



THE REPUBLIC OF UGANDA

MINISTRY OF ENERGY AND MINERAL DEVELOPMENT



UGANDA NATIONAL BUREAU OF STANDARDS

OIL AND GAS STANDARDS CATALOGUE

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BACKGROUND

Intensified exploration and appraisal work in the Albertine Graben of Uganda led to the confirmation of the existence of commercial resources of petroleum in the country in 2006. By the end of 2014, the estimated resources in the country had reached 6.5 billion barrels of oil in place with approximately 1.4 billion. The current in place gas volumes in the country are 499 BCF of non-associated gas resources with 328 BCF estimated to be recoverable.

The National Oil and Gas Policy of Uganda was approved by Cabinet on 31st January, 2008 to guide the development of the country's emerging oil and gas sector. The government has since put in place a number of initiatives to promote the exploration, development and production of the discovered resources and management of petroleum products in Uganda.

In order to support the government program of achieving the Policy goal, the Uganda National Bureau of Standards (UNBS) and the Ministry of Energy & Mineral Development (MEMD) initiated the process of development of standards for the entire petroleum value chain.

Uganda currently imports all its petroleum products requirements from overseas. In order to guide the importation of products and foster local production of petroleum, there was need to develop a wide range of standards for the petroleum sector.

Uganda aims to utilize the discovered petroleum resources in transforming the economy and also for the petroleum products to access international markets.

Standards provide detailed characteristics of processes, products and services which may not be included in the law or regulations. Standards help regulators, producers and consumers know what is expected or required. Therefore the standards will play an important role in streamlining and regulating the petroleum industry.

TECHNICAL COMMITTEE (TC16) HISTORY

UNBS/TC 16-Petroleum was established early 2009 and at that time, it had focused on developing standards for the downstream sector, mainly petroleum products such as petrol, diesel, kerosene, JET A - 1, lubricants and engine oil and standards, for facilities like depots, fuel stations, and fuel road trucks, to be used to assess compliance to set regulatory requirements.

In 2013, TC16 was re-structured and expanded to develop standards for the entire petroleum value chain i.e. Including upstream and mid-stream activities. To undertake this role, its work Programme was to initiate the development of a coherent framework of national standards for the petroleum sector.

TC 16 has the following sub committees;

- Petroleum and Petrochemical Products
- Petroleum Transportation and Refining
- Drilling, Development, Production Equipment and Materials
- Petroleum Management and Occupational Health and Safety
- Distribution

PURCHASING UGANDA STANDARDS

To purchase the Standards below, please visit webstore.unbs.go.ug, to search, identify and process payment.

PETROLEUM AND PETROCHEMICAL PRODUCTS

1. US EAS 158:2012, Automotive gasoline (Premium motor spirit) — Specification (2nd Edition)

This Uganda Standard specifies requirements and methods of sampling and test 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. **PRICE: 25,000**

2. US EAS 177:2012, Automotive gas oil (automotive diesel) — Specification (2nd Edition)

This Uganda Standard specifies the requirements and methods of sampling and test for automotive gas oil, AGO (automotive diesel) as manufactured, stored, transported and marketed. **PRICE: 25,000**

3. US 249:1999/EAS159 Engine oil-Specification

This standard covers crankcase lubricating oils, for automotive type internal combustion engines, meeting or exceeding the API service classification SF for gasoline engines and meeting or exceeding the API service classification CD for diesel engines **PRICE: 25,000**

4. US 803:2008, Kerosene for domestic heating and illuminating (BIK)

This Uganda Standard specifies the requirements for a hydrocarbon fuel suitable for use in wick-fed, pressure vaporizing and other kerosene burning appliances for space heating, cooking and illumination. **PRICE: 20,000**

5. US 916:2011, Specification for denatured fuel ethanol as used for blending with gasoline

This Uganda Standard prescribes the requirements and the methods of sampling and test for anhydrous denatured fuel ethanol intended to be blended with unleaded motor gasoline of premium grade for use as a spark ignition automotive engine fuel. **PRICE: 25,000**

6. 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. **PRICE: 55,000**

7. 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. **PRICE: 45,000**

8. US 971-4: 2014, Liquefied Petroleum Gases (LPG) — Part 4: Specification

This Uganda Standard specifies the requirements and methods of sampling and test for those products commonly referred to as liquefied petroleum gases, consisting predominantly of C3 hydrocarbons (propane/propene); C4 hydrocarbons (butane/butene); and mixtures of C3 and C4 hydrocarbons. **PRICE: 20,000**

9. 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). **PRICE: 45,000**

10. 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 2.7 % (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 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. **PRICE: 35,000**

11. 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. **PRICE 35,000**

12. 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. **PRICE: 25,000**

13. 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. **PRICE: 30,000**

14. 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. **PRICE: 50,000**

15. 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. **PRICE: 50,000**

16. 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 8216/0. The 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. **PRICE: 50,000**

17. 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. **PRICE: 50,000**

18. 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 0.1 % (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. **PRICE: 30,000**

19. US ISO 6743-15:2007, Lubricants, industrial oils and related products (class L) — Classification — Part 15: Family E (Internal combustion engine oils)

This Uganda Standard establishes the detailed classification, in tabular form, of engine lubricating oils for use in the following internal combustion engines:

a) two-stroke cycle, spark-ignition gasoline engines that employ a crankcase scavenging system and are used in transportation, leisure and utility applications, such as motorcycles, snowmobiles, chainsaw (hereinafter referred to as two-stroke engine oils);

b) four-stroke cycle, spark-ignition gasoline engines that employ a common sump containing the lubricant for both the engine and the drive train/starter/transmission of motorcycles, motor scooters, all-terrain vehicles (ATVs) and related equipment (hereinafter referred to as four-stroke engine oils). **PRICE: 25,000**

20. 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 **PRICE: 25,000**

21. US ISO 6251: 1996, Liquefied petroleum gases — Corrosiveness to copper — Copper strip test

This Uganda Standard describes a method for the determination of the corrosiveness to copper of liquefied petroleum gases **PRICE: 40,000**

22. 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. **PRICE: 30,000**

23. 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. **PRICE: 65,000**

24. 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, 0.3 % (VW) to 55 % (V/V) olefins, and 1 % (VIV) to 95 % (V/v) saturated hydrocarbons in petroleum fractions that distill below 315 °C. **PRICE: 30,000**

25. 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. **PRICE: 30,000**

26. 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, ν , 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. **PRICE: 30,000**

27. 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. **PRICE: 25,000**

28. 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 37.80C are included. **PRICE: 30,000**

29. 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. **PRICE: 40,000**

30. 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. **PRICE: 20,000**

31. US ISO 3405:2000, Petroleum products — Determination of distillation characteristics at atmospheric pressure

This Uganda Standard specifies a laboratory method for the determination of the distillation characteristics of light and middle distillates derived from petroleum with initial boiling points above 0 °C and end-points below approximately 400 °C, utilizing either manual or automated equipment, with the manual procedure being the referee method in cases of dispute, unless otherwise agreed. **PRICE: 30,000**

32. 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. **PRICE: 60,000**

33. 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. **PRICE: 40,000**

34. 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. **PRICE: 40,000**

35. 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. **STATUS: PRICE: 20,000**

36. 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. **PRICE: 30,000**

37. 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. **PRICE: 65,000**

38. 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. **PRICE: 30,000**

39. 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. **PRICE: 30,000**

40. 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. **PRICE: 40,000**

41. 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. **PRICE: 20,000**

42. 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 0.02 to 2 % in crude oils. **PRICE: 20,000**

43. 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 0.02 to 5.00 mass or volume % in crude oils. **PRICE: 20,000**

44. 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. **PRICE: 25,000**

45. 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 0.01 % to 0.40 % mass, although higher levels may be determined. **PRICE: 20,000**

46. 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. **PRICE: 20,000**

47. 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.CH₃). **PRICE: 15,000**

48. 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. **PRICE: 20,000**

49. 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. **PRICE: 20,000**

50. 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). **PRICE: 20,000**

51. 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. **PRICE: 25,000**

52. 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. **PRICE: 60,000**

53. 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. **PRICE: 30,000**

54. US ISO 5280:1979, Xylene for industrial use — Specification

This Uganda Standard specifies requirements for xylene suitable for industrial purposes. **PRICE: 20,000**

55. 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). **PRICE: 20,000**

56. 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 101.325 kPa (14.696 psi) or less. **PRICE: 30,000**

57. 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. **PRICE: 30,000**

58. 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). **PRICE: 30,000**

59. US 1711:2017, Standard Test Method for Determination of Vapor Pressure of Crude Oil: VPCR_x (Expansion Method)

This Uganda Standard covers the use of automated vapor pressure instruments to determine the vapor pressure exerted in vacuum of crude oils. **PRICE: 30,000**

60. 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. **PRICE: 30,000**

61. 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. **PRICE: 30,000**

62. 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 101.325 kPa (14.696 psi) or less. **PRICE: 30,000**

63. 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 101.325 kPa (14.696 psi) or less. **PRICE: 30,000**

64. 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. **PRICE: 30,000**

65. 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. **PRICE: 30,000**

66. 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. **PRICE: 30,000**

67. 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 37.8 °C. **PRICE: 30,000**

68. 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. **PRICE: 30,000**

69. 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. **PRICE: 30,000**

70. 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. **PRICE: 30,000**

71. 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. **PRICE: 30,000**

72. 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. **PRICE: 30,000**

73. 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. **PRICE: 30,000**

74. 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. **PRICE: 30,000**

75. 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. **PRICE: 30,000**

76. 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. **PRICE: 30,000**

77. 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 °C. 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. **PRICE: 30,000**

78. 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. **PRICE: 30,000**

**79. 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. **PRICE: 30,000**

**80. 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. **PRICE: 30,000**

**81. 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. **PRICE: 30,000**

**82. 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. **PRICE: 30,000**

**83. 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. **PRICE: 70,000**

**84. 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. **PRICE: 40,000**

**PETROLEUM TRANSPORTATION AND
REFINING**

**85. 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. **PRICE: 40,000**

**86. 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. **PRICE: 50,000**

**87. 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. **PRICE: 70,000**

88. 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. **PRICE: 30,000**

89. 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. **PRICE: 30,000**

90. 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. **PRICE: 40,000**

91. 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). **PRICE: 30,000**

92. 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). **PRICE: 30,000**

93. 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. **PRICE: 40,000**

94. 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.

PRICE: 30,000

95. 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. **PRICE: 20,000**

97. 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. **PRICE: 80,000**

98. 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. **PRICE: 80,000**

99. 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. **PRICE: 60,000**

100. 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 10440-1. These systems can serve equipment such as compressors, gears, pumps and drivers. **PRICE: 60,000**

101. 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. **PRICE: 110,000**

102. 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. **PRICE: 90,000**

103. 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. **PRICE: 90,000**

104. 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. **PRICE: 110,000**

105. 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. **PRICE: 110,000**

106. 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. **PRICE: 110,000**

107. 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. **PRICE: 110,000**

108. 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. **PRICE: 110,000**

109. 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. **PRICE: 110,000**

110. 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. **PRICE: 25,000**

111. 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. **PRICE: 110,000**

112. 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. **PRICE: 110,000**

113. 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 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. **PRICE: 65,000**

114. 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. **PRICE: 110,000**

115. 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. **PRICE: 60,000**

116. 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. **PRICE: 55,000**

117. 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. **PRICE: 50,000**

118. 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. **PRICE: 40,000**

119. 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. **PRICE: 50,000**

120. 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. **PRICE: 50,000**

121. US ISO 15609-3: 2004, Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 3: Electron beam welding

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. **PRICE: 50,000**

122. 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 (e.g. thermal spraying). **PRICE: 50,000**

123. 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. **PRICE: 50,000**

124. 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. **PRICE: 50,000**

125. 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. **PRICE: 50,000**

126. 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. **PRICE: 70,000**

127. 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. **PRICE: 70,000**

128. 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. **PRICE: 110,000**

129. 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. **PRICE: 50,000**

130. 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. **PRICE: 50,000**

131. US ISO 148-1, 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. **PRICE: 30,000**

132. ISO 857-1: 1998, Welding and allied processes — Vocabulary — Part 1: Metal welding processes

This Uganda Standard defines metal welding processes and relating terms. **PRICE: 30,000**

133. 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. **PRICE: 30,000**

134. 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. **PRICE: 35,000**

135. 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. **PRICE: 25,000**

136. 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. **PRICE: 25,000**

137. 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*). **PRICE: 50,000**

138. 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. **PRICE: 40,000**

139. 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. **PRICE: 35,000**

140. 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. **PRICE: 35,000**

141. 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. **PRICE: 40,000**

142. 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. **PRICE: 30,000**

143. US ISO 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. **PRICE: 30,000**

DRILLING, DEVELOPMENT AND PRODUCTION EQUIPMENT AND MATERIALS

144. 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). **PRICE: 110,000**

145. 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). **PRICE: 110,000**

146. 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. **PRICE: 55,000**

147. 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. **PRICE: 110,000**

148. 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. **PRICE: 110,000**

149. 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. **PRICE: 100,000**

150. 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. **PRICE: 110,000**

151. 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. **PRICE: 110,000**

152. 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-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 *Xanthomonas campestris* (Xanthan gum). **PRICE: 110,000**

153. 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. **PRICE: 110,000**

**154. 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. **PRICE: 110,000**

**155. 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 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. **PRICE: 60,000**

**156. 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. **PRICE: 65,000**

**157. 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. **PRICE: 110,000**

**158. 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. **PRICE: 65,000**

**159. 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. **PRICE: 75,000**

**160. 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. **PRICE: 110,000**

**161. 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. **PRICE: 65,000**

162. 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. **PRICE: 35,000**

163. 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. **PRICE: 65,000**

164. 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. **PRICE: 45,000**

165. 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. **PRICE: 50,000**

166. 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. **PRICE: 50,000**

167. 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. **PRICE: 50,000**

168. 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. **PRICE: 50,000**

169. 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. **PRICE: 50,000**

170. 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. **PRICE: 50,000**

171. 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.

PRICE: 60,000

172. 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. **PRICE: 65,000**

173. 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. **PRICE: 50,000**

174. 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. **PRICE: 65,000**

175. 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. **PRICE: 50,000**

176. 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. **PRICE: 50,000**

177. 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. **PRICE: 50,000**

178. 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. **PRICE: 110,000**

179. 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. **PRICE: 80,000**

180. 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.

PRICE: 40,000

181. 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. **PRICE: 40,000**

182. 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. **PRICE: 40,000**

183. 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. **PRICE: 40,000**

184. 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. **PRICE: 40,000**

185. 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. **PRICE: 40,000**

186. 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 conditions

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. **PRICE: 40,000**

187. 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. **PRICE: 110,000**

188. 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 requirements 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. **PRICE: 40,000**

189. 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. **PRICE: 40,000**

190. 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. **PRICE: 30,000**

191. 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. **PRICE: 25,000**

192. 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. **PRICE: 30,000**

193. 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. **PRICE: 100,000**

194. 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. **PRICE: 40,000**

195. 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. **PRICE: 20,000**

196. 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. **PRICE: 30,000**

PETROLEUM MANAGEMENT AND OCCUPATIONAL HEALTH AND SAFETY

197. 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. **PRICE: 40,000**

198. 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. **PRICE: 60,000**

199. 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. **PRICE: 80,000**

200. 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). **PRICE: 80,000**

201. 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. **PRICE: 70,000**

202. 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 15663-1. This 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. **PRICE: 70,000**

203. 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. **PRICE: 70,000**

204. US ISO 20815:2008, Petroleum, petrochemical and natural gas industries — Production assurance and reliability management

This Uganda Standard introduces 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. **PRICE: 60,000**

205. 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. **PRICE: 80,000**

206. 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. **PRICE: 60,000**

207. 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.
PRICE: 70,000

208. 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. **PRICE: 30,000**

209. 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. **PRICE: 20,000**

210. 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. **PRICE: 50,000**

211. 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. **PRICE: 50,000**

212. 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. **PRICE: 30,000**

213. 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. **PRICE: 50,000**

214. 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. **PRICE: 50,000**

215. 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. **PRICE: 40,000**

216. 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. **PRICE: 25,000**

217. 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. **PRICE: 40,000**

218. 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. **PRICE: 35,000**

219. 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. **PRICE: 30,000**

220. 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. **PRICE: 30,000**

221. US ISO 16900-13:2015, Respiratory protective 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**

This Uganda Standard specifies tests which are specific to RPDs using regenerated breathable gas, compressed breathable gas with class L respiratory interfaces, and special application mining escape RPD. **PRICE: 30,000**

222. 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 17420-2. This part of US ISO 17420 also includes the description of test simulators that are necessary for the assessment of some of the requirements. **PRICE 35,000**

223. 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. **PRICE: 30,000**

224. 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. **PRICE: 35,000**

225. 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).* **PRICE: 95,000**

226. 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. Special risks are covered by complementary job-related standards (e.g. footwear for firefighters, electrical insulating footwear, protection against chain saw injuries, protection against chemicals and molten metal splash, protection for motor cycle riders). **PRICE: 45,000**

227. 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 (e.g. 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).* **PRICE: 45,000**

228. 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 (e.g. 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).* **PRICE: 45,000**

229. 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. **PRICE: 110,000**

230. 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. **PRICE: 40,000**

231. 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. **PRICE: 40,000**

232. 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. **PRICE: 40,000**

233. 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. **PRICE: 40,000**

234. 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. **PRICE: 40,000**

235. 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 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. **PRICE: 40,000**

236. 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. To assist with choice based on user risk assessment, types and performance levels for different categories of protection are included. **PRICE: 50,000**

237. 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. **PRICE: 40,000**

238. 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. **PRICE: 40,000**

**239. 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 12480-1. Subjects 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 signallers. It does not cover manually (non-powered) operated cranes, or cranes in which at least one of its motions is manually operated. **PRICE: 40,000**

**240. 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. **PRICE: 40,000**

**241. 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. **PRICE: 30,000**

**242. 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. **PRICE: 65,000**

**243. 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. **PRICE: 20,000**

**244. 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. **PRICE: 50,000**

**245. 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. **PRICE: 40,000**

**246. 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. **PRICE: 80,000**

247. 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. **PRICE: 20,000**

248. 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).* **PRICE: 80,000**

DISTRIBUTION

250. US 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 1.4 MPa (14 bar) (absolute vapour pressure 1.5 MPa) 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. **PRICE: 25,000**

251. 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. **PRICE: 45,000**

252. 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. **PRICE: 20,000**

253. 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 °C to 70 °C. **PRICE: 20,000**

254. 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 0.5 l 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. **PRICE: 50,000**

255. 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. **STATUS: VOLUNTARY PRICE: 50,000**

256. 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. **PRICE: 80,000**

257. 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. **PRICE: 30,000**

258. 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. **PRICE: 80,000**

259. 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. **PRICE: 80,000**

260. 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. **PRICE: 80,000**

261. 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. **PRICE: 80,000**

262. US ISO 7507-5:2000, Petroleum and liquid petroleum products — Calibration of vertical cylindrical tanks — Part 5: External electro-optical distance-ranging method

This Uganda Standard specifies a method for the calibration of non-insulated vertical cylindrical tanks having diameters greater 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). **PRICE: 80,000**

263. 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 PRICE: 80,000**

264. 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. **PRICE: 30,000**

265. 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). **PRICE: 30,000**

266. 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 0.5 l up to and including 150 l for compressed, liquefied and dissolved gases. This standard is applicable to cylinders with a maximum actual tensile strength R_{ma} of less than 1 100 MPa. **PRICE: 60,000**

267. 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 0.5 l 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 $R_{ma} \geq 1 100$ MPa. It is not applicable to cylinders with $R_{ma, max} > 1 300$ MPa for diameters > 140 mm and guaranteed wall thicknesses $a' \geq 12$ mm and $R_{ma, max} > 1 400$ MPa for diameters ≤ 140 mm and guaranteed wall thicknesses $a' \geq 6$ mm, because beyond these limits, additional requirements can apply. **PRICE: 60,000**

268. 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 0.5 l up to and including 150 l for compressed, liquefied and dissolved gases. **PRICE: 60,000**

269. 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. **PRICE: 40,000**

270. US ISO 9809-4:2014, Gas cylinders — Refillable seamless steel gas cylinders — Design, construction and testing — Part 4: Stainless steel cylinders with an R_m 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 0.5 l 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, R_{ma} , of less than 1 100 MPa. **PRICE: 60,000**

271. 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 0.5 l to 150 l; it also applies, as far as practical, to cylinders of less than 0.5 l 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. **PRICE: 55,000**

272. 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 0.5 l to 150 l; it also applies, as far as practical, to cylinders of less than 0.5 l 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.

PRICE: 40,000

273. 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. **PRICE: 30,000**

274. 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 0.5 l 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. **PRICE: 45,000**

275. 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 0.5 l 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. **PRICE: 50,000**

276. 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. **PRICE: 65,000**

277. 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. **PRICE: 75,000**

278. 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 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 R_m 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, e.g. bending stresses, etc. **PRICE: 55,000**

**279. 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 than 150 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. **PRICE: 30,000**

**280. 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 11363-1. It defines routines for inspection and preparation prior to valving for both taper and parallel screw threads. **PRICE: 35,000**

**281. 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. **PRICE: 25,000**

**282. 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. **PRICE: 35,000**

**283. 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 **PRICE: 45,000**

**284. 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. **PRICE: 45,000**

**285. US 947-1:2011, Handling of
petroleum products and their derivatives
— Part 1: Siting, design and construction
of service station**

This Uganda Standard covers the siting, design and construction of service stations, installation and operation of equipment in service stations for handling, storage and dispensing of petroleum products and their derivatives, other than equipments used in transportation. **PRICE: 55,000**

**286. 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).***PRICE: 30,000**

287. 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).* **PRICE: 25,000**

288. 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).***PRICE: 25,000**

289. 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)* **PRICE: 35,000**

290. 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. **PRICE: 20,000**

291. US ISO 1209-2:2007, Rigid cellular plastics — Determination of flexural properties — Part 2: Determination of

flexural strength and apparent flexural modulus of elasticity

This Uganda Standard specifies a method for determining the flexural strength and the apparent flexural modulus of elasticity of rigid cellular plastics. **PRICE: 20,000**

292. 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 0.5 l up to 150 l; it also applies, as far as practical, to cylinders of less than 0.5 l 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. **PRICE: 50,000**

293. 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 l. It 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. **PRICE: 30,000**

294. 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. **PRICE: 70,000**

295. 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. **PRICE: 30,000**

296. 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 l up to and including 150 l. It does not apply to cylinders permanently installed in vehicles, or to plant and filling equipment. **PRICE: 20,000**

297. 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 l to 150 l water capacity. **PRICE: 30,000**

298. 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. **PRICE: 30,000**

299. 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 dismantling operations. **PRICE: 30,000**

300. US ISO 15245-2: 2001. Gas 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. **PRICE: 20,000**

301. US ISO 15995:2006, Gas cylinders — Specifications and testing of LPG cylinder valves — Manually operated

This Uganda Standard specifies the requirements for design, specification and type testing of dedicated LPG manually 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. **PRICE: 30,000**

302. 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. **PRICE: 45,000**

303. 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. **PRICE: 25,000**

304. 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. **PRICE: 70,000**

305. 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. **PRICE: 30,000**

306. 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. **PRICE: 60,000**

307. 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. **PRICE: 50,000**

308. 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. **PRICE: 35,000**