Uganda Standard specifies a simple method for assessing the behaviour of a bar of rigid cellular plastic under the action of three-point bending. It may be used to determine either the load for a specified deformation or the load at break.	DISTRIBUTION	*VOLUNTARY*	*20,000*
540.	**US ISO 1209-2:2007, Rigid cellular plastics — Determination of flexural properties —**	This Uganda Standard specifies a method for determining the flexural strength and the apparent flexural modulus of elasticity of rigid cellular plastics	DISTRIBUTION	*VOLUNTARY*	*20,000*

	Part 2: Determination of flexural strength and apparent flexural modulus of elasticity				
541.	**US ISO 6406:2005, Gas cylinders — Seamless steel gas cylinders— Periodic inspection and testing**	This Uganda Standard deals with seamless steel transportable gas cylinders (single or those that comprise a bundle) intended for compressed and liquefied gases under pressure, of water capacity from 0l up to 150 l; it also applies, as far as practical, to cylinders of less than 0l water capacity. This standard specifies the requirements for periodic inspection and testing to verify the integrity of such gas cylinders to be re-introduced into service for a further period of time. This standard does not apply to periodic inspection and testing of acetylene cylinders or composite cylinders with steel liners	DISTRIBUTION	*VOLUNTARY*	*50,000*
542.	**US 1873:2017, Gas cylinders — Seamless, welded and composite cylinders for compressed and liquefied gases (excluding acetylene) — Inspection at time of filling**	This Uganda Standard specifies the inspection requirements at the time of filling, and applies to seamless or welded transportable gas cylinders made of steel or aluminium-alloy (Type 1), and for composite transportable gas cylinders (Types 2 to 5 inclusive) for liquefied or compressed gases of a water capacity up to 150 lIt may be applicable to cylinders and tubes with a water capacity between 150 l and 450 l, provided they are inspected and filled as individual cylinders and tubes	DISTRIBUTION	*VOLUNTARY*	*30,000*

543.	**US ISO 10286: 2015, Gas cylinders — Terminology**	This Uganda Standard gives the terminology for standards intended to be used under regulations for the transport of dangerous goods that are based on the UN Model Regulations Variations from the terminology are permissible to comply with other regulations such as for stationary and automotive applications	DISTRIBUTION	*VOLUNTARY*	*70,000*
544.	**US ISO 10464: 2004, Gas cylinders — Refillable welded steel cylinders for liquefied petroleum gas (LPG) — Periodic inspection and testing**	This Uganda Standard applies to cylinders protected by a system to prevent external corrosion and designed and manufactured in accordance with ISO 4706, ISO 22991 or an equivalent design and construction standard. This standard may also apply to other refillable welded steel cylinder designs for LPG with the approval of the national authority Cylinders for the on-board storage of LPG as a fuel for vehicles are excluded from this standard, except cylinders used for fork-lift truck applications	DISTRIBUTION	*VOLUNTARY*	*30,000*
545.	**US ISO 10691:2004, Gas cylinders — Refillable welded steel cylinders for liquefied petroleum gas (LPG) — Procedures for checking before, during and after filling**	This Uganda Standard specifies the procedures to be adopted when checking transportable refillable welded steel LPG cylinders before, during and after filling. It applies to transportable refillable welded steel LPG cylinders of water capacity from 0,5 I up to and including 150 l. It does not apply to cylinders permanently installed in vehicles, or to plant and filling equipment	DISTRIBUTION	*VOLUNTARY*	*20,000*

546.	**US ISO 11625:2007, Gas cylinders — Safe handling**	This Uganda Standard specifies requirements for safe handling, use and storage of gas cylinders for compressed, liquefied or dissolved gases. This standard applies only to single gas cylinders of sizes from 0,5 I to 150 I water capacity	DISTRIBUTION	*VOLUNTARY*	*30,000*
547.	**US ISO 13769:2007, Gas cylinders — Stamp marking**	This Uganda Standard specifies stamp marking of refillable transportable gas cylinders and tubes of volume greater than 0,5 l and less than or equal to 3 000 l, including: steel and aluminium gas cylinders; composite gas cylinders; acetylene cylinders; LPG cylinders	DISTRIBUTION	*VOLUNTARY*	*30,000*
548.	**US ISO 15245-1:2001, Parallel threads for connection of valves to gas cylinders — Part 1: Specification**	This Uganda Standard specifies definitions, dimensions and tolerances of parallel screw threads of nominal diameter 30 mm (designated 30P), 25 mm (designated 25P) and 18 mm (designated 18P), for the connection of valves to medical and industrial gas cylinders. This part of US ISO 15245 does not cover the connection requirements for — mechanical strength; gas tightness; capability of repeated assembly and dismounting operations	DISTRIBUTION	*VOLUNTARY*	*30,000*
549.	**US ISO 15245-2: 2001Gas cylinders — Parallel threads for connection of valves to gas cylinders — Part 2: Gauge inspection**	This Uganda Standard specifies types, dimensions and principles of use of gauges to be used in conjunction with the sealing systems of the parallel threads specified in US ISO 15245-1	DISTRIBUTION	*VOLUNTARY*	*20,000*
550.	**US ISO 15995:2006, Gas cylinders — Specifications and**	This Uganda Standard specifies the requirements for design, specification and type testing of dedicated LPG manually	DISTRIBUTION	*COMPULSORY*	*30,000*

	testing of LPG cylinder valves — Manually operated	operated cylinder valves specifically for use with transportable refillable LPG cylinders from 0,5 l up to 150 l water capacity. It includes references to associated equipment for vapour or liquid service			
551.	**US ISO 16148:2016, Gas cylinders — Refillable seamless steel gas cylinders and tubes — Acoustic emission examination (AT) and follow-up ultrasonic examination (UT) for periodic inspection and testing**	This Uganda Standard gives procedures for the use of acoustic emission examination (AT) and ultrasonic examination (UT) follow-up during the periodic inspection and testing of seamless steel cylinders and tubes with a water capacity of up to 3 000 l used for compressed and liquefied gases. This examination provides acoustic emission (AE) indications and locations that are evaluated by a secondary examination using UT for a possible flaw in the cylinder or tube Methods other than UT for the secondary examination are not covered by this standard	DISTRIBUTION	*VOLUNTARY*	*45,000*
552.	**US ISO 17871:2015, Gas cylinders — Quick-release cylinder valves — Specification and type testing**	This Uganda Standard in conjunction with ISO 10297 and ISO 14246 specifies design, type testing, marking and manufacturing tests, and examinations requirements for quick-release cylinder valves intended to be fitted to refillable transportable gas cylinders which convey non-toxic, non-oxidizing, and non-corrosive compressed or liquefied gases or extinguishing agents charged with compressed gases to be used for fire-extinguishing, explosion protection, and rescue applications	DISTRIBUTION	*VOLUNTARY*	*25,000*

553.	**US ISO 20826:2006, Automotive LPG components — Containers**	This Uganda Standard specifies the technical requirements for the design and the testing of automotive Liquefied Petroleum Gas (LPG) containers, to be permanently attached to a motor vehicle which uses automotive LPG as a fuel. The technical requirements cover the design criteria, the requirements on construction and workmanship, and the marking and re-qualification procedures. This standard also covers all tests, including their frequencies, to be carried out on auto gas containers, during production and performance verification Specific recommendations are also given on the tests to be carried out when changing the design	DISTRIBUTION	*VOLUNTARY*	*70,000*
554.	**US ISO 21007-1:2005, Gas cylinders — Identification and marking using radio frequency identification technology — Part 1: Reference architecture and terminology**	This Uganda Standard establishes a common framework for data structure for unambiguous identification of single or manifolded gas cylinders and for other common data elements in this sector. It also serves as a terminology document in the area of radio frequency identification (RFID) technology	DISTRIBUTION	*VOLUNTARY*	*30,000*
555.	**US ISO 21007-2:2015, Gas cylinders — Identification and marking using radio frequency identification technology — Part 2: Numbering schemes for radio frequency identification**	This Uganda Standard establishes a common flexible framework for data structure to enable the unambiguous identification in gas cylinders (GC) applications and for other common data elements in this sector	DISTRIBUTION	*VOLUNTARY*	*60,000*

556.	**US ISO 22991: 2004, Gas cylinders — Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) — Design and construction**	This Uganda Standard specifies minimum requirements concerning material, design, construction and workmanship, procedure and test at manufacture of transportable refillable welded steel liquefied petroleum gas (LPG) cylinders of water capacity up to and including 150 l, exposed to ambient temperatures	DISTRIBUTION	*VOLUNTARY*	*50,000*
557.	**US ISO 25760:2009, Gas cylinders — Operational procedures for the safe removal of valves from gas cylinders**	This Uganda Standard is intended for suppliers, operators in testing facilities, operators performing cylinder maintenance and any person authorized to remove valves from gas cylinders. It details procedures for the safe removal of valves from cylinders and includes techniques for the identification of inoperable valves	DISTRIBUTION	*VOLUNTARY*	*35,000*
558.	**US EAS 902:2018, Bulk Liquefied Petroleum Gas (LPG) road tankers — Assembling — Requirements**	This Uganda Standard specifies requirements for vehicle, equipment, accessories and assembling thereof used to form a bulk LPG road tanker for safe transportation, filling, and discharge operations	DISTRIBUTION	*COMPULSORY*	*45,000*
559.	**US EAS 903:2018, Road tankers — Welded steel tanks for Liquefied Petroleum Gas (LPG) — Design and manufacture**	This Uganda Standard specifies minimum requirements for materials, design, construction and workmanship procedures, and tests for welded LPG road tanker and their welded attachments manufactured from carbon, carbon/manganese and micro alloy steels. This standard does not cover tanks for ISO type containers	DISTRIBUTION	*COMPULSORY*	*65,000*

560.	**US EAS 924-1:2018, Handling, storage, and distribution of Liquefied Petroleum Gas (LPG) in domestic, commercial, and industrial installations — Code of practice — Part 1: Storage and filling sites for refillable LPG containers of capacity not exceeding 150 L**	This Uganda Standard gives guidelines for the location, installation and operation of storage and filing sites for refillable Liquefied Petroleum Gas (LPG) containers of capacity not exceeding 150 L. It identifies safe methods of filling and storing refillable containers and makes recommendations towards safe working procedures that cover all aspects of the storage and filling of refillable containers	DISTRIBUTION	*VOLUNTARY*	*40,000*
561.	**US EAS 924-2:2018, Handling, storage, and distribution of Liquefied Petroleum Gas (LPG) in domestic, commercial, and industrial installations — Code of practice — Part 2: LPG installations involving gas storage vessels of individual water capacity exceeding 150 L and combined water capacity not exceeding 9 000 L per installation**	This Uganda Standard gives guidelines for the layout, design and installation of butane, propane and LPG equipment and of storage vessels of combined water capacity not exceeding 9 000 L. These guidelines cover storage vessels of individual water capacity exceeding 150 L and associated vapourizers, pipe work and fittings up to the outlet of the first pressure reduction stage in the line	DISTRIBUTION	*VOLUNTARY*	*40,000*
562.	**US EAS 925:2018, Inspection and testing of Liquefied Petroleum Gas (LPG) road tankers**	This Uganda Standard specifies minimum requirements for the inspection and testing of the LPG road tanker which includes its tank, tank accessories and vehicle LPG equipment	DISTRIBUTION	*VOLUNTARY*	*65,000*