

From the Ministry of Industry and Technology:

**DRAFT COMMUNIQUÉ ON THE MANDATORY
IMPLEMENTATION OF TURKISH STANDARDS
(COMMUNIQUE NO: SGM 2022/...)**

Objective

ARTICLE 1 – The purpose of this Communiqué is to determine the procedures and principles regarding the mandatory application of Turkish standards related to products published by the Turkish Standards Institute (TSE).

Scope

ARTICLE 2 – This Communiqué covers the Turkish standards published by TSE, whose standard number, title and scope are given in the attached list.

Legal basis

ARTICLE 3 – This Communiqué has been prepared on a legal basis of subparagraph d of the first paragraph of Article 388 of the Presidential Decree No.1 on the Organization of the Presidency published in the Official Gazette No. 30474 of 7 October 2018, fourth paragraph of Article 550 of the Presidential Decree No.4 on the Organization of Ministries, Related Institutions and Organizations and Other Institutions and Organizations published in the Official Gazette No.30479 of 15 April 2018, third paragraph of Article 4 of the Product Safety and Technical Regulations Law No. 7223 published in the Official Gazette No.31066 of 12 March 2020 and Regulation on Mutual Recognition in the Non-Harmonised Area published in the Official Gazette No. 31421 of 12 March 2021.

Mandatory application

ARTICLE 4 – (1) The standards listed in the annex of this Communiqué have been put into effect as mandatory together with their amendments on the date of this communiqué put into force during the manufacturing and placing on the market stages.

(2) Those who manufacture and place the products on the market covered by the Turkish standards in the attached list of this Communiqué shall be mandatory to comply with the provisions of this Communiqué.

Provision

ARTICLE 5 – (1) The standards in the attached list of this Communiqué shall be provided from the Central Organization, Certification Directorates or Provincial Representations of TSE.

Mutual recognition

ARTICLE 6 – (1) Products making available on the market legally in a European Union member state shall be assumed that they are comply with the rules set out in this Communiqué. The implementation of these rules is subject to the provisions of the Regulation on Mutual Recognition in the Non-Harmonised Area.

Entry into force

ARTICLE 7 – (1) This Communiqué shall enter into force six months after following the date of publication in Official Gazette.

Enforcement

ARTICLE 8 – (1) The provisions of this Communiqué shall be enforced by the Minister of Industry and Technology.

ANNEX

LIST OF MANDATORY STANDARDS TO BE IMPLEMENTED

No.	Standard No	Name of the Standard	Scope of the Standard
1.	TS 1 / December 2002	Turkish Flag And Bunting Cloth	This standard covers the specifications of fabrics for manufacturing Turkish Flag and bunting cloth
2.	TS 3 / January 2017	Concentric Lay - Stranded Copper Conductors For Overhead Lines	This standard covers hard-drawn solid and stranded circular copper conductors for overhead power transmission systems.
3.	TS 40 / December 1997	Plugs and Socket outlets for household and similar purposes - Standard sheets	This standard covers plugs and socket outlets for household and similar purposes
4.	TS 57 / February 1989	Porcelain Insulators for Telegraph And Telephone lines	This standard applies to post insulators of ceramic material for supporting wires on telegraph and telephone lines.
5.	TS 59-2 / April 2015	Assembly tools for screws and nuts - Screwdrivers - Part 2: Double offset	This standard covers the definition, classification and characteristics, sampling, inspection and tests and the way of placing on the market of double offset screw drivers for slotted head screws and cross point screws. NOTE: The tips of the screwdrivers within the scope of this standard are listed in TS ISO 1703; flat blade screwdriver tips as 4.1.04.02 0, Phillips screwdriver tips as 4.1.05.02 0
6.	TS 62 / March 2016	Twist drills - Alloyed cold work tool steel or hard metal brazing tips	This standard covers cylindrical and morse taper shank drills for drilling holes in material such as metal, plastic, concrete etc. This standard does not cover step drills, center drills, carpentry drills, taper pin hole drills, puller morse taper drills, countersunk drills, core drilling drills, shank slotted drills for rotary hammers, high speed steel drills and all hard metal drills. NOTE - In this standard, only the term "Drill" is used instead of the term "Helical Drill".

7.	TS 76 / October 1977	Porcelain Insulators for Overhead Lines With Nominal Voltages Up To 1000 Volts	This standard covers porcelain insulators used in electrical overhead lines with a nominal voltage up to 1000 volts (within 1000 Volts). It does not cover insulators used in telegraph and telephone lines and insulators used in voltages higher than 1000 V.
8.	TS 78 / April 1985	Reamers	This standard covers reamers classified in Clause 1.1.
9.	TS 81 / September 2021	Assembly tools for screws and nuts - Engineers wrenches, open end	This standard specifies open end, engineer's wrenches, having their dimensions of width across flats which are specified in Clause 4.3 and in relevant standards, and used for tightening and dismantling of bolts and nuts. This standard applies the open end wrenches manufactured from steel materials specified in Clause 4.2.1. NOTE - Those wrenches specified in this standard are listed in TS ISO 1703:2021 under the reference numbers of 1 1 01 01 0, 1 1 01 01 1, 1 1 01 03 0 and 1 1 01 02 0.
10.	TS 82-1 / October 2015	Taps - For general purposes - Part 1: General requirements	This standard covers the description, classification and properties, sampling, inspection and tests of screwing taps for general purposes used for opening thread by hand or a machine on metal, plastic materials in accordance with TS 61 used in the drilling of internal threads to the material. This standard does not cover special taps.
11.	TS 82-2 / October 2015	Taps - For general purposes - Part 2: Machine taps	This standard covers the description, classification and properties, sampling, inspection and tests of screwing taps for general purposes used for opening internal threads by a machine on metal, plastic materials in accordance with TS 61 used in the drilling of internal threads to the material. This standard does not cover special taps.
12.	TS 82-3 / October 2015	Taps - For general purposes - Part 3: Hand taps	This standard covers the description, classification and properties, sampling, inspection and tests of screwing taps for general purpose used in the opening of internal threads into metal, plastic, etc materials by hand in accordance with TS 61. This standard does not cover special taps.
13.	TS 183 EN 60081 / March 2002	Double-capped fluorescent lamps - Performance specifications	This standard specifies the performance requirements for double-capped fluorescent lamps for general lighting service. The requirements in this standard relate only to type testing. Conditions of compliance, including

			<p>methods of statistical assessment should be The following lamp types and modes of operation are included:</p> <ul style="list-style-type: none"> a) Lamps having preheated cathodes operating at high frequencies designed to operate at a.c. grid frequencies with the use of a starter b) Lamps having preheated cathodes operating at high frequencies designed to operate at a.c. grid frequencies without the use of a starter c) Lamps having preheated cathodes operating at low frequencies designed to operate at a.c. grid frequencies without the use of a starter d) Lamps with preheated cathodes designed to operate at high frequencies. e) Lamps with unpreheated cathodes designed to operate at a.c. grid frequencies. f) Lamps with non-preheated cathodes designed to operate at high frequencies.
14.	TS 198 / December 2016	V-Belts	This standard specifies the definition, classification and characteristics, sampling, inspection and tests and the way of placing on the market of V belts. This standard covers V-belts specified in clause 4.1.2.
15.	TS 214 / April 2016	Processed leather - Marketing conditions and selling units	This standard covers marketing conditions and selling units of processed leathers obtained from cattle, buffalo, horse, camel, sheep, goat. This standard does not cover the leathers obtained from pig and other leathers.
16.	TS 219 / April 2015	Leather - Cowhide leather - Specifications	This standard covers the definition, classification, characteristics, sampling, examinations, testing and the way of placing on the market of cowhide leather.
17.	TS 220 / April 2015	Leather - Saddle soap leather - Specifications	This standard covers the definition, classification, characteristics, sampling, examinations, testing and the way of placing on the market of saddle soap leather.
18.	TS 221 / May 2017	Leather - Belting leather - Specifications	This standard covers the definition, classification, specifications, sampling, inspection, testing and the way of placing on the market of belting leather.
19.	TS 222 / May 2017	Leather - Chromated cowhide leather	This standard covers the definition, classification and properties, sampling, inspection and tests of chromated cowhide leather.

20.	TS 223 / May 2017	Leather - Vegetable tanned upper leather - Specifications	This standard specifies the description, classification and characteristics, sampling, inspection and the way of placing on the market of vegetable tanned upper leather.
21.	TS 224 / December 2017	Leather - Semichrommed vachetta leather- Specifications	This standard covers the definition, classification and characteristics, sampling, inspection and tests and the way of placing on the market of semi-chrome vaketa.
22.	TS 225 / July 2016	Leather - Box-calf and Rind-box (Chrome tanned upper leather) - Specifications	This standard covers the definition, classification and characteristics, sampling, inspection and tests and the way of placing on the market of box-calf and rind-box (chrome tanned upper leather).
23.	TS 226 / May 2017	Leather - Upper suede - Specifications	This standard covers the description, classification and specifications sampling, inspection, testing and the way of placing on the market of the upper suede leathers.
24.	TS 227 / April 2013	Leather, glacé	This standard covers the description, classification and specifications sampling, inspection and testing of glazed skin.
25.	TS 228 / April 2014	Leather for gloves	This standard covers the leather the description, classification and characteristics, sampling, inspection and testing of leather gloves.
26.	TS 229 / April 2013	Lining Leather	This standard covers the description, classification and characteristics, sampling, inspection and testing of lining leather.
27.	TS 230 / March 2013	Leather for garments	This standard covers the description, classification and characteristics, sampling, inspection and testing of leather used in the manufacture of dresses, jackets, coats, overcoats and similar garments.
28.	TS 231 / May 2017	Leather - Morocco leather - Specifications	This standard covers the description, classifications and specifications, sampling, inspection and testing and the way of placing on the market of the morocco leather.
29.	TS 232 / May 2017	Leather - Goat skins for uppers - Specifications	This standard covers the description, classification and characteristics, sampling, inspection and tests and the way of placing on the market of the goat skins for uppers.

30.	TS 233 / December 2015	Leather - chamois – for clothing	<p>This standard covers the description, classification and properties, sampling, inspection and tests of chamois leather used in the manufacture of dresses, jackets, topcoats, coats and similar garments.</p> <p>This standard does not cover chamois for cleaning purposes. (For chamois for cleaning purposes, see TS EN 16419).</p>
31.	TS 234 / May 2017	Leather - Glazed - Specifications	<p>This standard covers the description, classification and specifications, sampling, inspection and testing of the glazed leather.</p>
32.	TS 260 / January 2003	Cotton Yarn-Carded-Grey-Single-For Woven Fabrics	<p>This standard covers the specifications for single plied cotton yarns 6 Ne to 46 Ne, intended for use in woven fabrics, carded and manufactured in a ring spinning system, and made from cotton fibers which are short and medium in length. It does not cover yarns produced by other methods.</p>
33.	TS 262 / January 2003	Cotton Yarn-Carded-Grey-Single-For Knitted Fabrics	<p>This standard covers the specifications for single plied cotton yarns 6 Ne to 46 Ne, intended for use in knitted fabrics, carded and manufactured in a ring spinning system, and made from cotton fibers which are short and medium in length. It does not cover yarns produced by other methods.</p>
34.	TS 263 / January 2003	Cotton yarn-Combed-Grey-Single-Fro woven Fabrics	<p>This standard covers the specifications for single plied cotton yarns 18 Ne to 106 Ne, intended for use in woven fabrics, combed and manufactured in a ring spinning system, and made from cotton fibers which are medium and long in length. It does not cover yarns produced by other methods.</p>
35.	TS 265 / January 2003	Cotton yarn-Combed-Grey-Single-Fro Knitted Fabrics	<p>This standard covers the specifications for single plied cotton yarns 18 Ne to 106 Ne, intended for use in knitted fabrics, combed and manufactured in a ring spinning system, and made from cotton fibers which are medium and long in length. It does not cover combed yarns produced by other methods.</p>
36.	TS 303 / December 2012	Milling Cutters - For Metals	<p>This standard covers milling cutters used in metalworking. This standard does not cover milling cutters made entirely of hard metal. TS EN ISO 15641:2012 should be consulted for the hazards arising from the use of milling cutters in high speed machining (machining at increased peripheral speeds), related safety rules and precautions to be taken.</p>
37.	TS 352 / October 1998	Lead Shots	<p>This standard specifies lead shots used in manufacturing of shotgun cartridges.</p>

38.	TS 401 / April 2014	Textiles products - Socks, stockings and pantyhoses	This standard covers stockings produced on circular knitted machines. This standard doesn't cover hand knitted socks, stockings for medical purposes and used for ballet.
39.	TS 430 / April 1984	Sectional Cast Iron Boilers	<p>This standard covers boilers which provide heating fluid to the heating installation and/or domestic hot water production installation, which is made of cast iron sections;</p> <p>a) Low pressure steam boilers (TS 2838)</p> <p>b) Hot water boilers operating in a system open to the atmosphere and having the highest operating pressure of 6x10² KPa (TS 2796),</p> <p>c) Hot water boilers (TS 2736), which are connected to the pressurized system and have a maximum operating pressure of 6 x 10² KPa and a maximum operating temperature of 130°C.</p> <p>This standard does not cover steel welded and steel section boilers.</p>
40.	TS 431 / September 2021	Screws - For woodwork	This standard specifies the aspects of definition, classification and specifications, sampling, inspection and testing, and the way of placing of the market of wood screws. This standard does not cover wood particleboard bolt/screw.
41.	TS 432-11 / April 2000	Hexagon head and slotted head thread cutting screws - Dimensions requirements and testing	<p>This standard specifies dimensions, requirements and test methods for heat-treated hexagon head and slotted head thread cutting screws with an ISO 261 metric thread, with cutting flutes extending from the point of the screw to its head, and designed to cut their mating thread during assembly. Head shapes are given in the relevant TS standards, general features are given in TS 80 (ISO 8992), and acceptance examinations are given in TS 80 (ISO 3269).</p> <p>The rules in this standard have been prepared in such a way that the tapped sheet bolts can fulfill the above functions without their own screw threads breaking or deteriorating. For this, properties related to screw thread forming ability, surface hardness, tensile strength and torsional strength were determined.</p>

42.	TS 432-12 / April 2000	Cross recessed head thread cuttings screws - Dimensions requirements and testing	<p>This standard specifies dimensions, requirements and test methods for heat-treated cross recessed head thread cutting screws with an TS 61-13 ISO 261 metric thread with cutting flutes extending from the point of the screw to its head and designed to cut their mating thread during assembly.</p> <p>Head shapes are given in the relevant TS standards, general features are given in TS 80 (ISO 8992), and acceptance examinations are given in TS 80 (ISO 3269).</p> <p>The rules in this standard have been prepared in such a way that the tapped sheet bolts can fulfill the above functions without their own screw threads breaking or deteriorating.</p> <p>For this, properties related to screw thread forming ability, surface hardness, tensile strength and torsional strength were determined.</p>
43.	TS 531 / May 2016	Woodworking chisels and gouges	This standard covers woodworking chisels and gauges
44.	TS 606 / April 2002	Textiles - Cotton lace and embroidery yarns	This standard covers lace and embroidery yarns from 100 % cotton fibres.
45.	TS 663 / November 2014	Road Vehicles - Tyre chains	This standard covers metal spinning chain which defined in the Road Traffic Regulation M1, N1, O1, O2 (passenger cars, light commercial vehicles and trailers) and M2, M3, N2, N3, O3 and O4 (trucks, buses and trailers) in the category of road vehicles used in metal spinning chains. This standard does not cover anti-skid devices other than metal anti-skid chains.
46.	TS 862-7 EN 3-7+A1 / July 2010	Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods	<p>This standard specifies the characteristics, performance requirements and test methods for portable fire extinguishers.</p> <p>Reference to the suitability of an extinguisher for use on gaseous fires (class C fires) are at the manufacturer's discretion, but are applied only to powder type extinguishers which have gained a class B or class A and class B rating.</p> <p>Suitability of extinguishers for use on class D fires (fires involving flammable metals) is outside the scope of this standard in respect of test fires. However,</p>

			<p>extinguishers claiming class D suitability are covered in all other respects by the requirements in this standard for powder extinguishers.</p> <p>It is considered hazardous for powder and carbon dioxide fire extinguishers to be used on Class F fires. For this reason powder and carbon dioxide fire extinguishers are excluded for conformance with regard to Class F in this standard."</p> <p>NOTE - The extinction of a metal fire presents a situation so specific (in terms of the metal itself, its form, the configuration of the fire etc.) that it is not possible to define a representative standard fire for the purposes of testing. The efficiency of extinguishers on class D fires needs to be established on a case by case basis.</p>
47.	TS 870 / January 2019	Firearms-Shotguns with smooth bore for hunting, sport and competition	<p>This standard covers the description, classification and characteristics, sampling, inspection and tests and the way of placing on the market of smooth-bore rifles used in hunting, sports and competitions in private and industrial areas.</p> <p>This standard does not cover rifle-gun and/or air rifles.</p>
48.	TS 925 / March 1971	Friction Linings for Clutches (Metallic, Semimetallic and Metal-Ceramic)	This standard covers air friction linings for clutches made of metallic, semi-metallic and metal-ceramic materials.
49.	TS 968 / May 2016	Road vehicles – Spark-plugs – Metric screw thread	This standard covers spark plugs with metric screws threaded which are used in internal combustion engines with spark ignition and the size of the place of their cylinder head housings. This standard does not cover glow plugs used in diesel engines and the spark plugs are used in aircraft engines and other special spark plugs.
50.	TS 1020 / March 1988	Raised Cheese Head, Cylindrical Head and Round Head Bolts With Metric Tread	This standard covers raised cheese head, cylindrical head and round head bolts with metric thread.

51.	TS 1022 / November 2018	Square head and T- head bolts with metric thread (for general purposes)	<p>This standard covers the definition, classification and properties of their inspection and tests and the way they are placed on the market of the square head and tee head bolts with metric threads.</p> <p>This standard covers square head and tee head bolts with metric thread for general purposes.</p>
52.	TS 1023-1 / December 2014	Screws and bolts - Part 1: Slotted countersunk flat head	<p>This standard; covers the–definition, classification, properties, sampling, inspection and tests, technical delivery conditions and the way of placing on the market of countersunk flat head screwdriver slotted bolts. It does not cover countersunk - flat head, screwdriver slotted bolts and aerospace bolts made of non-metallic materials.</p>
53.	TS 1023-2 / December 2014	Screws and bolts - Part 2: Raised countersunk head	<p>This standard coverst the definition, classification and properties their inspection and tests and the way they are placed on the market of square head and tee head metric bolts. This standard covers square head and tee head metal bolts with metric thread for general purposes.</p>
54.	TS 1023-3 / December 2014	Screws and bolts - Flat countersunk head - With square neck	<p>This standard covers the description, classification and properties of sampling, inspection and tests, technical delivery conditions and the way of placing on the market of –countersunk - flat head, square neck bolts with product quality C. It excludes countersunk made of non-metallic materials – flat head, square neck bolts and aerospace bolts.</p>
55.	TS 1023-4 / December 2014	Screws and bolts-Flat countersunk head with nib	<p>This standard; covers the definition, classification, properties sampling, inspection and tests, technical delivery conditions and the way of placing on the market of flat countersunk head with nib screws and bolts. It does not cover flat–countersink head with nibs made of non-metallic materials and aerospace bolts.</p>
56.	TS 1025 / September 2013	Studs - Metric thread	<p>This standard specifies dimensions and technical delivery conditions of studs with a length of engagement approximately 1.25 d, and studs for sizes M4 to M24 coarse pitch thread and M8 × 1 to M24 × 2 fine pitch thread studs, with a thread length at the stud end of approximately 2d and approximately 2.5 d, of product grade A; and studs which are suitable for mounting workpieces and fixtures in T-slots on machine tool tables. Studs complying with this</p>

			<p>standard; having engagement length of approximately 1.25 d, are intended for use mainly in cast iron; having a thread length at the stud end of approximately 2d are intended for use mainly aluminium alloys; having a thread length at the stud end of approximately 2.5d are intended for use mainly in light metals of low strength.</p> <p>NOTE 1 - To ensure proper performance of nuts for T-slots (specified in TS 4091) when used together with studs for clamping purposes, the dimensions of nuts and studs used for this purpose must be compatible. T-head bolts should be used since these can take a higher tightening torque, particularly where smaller T-slots are involved.</p> <p>NOTE 2 – Thereafter Instead of “studs, metric thread”, the term of “stud” is used.</p>
57.	TS 1026-20 / May 2017	Fasteners- Hexagon nuts- Part 20: Rounded trapezoidal thread- Product quality B	<p>This standard covers the definition, classification and properties sampling, inspection and tests and the way of placing on the market of rounded trapezoidal screw hexagon nuts in B product quality.</p> <p>NOTE - In this standard text, the term "nut" is used instead of the expression "nut with rounded hexagonal trapezoidal thread".</p>
58.	TS 1026-21 / May 2017	Fasteners - Hexagon nuts - Part 21: Spherical seating, metric - 1.5d thickness (height) - Product quality A	<p>This standard covers the definition, classification and properties, sampling, inspection and tests, experiments and ways on placing on the market and other issues of thick nuts that are used frequently disassembled bolt sets of A Product quality, 1.5 d thick, metric, normal pitch, hexagonal, spherical seating surface.</p> <p>NOTE - In this standard text, only the term "nut" is used instead of the expression "hexagonal rounded trapezoidal threaded nut".</p>
59.	TS 1026-33 / December 1995	Fasteners - Hexagon Thin Nuts - Section: 33 Product Grades A and B	This standard covers hexagon thin nuts with metric fine pitch thread.
60.	TS 1026-50 / January 2018	Fasteners-Hexagon Castle Nuts Section: 50 With Metric Coarse	This standard; covers the description, classification and properties, sampling, inspection and tests, and the way of placing on the market of hexagonal

		and Fine Pitch Thread-Product Grades A and B	slotted and crowned nuts in product grade A (nominal thread diameter up to 16 mm) and in product quality B (nominal thread diameter greater than 16 mm), metric normal and fine pitch, thread nominal diameter from 4 mm to 100 mm.
61.	TS 1026-51 / March 2017	Hexagon thin castle nuts – Part 51: Metric coarse and fine pitch thread, product grades A and B	This standard covers normal and fine pitch, metric, crowned, thin hexagon nuts in product quality A ($12 \text{ mm} \leq D \leq 16 \text{ mm}$) and product quality B ($16 \text{ mm} < D \leq 52 \text{ mm}$). NOTE - In this standard text, only the term "Nuts" is used instead of the term "Metric, Fine and Normal Pitch, Hexagonal Crown, Thin Nuts in A and B Product Quality".
62.	TS 1026-52 / December 1995	Fasteners-Hexagon Thin Castle Nuts- Section: 52 With Metric Coarse and Fine Pitch Thread-Product Grades A and B (Old Type)	This standard covers hexagon thin castle nuts with metric coarse and fine pitch thread.
63.	TS 1026-61 / March 2017	Hexagon thin slotted nuts - Part 61: Metric coarse and fine pitch thread, product grades A	This standard covers normal and fine pitch, metric, grooved, ($6 \text{ mm} < D \leq 10 \text{ mm}$), thin hexagon nuts in quality A. NOTE: In this standard text, only the term "Nuts" is used instead of the term "Metric, Normal and Fine Pitch, Grooved, Thin Hexagonal Nuts in Product Quality A"
64.	TS 1026-62 / December 1995	Fasteners - Hexagon Thin Slotted Nuts Section: 62 - With Metric Coarse and Fine Pitch Thread - Product Grade A (Old Type)	This standard covers metric coarse and fine pitch thread hexagon thin slotted nuts.
65.	TS 1026-77 / December 2017	Fasteners - Hexagon nuts - Section: 77 - Metric coarse and fine pitch thread - Prevailing torque type hexagon domed cap nuts with non metallic insert - Product grades A and B	This standard covers the definition, classification and properties, sampling, inspection and testing and placing on the market of hexagon domed cap nuts with metric coarse and fine pitch, non-metallic safety element, nominal thread diameter of M4 to M20. The product quality of nuts with a nominal thread diameter of up to 16 mm is A, and the product quality of nuts with a nominal thread diameter of 20 mm is B.

			NOTE - In the text of this standard, only the term “nut” is used instead of the expression“, metric screw, normal and fine pitch, cap with non-metallic safety element, hexagonal nut in product quality A and B”.
66.	TS 1026-78 EN 1663 / February 2005	Prevailing torque type hexagon nuts with flange (with non-metallic insert)	This standard covers the features of hexagonal nuts of which hexagonal flanges of qualities 8 and 10 with non-metallic safety elements of nominal size M5 to M20 (inclusive) and normal pitch for product class A up to M16 and product class B for over M16.
67.	TS 1026-90 / May 2017	Fasteners - Shouldered hexagon nuts - Section: 90 Metric fine pitch thread - Metric rounded acme thread - Product grade B	This standard covers shouldered hexagon nuts with metric fine pitch thread and metric rounded acme thread in product quality B.
68.	TS 1026-91 / December 2017	Fasteners - Hexagon nuts - Section 91: Weld nuts with metric coarse and fine pitch threads - Product grade A	<p>This standard covers the definition, classification and properties, sampling, inspection and experiments and the way of placing on the market of hexagon nuts with product quality A, used by welding with metric normal pitch in nominal sizes from M3 to M16 and with metric fine pitch screw thread in nominal sizes from M8 to M16.</p> <p>Nuts used by welding specified in this standard are suitable for connection with bolts whose strength class is less than 8.8 according to TS EN ISO 898-1.</p> <p>This standard does not cover flanged hexagon nuts used by welding to the part specified in TS EN ISO 21670.</p> <p>NOTE - In this standard text, only the word "nut" is used instead of the expression "hexagonal nut with product quality A, metric normal and fine pitch, used by welding".</p>
69.	TS 1026-92 / April 2017	Fasteners - Shouldered hexagon nuts - Section: 92 Collar nuts metric coarse thread with a height of 1.5 d - Product grade A	<p>This standard covers hexagon nuts with A product quality, strength class 8 or 10, metric screw, normal pitch, shank, thickness 1.5 d.</p> <p>Nuts conforming to this standard are used without washers, where they need to be disassembled and reassembled frequently.</p>

			In this standard, only the term “Nuts” is used instead of the expression “Hexagonal nuts with A product quality, strength class 8 or 10, metric screw, normal pitch, shank, thickness 1.5 d”.
70.	TS 1026-100 / April 2017	Fasteners - Hexagon Nuts - Section: 100 - Cap nuts with metric coarse and fine thread - Product grade A.	This standard covers standard and fine pitch, metric, cambered hexagon nuts in product grade A with a nominal diameter of 4 mm to 72 mm. NOTE - In the text of this standard, the only term "Nuts" is used instead of the term "Hexagonal Camber Nuts with product grade A, Metric, Thin and Normal Pitch”.
71.	TS 1026-101 / May 2017	Fasteners - Hexagon Nuts - Section: 101- Dommed cap nuts with metric coarse and fine pitch thread - Product grades A and B	This standard covers metric coarse and fine pitch thread hexagon dommed cup nuts assigned to product grades A and B. NOTE - In the text of this standard, the term "Nuts" is used instead of the term "Hexagonal Cap Nuts with A and B Product Quality, Metric, Thin and Normal Pitch, Hexagonal Cap Nuts”.
72.	TS 1027 / April 2015	Knurled Thumb Screws With Metric Thread	This standard covers the description, classification and properties, sampling, inspection and tests and the way of placing on the market of knurled, metric screw bolts.
73.	TS 1029 / March 2017	Fasteners – Weld studs with metric threads	This standard covers the definition, classification and properties, sampling, inspection and tests and the way of placing on the market of metric screw studs welded on parts. This standard covers metric threaded studs for welding on parts.
74.	TS 1030 / January 2018	Plugs with metric fine thread	This standard covers the dimensions and technical delivery conditions of plugs with metric fine thread for closing threaded holes.

75.	TS 1031 / April 2017	Screw and washers assemblies - Assemblies with coarse threaded screws and captive conical spring washer	<p>This standard covers the description,-classification and its features, sampling, inspection and tests, and the way of placing on the market of screw and washer assemblies containing bolts/screws of strength class 8.8 to 10.9 (including 10.9), with M2.5 to M12 normal thread and flat seating, and a non-dropping (fixed) conical, spring washer.</p> <p>Spring washers (given within the scope of TS 79-5) are intended to eliminate the loosening effect in bolted connections as a result of the assembly process. They cannot effectively prevent loosening of the joint under varying radial load and are therefore generally designed for use with short screws subjected to axial stress.</p> <p>Phillips screwdriver slotted screws are not suitable for head screws, screw and washer assemblies whose critical cross section is not in the threaded part of the body but in the head. For limitations on the use of these screws, the relevant product standards should be consulted.</p> <p>NOTE 1 - Standardized bolt/screw and washer combinations and related symbols are given in TS EN ISO 10644.</p>
76.	TS 1032 / March 2017	Wing screws with metric thread	<p>This standard covers the description, classification and properties, sampling, inspection and tests and forms of placing on the market of screws with product grade C, M4 to M24 rounded butterfly head and M4 to M12 square butterfly head, metric thread, made of malleable cast iron, steel, austenitic steel or copper-zinc alloy.</p>
77.	TS 1033 / May 2017	Special foundation bolts and nuts, metric	<p>This standard covers the definition, classification and properties, sampling, inspection and testing and supply to the market of bolts (special base bolts) and nuts (special base bolts) for M24 to M100 × 6 size anchoring.</p>
78.	TS 1034 / April 2015	Bolts with metric thread - For masonry and foundation	<p>This standard covers the definition, classification and properties sampling, inspection, tests and the way of placing on the market of bolts with metric thread for stone and concrete.</p>

79.	TS 1035 / December 2017	Spring centre bolts with metric threads - For laminated springs	<p>This standard covers the definition, classification and properties, sampling, inspection and tests and the way of placing on the market of metric spring centre bolts used in the centering fixation of leaf springs in road vehicles.</p> <p>This standard covers metric screw bolts used for centering fixation of leaf springs in road vehicles.</p>
80.	TS 1036 / May 2017	Eye bolts, metric	<p>This standard covers the definition, classification and properties sampling, inspection and tests and the way of placing on the market of M5 to M39 metric threaded hole head bolts in A, B and C product quality,</p>
81.	TS 1037 / April 1972	Spikes	<p>This standard covers the tirphones shown in Leaflets 1-7, which are generally used for fastening rails to wooden or concrete sleepers.</p> <p>It does not cover other types of screwed and variously shaped fasteners.</p>
82.	TS 1143 / January 2018	Internal combustion engines – Piston rings made of cast iron	<p>This standard covers one-piece unsprung oil rings and compression rings and made of cast iron with nominal diameters from 30 mm to 200 mm (inclusive) used in internal combustion engine pistons.</p> <p>This standard does not cover other segments other than those mentioned above.</p>
83.	TS 1380 / January 2017	Galvanized (Zinc Coated) Tie Wires (For Overhead Lines)	<p>This standard covers the description, classification and properties, dimensions and tolerances, sampling, inspection and tests and the way of placing on the market of galvanized (zinc coated) steel tie wires used to connect telegraph, telephone and signal overhead lines to insulators.</p> <p>This standard, does not cover galvanized steel wires used for other purposes.</p>
84.	TS 1441-1 / April 2015	Springs - Quality requirements - Cylindrical helical compression springs - Part 1: Made from round wire and rods, hot formed	<p>This standard covers the description, classification and properties, sampling, inspection and tests, and the way of placing on the market of hot rolled cylindrical-helical compression springs made of circular cross-section bar.</p> <p>The permissible deviations specified in this standard apply to helical compression springs which satisfy the following conditions:</p> <ul style="list-style-type: none"> – lot size up to 5000 pieces

			<ul style="list-style-type: none"> - rod or wire diameter d 8 to 60 mm - external coil diameter D_e smaller or equal to 460 mm - length of unloaded spring L_0 smaller or equal to 800 mm - number of active turns n greater or equal to 3 - coiling ratio w 3 to 12 <p>In case the lot size is 5000 pieces or more, TS 1441-2 is applied.</p>
85.	TS 1441-2 / April 2015	Cylindrical coil compression springs made from round rods - Part 2 : Quality requirements for mass production	<p>This standard covers the description and tests of cylindrical helical compression springs, produced in series from round bar.</p> <p>Springs covered by this standard are mainly used in vehicle suspensions.</p> <p>NOTE - Vehicle suspension springs are generally mass-produced on a large scale and on automated production lines. Therefore, manufacturing tolerances are narrower than TS 1441-1.</p> <p>The permissible deviations quoted are valid for cylindrical coil compression springs which satisfy the following conditions:</p> <ul style="list-style-type: none"> - Large-scale production, minimum lot size 5000 pieces - rod length l up to 4300 mm - rod diameter d 9 to 18 mm - length of unloaded (free length) spring L_0 up to 600 mm - external coil diameter D_e up to 180 mm - number of active turns n from 5 to 12 - spring index w 6 to 12 - Total spring deflection s_c 180 mm and more. <p>In cases where the lot size is 5000 pieces or more, TS 1441-2 is applied.</p>
86.	TS 1442 / November 1973	Helical Tension Springs Made of Round Wire Cold Coiled	This standard covers helical tension springs made of round wire cold coiled.
87.	TS 1459 / January 1974	Glass Insulators For Overhead Power Lines With Nominal	This standard applies to glass insulators for overhead power lines with a nominal voltages up to 1000 volts (1000 volts included).

		Voltages Up To 1000 Volts (1000 Volts Included)	It does not cover insulators used in telegraph and telephone lines and insulators used at voltages higher than 1000 V.
88.	TS 1846 / February 1975	Hoses For Liquefied Petroleum Gases and City Gas	<p>This standard specifies requirements for hoses made of rubber or plastics for city gas, and for liquefied petroleum gases up to a maximum pressure of 500 mm of water column.</p> <p>It does not include compressed oxygen, acetylene, liquefied petroleum gases and other gas hoses with operating pressure exceeding 500 mm SS, reinforced with cotton, synthetic or equivalent strength yarn, woven cloth or braid layer, or reinforced with steel or other metal wire and made in different ways with different materials.</p>
89.	TS 1847 / February 1975	Connecting Wires (For Use In Television Receivers) (For a Rated Voltage of 20 kV and 25 kV D.C. and A Maximum Working Temperature of 105 Degree	<p>This standard covers single core high voltage connection cables with thermoplastic insulation, resistant to direct voltage of 20 kV and 25 kV and an operating temperature of up to 105°C, especially used in television receivers, it does not cover other connection cables.</p> <p>This standard is also applied when the connecting cable is used in devices other than television receivers as specified in clause 0.2.2.</p>
90.	TS 1879 / April 2014	Valves - for Tyres	<p>This standard covers the description, classification and properties, inspection and tests, the way of placing on the market and the inspection principles of the valves in tire tires of wheeled vehicles.</p> <p>This standard specifications Article 4.2 cited herein above and as shown in ISO 9413, for the inflation of tire valve covers made of metal and rubber. It does not cover valves used in aircraft tires.</p>
91.	TS 1889 / November 2020	Shotgun cartridges - Hunting, sound and competition cartridges (Used for civil purposes)	This standard covers the description, classification and characteristics, sampling, inspection and tests and the way of placing on the market of hunting and competition cartridges used in hunting and competition rifles manufactured according to TS 870.
92.	TS 1996 / April 1975	Tubular Heat Exchangers for Heating Purposes	This standard contains tubular heat exchangers for heating purposes max nominal pressure 40 bar and max operational temperature 25°C.
93.	TS 2145 / April 2002	Centre drills for centre holes	This standard covers centre drills for drilling centre holes.

94.	TS 2264 / March 1976	Piston Rings for Machines	This standard covers piston rings having nominal diameters between 18-1000 mm for machines. It does not cover the upper dimensioned segments and the segments in TS 1143.
95.	TS 2337-1 EN ISO 2338 / January 2001	Parallel pins of unhardened steel and austenitic stainless steel	This standard specifies the characteristics of parallel pins of unhardened steel and austenitic stainless steel with nominal diameters d from 0.6 mm to 50 mm inclusive
96.	TS 2337-2 EN ISO 8733 / January 2001	Parallel pins with internal thread of unhardened steel or austenitic stainless steel	This standard specifies the characteristics of parallel pins with internal thread of unhardened steel and austenitic stainless steel with nominal diameters from 6 mm to 50 mm inclusive.
97.	TS 2337-3 EN ISO 8734 / January 2001	Parallel pins of hardened steel or martensitic stainless steel (dowel pins)	This standard specifies the characteristics of cylindrical pins (retaining pins) of a nominal diameter of $1 \leq d_1 \leq 20$ mm, made of steel or martensitic stainless steel, surface or wholly hardened.
98.	TS 2337-4 EN ISO 8735 / January 2001	Parallel pins with internal thread of hardened steel or martensitic stainless steel	This standard specifies the requirements for cylindrical pins with a nominal diameter of $6 \leq d_1 \leq 50$ mm, partially threaded internally, wholly or surface-hardened, made of steel or martensitic stainless steel.
99.	TS 2337-5 EN 22339 / January 2001	Taper pins unhardened	This Standard specifies the requirements for unhardened tapered pins with a nominal diameter of $0.6 \leq d_1 \leq 50$ mm in metric dimensions.
100.	TS 2337-6 EN 28736 / January 2001	Taper pins with internal thread unhardened	This Standard specifies the requirements for partially threaded, unhardened, taper pins internally with metric dimensions and nominal diameters $6 \leq d_1 \leq 50$ mm.
101.	TS 2337-7 EN 28737 / January 2001	Taper pins with external thread unhardened	Bu standard, metrik boyutları ve anma çapları $5 \leq d_1 \leq 50$ mm olan dıştan kısmî diş açılmış, sertleştirilmemiş, konik pimlerin özelliklerini kapsar.
102.	TS 2337-8 / January 2019	Pins – Part 8: Taper pins with metric threaded ends and constant taper lengths	This standard covers the dimensions and technical delivery conditions of taper pins with a nominal diameter of $5 \text{ mm} \leq d_1 \leq 50 \text{ mm}$, non-hardened, with metric threads to the end and constant taper length.
103.	TS 2337-9 EN ISO 8739 / January 2001	Grooved pins - Full - Length parallel grooved with pilot	This standard specifies the characteristics of pins with a nominal diameter of $1.5 \text{ mm} \leq d_1 \leq 25 \text{ mm}$, made of steel or austenitic stainless steel, with three

			<p>equally spaced longitudinal threads on the outer surface, tapered to facilitate fitting, and threaded along the length.</p> <p>The diameter d_2, which is formed by the displaced material during the opening of the grooves and is larger than the nominal diameter d_1, provides temporary locking when it is forced into the drilled hole equal to the nominal diameter d_1.</p>
104.	TS 2337-10 EN ISO 8740 / January 2001	Grooved pins - Full-Length parallel grooved with chamfer	<p>This standard specifies the characteristics of pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally spaced longitudinal threads on the outer surface, chamfered at the end to facilitate fitting, and threaded along the length.</p> <p>Diameter d_2, formed by the displaced material on each side of the threads and larger than the nominal diameter d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
105.	TS 2337-11 EN ISO 8741 / January 2001	Grooved pins - Half-Length reserve - Taper grooved	<p>This standard specifies the characteristics of pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally spaced longitudinal grooves on the outer surface, reverse-tapered up to half the length.</p> <p>Diameter d_2, formed by the displaced material on each side of the threads and larger than the nominal diameter d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
106.	TS 2337-12 EN ISO 8742 / January 2001	Grooved pins - One-Third-Length centre grooved	<p>This standard specifies the requirements for pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally spaced longitudinal grooves on the outer surface, and threaded in the middle one third of their length.</p> <p>Diameter d_2, formed by displaced material on each side of the splines and having a nominal diameter greater than d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
107.	TS 2337-13 EN ISO 8743 / January 2001	Grooved pins - Half-Length centre grooved	<p>This standard specifies the requirements for pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally</p>

			<p>spaced longitudinal grooves on the outer surface, and half-length grooved pins in the middle.</p> <p>Diameter d_2, formed by displaced material on each side of the splines and having a nominal diameter greater than d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
108.	TS 2337-14 EN ISO 8744 / January 2001	Grooved pins - Full-Length taper grooved	<p>This Standard specifies the requirements for pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally spaced longitudinal grooves on the outer surface, and half-length grooved pins in the middle.</p> <p>Diameter d_2, formed by displaced material on each side of the splines and having a nominal diameter greater than d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
109.	TS 2337-15 EN ISO 8745 / January 2001	Grooved pins - Half-Length taper grooved	<p>This standard specifies the requirements for pins with a nominal diameter of $1.5 \leq d_1 \leq 25$ mm, made of steel or austenitic stainless steel, with three equally spaced longitudinal grooves on the outer surface, tapered halfway to the length.</p> <p>Diameter d_2, formed by displaced material on each side of the splines and having a nominal diameter greater than d_1, provides temporary locking when forced into the hole drilled equal to the nominal diameter d_1.</p>
110.	TS 2337-16 EN ISO 8746 / January 2001	Grooved pins with round head	<p>This standard specifies the characteristics of round-head threaded pins with a nominal diameter of $1.4 \leq d_1 \leq 20$ mm and three equally spaced longitudinal threads on the outer surface.</p> <p>Diameter d_2, formed by displaced material on each side of the threads and having a nominal diameter greater than nominal diameter d_1, provides temporary locking when forced into the hole drilled with a nominal diameter equal to d_1.</p>

111.	TS 2337-17 EN ISO 8747 / January 2001	Grooved pins with countersunk head	<p>This standard specifies the characteristics of round-head threaded pins with a nominal diameter of $1.4 \leq d_1 \leq 20$ mm and three equally spaced longitudinal threads on the outer surface.</p> <p>Diameter d_2, formed by displaced material on each side of the threads and having a nominal diameter greater than nominal diameter d_1, provides temporary locking when forced into the hole drilled with a nominal diameter equal to d_1.</p>
112.	TS 2337-18 / January 2019	Pins - Part 18: Grooved pins - Half-Length grooved with gorge	<p>This standard specifies the dimensions and technical order specifications of cambered pins with a nominal diameter of $1.5 \text{ mm} \leq d_1 \leq 25$ mm, three equal intervals on the outer surface, longitudinally chamfered to half the length. These pins are tightly threaded into the locating hole with tolerance of H11, securing retaining rings, retaining washers, springs, etc. It is designed to hold the hitch.</p> <p>Pins covered by this standard; They are divided into splined pins (Type A) for holding retaining rings, splined pins (Type B) for retaining washers, and rounded splined pins (Type C).</p> <p>NOTE - Tolerance class H11 is recommended for the holes the pin goes into (pins conforming to TS EN ISO 8750).</p>
113.	TS 2638 / April 1989	Radio Frequency Cables (RF Cables)	<p>This standard covers coaxial and twin conductor (flat) cables used in radio frequencies.</p> <p>Cables used outside of radio frequencies are not covered by this standard. (For example, power cords, telephone cords).</p>
114.	TS 2792 / January 2003	Textiles - Cotton corduroy fabric - For apparel use	<p>This standard covers the cotton corduroy fabric for apparel use, which is described in Article 0.2.1.</p>
115.	TS 2793 / April 2017	Textiles - Woolen woven fabrics - For use in outerwear - Specifications	<p>This standard covers the description, properties, sampling, inspection and tests and the way of placing on the market of woolen woven fabrics used in outerwear.</p> <p>This standard does not cover fabrics used in clothing accessories and for decoration.</p>

116.	TS 2816 / January 1989	Low Frequency Cables and Wires With PVC Insulation and PVC Sheat Distrubition Wires With Solid Conductors, PVC Insulated in Pairs, Triples, Quads and Quintuples	This standard applies to PVC insulated in pairs triples, quadruples and quintuples low frequency cables and wires with solid conductors inside buildings and in distribution cabinets for connecting terminals on equipment frames or apparatus to one another or to distribution frames, interconnection between subscriber's lines of telegraph or telephone, and for temporary installations.
117.	TS 3034 / February 2014	Road vehicles - Suspension systems - Shock absorbers	This standard covers the description, classification and characteristics sampling, inspection and tests and the way of placing on the market of telescopic and strut shock absorbers used at suspension systems of road vehicles. This standard does not cover steering, trunk, hood and pedal shock absorbers that are not included in the suspension system of road vehicles.
118.	TS 3364 / April 1979	Non-Aging Steels	This standard covers the steels which are not aged and outside the steel casting.
119.	TS 3582 / April 2006	Engine coolant	This standard covers the antifreeze used in the cooling systems of construction machine engines, other motor vehicle engines and some laboratory equipment.
120.	TS 3778 EN 1783 / April 2003	Matches - Performance requirements, safety and classification	<p>This standard specifies requirements for the safety performance classification and marking of matches together with their match containers, available to the general public free of charge or in return for payment.</p> <p>This standard also covers the following:</p> <ul style="list-style-type: none"> - Necessary tests to determine conformity to the required specifications, - Sampling to select individual matchsticks and their containers for testing, - Acceptable quality level for matchsticks and their containers in a sample.
121.	TS 3794 / September 2021	Assembly tools for screws and nuts - Requirements for box (ring) and combination wrenches	This standard covers box ring, flare nut and combination wrenches, having their dimensions of width across flats which are specified in Clause 4.3 and in relevant standards, and used for tightening and dismantling of bolts and nuts.

			<p>This standard applies the box rings and combination wrenches manufactured from steel materials specified in Clause 4.2.1. General purpose non-sparking wrenches used in explosive atmospheres are within the scope of TSE K 594.</p> <p>NOTE - Those wrenches specified in this standard are listed in TS ISO 1703:2021 under the reference numbers of 1 1 01 05 0, 1 1 01 06 0, 1 1 02 01 0, 1 1 02 03 0, 1 1 02 04 0, 1 1 02 05 0, 1 1 02 06 0, 1 1 02 07 0 and 1 1 02 08 0.</p>
122.	TS 3796 / February 2007	Wrenches for pipes	This standard covers wrenches which are used in the assembly and disassembly of pipes in nominal sizes given in their leaflets.
123.	TS 3797 / February 2007	Assembly tools for screws and nuts - Socket wrenches - Male	This standard covers the male sockets wrenches for tightening and dismantling bolts and nuts and includes dimensions of width across flats given in the sheets of this standard.
124.	TS 3798 / January 2018	Hook wrenches - Metric	<p>This standard covers the definition, classification and properties, sampling, inspection and tests and the way placed on the market of metric hook wrenches used for fitting and similar parts.</p> <p>This standard covers metric wrenches used for tightening or dismantling of fitting and similar parts.</p>
125.	TS 3876 / December 1982	Cotton holder	This standard covers the cotton holder. It does not cover the cotton holder for laryngeal examination and/or operation.
126.	TS 3947 / March 1983	Towel clamp - Medical use	This standard covers the towel clamps for medical use.
127.	TS 4035 / September 1983	Eustachian Catheter	This standard covers the eustachian catheter.
128.	TS 4341 / November 1984	High voltage connecting wire with flame retarding insulation for use in television receivers	This standard applies to high voltage wire insulated with thermoplastic material with a rated voltage up to and including 20 Kv D.C. and a maximum working temperature of 85°C

129.	TS 4507 ISO 1772 / December 1997	Laboratory crucibles in porcelain and silica	<p>This standard specifies requirements for an internationally acceptable series of porcelain and silica crucibles and lids for general laboratory requirements.</p> <p>NOTES</p> <p>1- It is recognized that some sizes of crucible larger than those listed may be needed for use in laboratories for special purposes. It is recommended that such larger sizes should be designed within the general framework of this standard, i.e. by selecting a suitable multiple of 10 mm as the nominal external top diameter, and applying one of the three Standard ratios in Order to obtain the nominal height.</p> <p>2- This standard does not deal with laboratory crucibles made of materials other than porcelain and silica (for example, glass and other ceramic materials) Nevertheless, it is expected that the types, sizes and dimensions specified herein may provide useful guidance for those concerned with the manufacture or standardization of crucibles made of such other materials, and that it may become possible to include them in this standard at some future date.</p>
130.	TS 4522 / April 1985	Rubber gaskets - For domestic pressure cookers	This standard covers rubber gasgets for domestic pressure cookers. This standard does not apply to other gasgets.
131.	TS 4544 / Ocober 1991	School notebooks	<p>This standard covers the school notebooks.</p> <p>It doesn't cover music notebooks and drawing books.</p>
132.	TS 4696 / February 1986	Cold rolled steel strips for springs	<p>This standard covers cold rolled steel strips for springs.</p> <p>This standard does not cover hot rolled steel strips which can be tempered, spring wires drawn from non-alloy steels by applying patent annealing, spring wires and valve spring wires manufactured from non-alloy steels, spring wires and spring strips made of stainless steels, and heat-resistant steel strips for springs.</p>
133.	TS 4766 / March 1986	Porcelain mortar and pestle	This standard is about the porcelain mortar and the pestle for it.

134.	TS 4812 EN 13046 / December 2002	Packaging - Flexible cylindrical metallic tubes - Dimensions and tolerances	This standard, specifies the diameter, length, wall thickness and shoulder geometry of cylindrical metallic collapsible tubes. This standard is applicable to tubes used for packaging pharmaceutical, cosmetic, hygienic, food and other domestic and industrial products.
135.	TS 4850 / May 1986	Wires and strips, for electrical heating purpose	This standard covers wires and strips made of nickel-chromium, nickel-chromium-iron and iron-chromium-aluminium alloy by drawing for electrical heating purpose.
136.	TS 5101 / March 1987	Electrical heating elements metal tube sheathed	This standard applies to metal tube sheathed electrical heating elements used in all over the electrical appliances for heating purposes, with voltages up to 250 V. This standard does not cover portable immersion electric heaters, aquarium heaters and aluminum sheathed heating elements.
137.	TS 5104 / April 2001	Flush mounting boxes for switches for household and similar fixed electrical installations - Standard sheets	This standard covers flush mounting boxes for switches for household and similar fixed electrical installations standard sheets.
138.	TS 5130 / April 2017	Double wall copper - Brazed steel tubes	This standard covers the description, classification and properties, sampling, inspection and testing and the way of placing on the market of double wall copper brazed steel tubes.
139.	TS 5374 EN 60454-3-1 / March 2002	Pressure-sensitive adhesive tapes for electrical purposes - Part 3: Specifications for individual materials - Sheet 1: PVC film tapes with pressure-sensitive adhesive	This standard specifies the requirements for insulating strips made of pressure sensitive and adhesive PVC film. Materials conforming to this standard meet the requirements for established performance levels. However, material selection by a user for a particular application should not be based solely on this standard, but rather the actual conditions required for adequate performance in that application.
140.	TS 5600 / March 1988	Playing cards	This standard covers playing cards made of lacquered or plastic coated cardboard and plastic.
141.	TS 5814 / April 1988	Lamp Chimney	This standard covers lamp chimnies used for lanterns in which LPG and similar fuels are consumed as fuels.

142.	TS 5914 / August 1988	Polyvinyl chloride films for agriculture	This standard covers the specifications of polyvinyl chloride films used in agriculture.
143.	TS 6053 / February 2007	Antennas - Used for the reception of television broadcast in the frequency range 30 MHz-1000 MHz - For outdoor applications – Not having integrated amplifier	This standard applies to outdoor antennas, not having integrated amplifier, which are used in frequency range 30 MHz - 1000 MHz and also related their description, classification and testing. Active (with amplifier in its structure) antennas are not included in the scope of this standard.
144.	TS 6054 / October 1988	Antenna amplifiers for the reception of coice and television broadcast in the frequency range 30 MHz - 1000 MHz	This standard covers outdoor antennas used in the reception of television broadcasts in the frequency range 30 MHz-1000 MHz. Active (with amplifier in its structure) antennas are not included in the scope of this standard.
145.	TS 6055 / October 1988	Antennas - Used for the reception of television broadcast in the frequency range 30 MHz-1000 MHz - For outdoor applications – Not having integrated amplifier	This standard applies to outdoor antennas, not having integrated amplifier, which are used in frequency range 30 MHz - 1000 MHz and also related their description, classification and testing. Active (with amplifier in its structure) antennas are not included in the scope of this standard.
146.	TS 6056 / February 2007	Antennas - Used for the Portable Radio and Television Receivers- Adjustable (telescopic)	This standard applies to telescopic antennas which are used for the portable radio and television receivers and also related their description, classification and testing.
147.	TS 6057 / February 2007	Antennas - Used for car radios - Not having integrated amplifier	This standard applies to radio antennas used in cars and the other vehicles, not having integrated amplifier, and also related their description, classification and testing. It does not cover the detachable whip part of the whip antenna, replaceable parts of motorized portable antennas and active audio radio receiver antennas.
148.	TS 6114 / November 1988	Flexible hoses end fittings and sockets for gas burning appliances	This standard specifies flexible hoses end fittings and sockets for connection of the domestic appliances burning first and second class gases up to 20 mbar working pressure.

149.	TS 6269 / April 2015	Rolling bearings - Single row, radial deep groove ball bearings	<p>This standard covers one row of ball, radial roller bearings with a bore diameter of 2.5 mm to (inclusive) 250 mm.</p> <p>One row ball, angular contact, four point contact, shoulder, retaining ring, outer ring cambered bearings, thin section bearings, unidirectional rolling bearings, inner ring or outer ring two-piece bearings, phosphate or cadmium plated bearings, outer ring Cracked close-grain bearings, grooved bearings, non-cage bearings, flanged bearings, bearings with inner or outer ring or both rings made of plastic or polyamide material, Bearings whose inner ring or outer ring or both rings are molded from sheet metal (e.g., clutch bearings, etc.), excludes stainless steel bearings and radial rolling bearings with balls of ceramic material, one or both rings of ceramic material or coated with ceramic material.</p> <p>In addition, it does not cover forklift bearings with very large radii on one corner of their outer rings, with different radii and roughness values compared to the standard, thrust bearings with non-standard dimensions (for example, clutch bearings, etc.), manufactured for different purposes, and whose outer surface or working surfaces are not grinded.</p> <p>This standard covers the definition, classification and properties sampling, inspection and tests and the way of placing on the market of single row, radial deep groove ball bearings.</p>
150.	TS 6355 / January 1990	Natural gas meter connections - One pipe connection	This standard covers one pipe connections for bellows type natural gas meters.
151.	TS 7374 / March 2018	Lead-Acid batteries (used for military purposes) - Maintenance free, sealed lead-acid batteries - General requirements and methods of test	This standard covers sealed rechargeable lead acid accumulators which rated voltage and capacities are given in Annex A and do not require maintenance, with gel electrolyte type, used for military purposes.
152.	TS 8542 / November 1990	Magnesite-For Refractory Uses	This standard covers magnesite, one of the basic raw materials used in the production of various refractory materials.

			It does not cover magnesite used in other areas and magnesite produced from sea water.
153.	TS 9809 / December 2015	Valves - Cast iron ball valves for combustible gases	<p>This standard, covers the ball valves made of cast iron with nominal diameters from DN 65 to DN 300 used in combustible gas pipelines such as LPG and natural gas.</p> <p>This standard does not cover steel and copper alloy ball valves.</p> <p>It does not cover the type, materials and dimensions of the fasteners to be used according to the working conditions depending on the operating pressure classes and temperature, thermal fluctuations, etc.</p>
154.	TS 9876 EN 303-4 / March 2001	Heating Boilers - Part 4: Heating Boilers With Forced Draught Burners-Special Requirements For Boilers With Forced Draught Oil Burners With Outputs Up to 70 kW and a Maximum Operating Pressure of 3 Bar - Terminology Special Requirements Testing and Marking	<p>This standard is applicable to heating boilers with forced draught oil burners up to a nominal heat output of 70 kW.</p> <p>They are operated, either with negative pressure (natural draught boiler) or with positive pressure (pressurised boiler) in the combustion chamber, in accordance with the boiler manufacturer's instructions.</p> <p>This standard specifies the necessary terminology, the requirements on the materials and testing of them, and marking requirements for heating boilers.</p> <p>The boilers are suitable for open vented systems up to a maximum allowable pressure of 1 bar (class 1 pressure) and open and closed water systems up to a maximum allowable pressure of 3 bar (class 2 pressure).</p> <p>The boilers are capable of operating with either conventional flues or low level discharge flues as specified by the boiler manufacturer.</p> <p>The boilers are provided as matched units with factory fitted burners for burning kerosene or gas oil. When using a low level flue gas discharge only kerosene may be used (see annex B).</p> <p>The requirements of this standard apply to heating boilers which are tested on an authorised test rig in accordance with EN 304 and annex B of this standard.</p>

			<p>Boilers in accordance with this standard are designed for the heating of central heating installations in which the heat carrier is water, and the temperature of which is restricted to 95 °C at normal operating conditions. For boilers with a built-in or attached water heater (storage or continuous flow heater) this standard only applies to the parts of the water heater which are necessarily subject to the operating conditions of the heating boiler (heating part).</p> <p>This standard does not apply to gas boilers with atmospheric burners, boilers for solid fuels, oil or gas fired condensation boilers, boilers with oil vaporisation burners and low temperature boilers. For these boilers there are further requirements.</p> <p>NOTE - Low temperature boilers are those operating with a (water) variable temperature up to 40 °C or less, or those which cannot be set at a temperature higher than 55 °C.</p>
155.	TS 10624 / May 2009	Gas Pressure Regulators For Combustible Gases (Natural Gas, City Gas LPG Gas) Supply Pressure Up To 0.4 MPa	<p>This standard covers gas pressure regulators for combustible gases set to fixed outlet pressure used in combustible gases (natural gas and city gas) installations inside a building or land, within supply pressure range 0.02 MPa – 0.4 MPa (0.2 bar – 4 bar), nominal diameter up to including DN 50 mm without auxiliary adjustment energy.</p> <p>Regulators for butane, propane or their mix are under the cover of TS EN 13785.</p> <p>This standard does not cover low pressure regulators and safety valves within the scope of TS 1862-4 EN 12864 and TS EN 13953:2008 and industrial type regulators with inlet pressure up to 10 MPa (100 bar).</p>
156.	TS 10670 / January 1993	Flexible corrugated stainless steel tubes for gas burning appliances (up to 1.6 MPa)	This standard covers flexible, corrugated stainless steel tubes used for connecting of gas burning appliances with an operating pressure up to 1.6 MPa to the installation.
157.	TS 11187 / January 1994	Road vehicles - Bicycles - Tyres and rims - Tyres	This standard specifies requirements for bicycle tyres.

			This standard does not cover tubular tires of racing bicycles.
158.	TS 11188 / January 1994	Road vehicles - Bicycles - Tyres and rims - Inner tubes	This standard specifies requirements for bicycle inner tubes. This standard does not cover specially manufactured inner tubes for tubular tires of racing bicycles.
159.	TS 11189 / January 1994	Road vehicles - motorbicycles, scooters and mopeds - tyres and rims inner tubes	This standard specifies requirements for inner tubes of motorbicycles, scooters and mopeds.
160.	TS 11394+T3 / May 2009	Safety gas hose with connector and connection armatures for use in gas burning appliances (Up to 10 kPa)	This standard covers non-metal safety gas hoses and gas connection armatures with connection plugs used for the connection of gas-burning devices with operating pressure up to 10 kPa (100 mbar) operating with flammable gases in accordance with TS EN 437 to the installation. Metal hose assemblies are given in TS EN 14800. This standard does not cover hoses conforming to TS 6114 and TS 10670. This standard is applied to the hoses and connection armatures used in the gas connection of gas-burning devices in commercial, residential, industrial and laboratories. Hoses should not be used where there is no grounding line.
161.	TS 11630 / April 1995	Fuel-oil additives for improving burning quality	This standard covers fuel oil additives that improves burning quality.
162.	TS 11654 / April 1995	0.6/1 kV Cables, Aerial Bundled Cable	This standard covers aerial bundled cables with plastic insulated aluminium phase conductors with a rated voltage of 0.6/1 kV.
163.	TS 11673 / April 2016	Pans - For food cooking - Used in industry (made of stainless steel)	This standard is covers the description, classification and characteristics, sampling, inspection and tests and the way of placing on the market of industrial type cooking pans made of stainless steel with direct and indirect heating from the electricity, gas or steam which are used in the large kitchens for food cooking or heating food.

			This standard covers industrial type stainless steel pans with the nominal capacity from 100 litres to 600 litres which are used in the large kitchens for food cooking or heating food, with direct and indirect heating from the electricity, gas or steam (maximum pressure up to 50 kPa).
164.	TS 11692 / April 1995	Steam Cooking Pans - With Tilting Mechanism, and Used In Industry (Made of Stainless Steels)	<p>This standard covers nominal cooking volume of at least 30 liters and maximum 600 liters industrial type steam cooking pans with a tilting mechanism, having one or more number of non-pressure cooking volumes, double-walled in a steam jacket, steam powered with a maximum pressure up to 50 kPa used for cooking and/or heating food.</p> <p>This standard does not cover household type pressure cookers with non-pressure cooking volume and pressure cooking volume.</p>
165.	TS 11790 / July 1995	Thermometers - with liquid, made of glass used for heating systems	This standard covers the double-tube thermometers placed in a suitable casing pipe to protect from external mechanical impacts and used to measure the temperature of liquid fluids in heating systems such as boilers, heat exchangers etc.
166.	TS 11846 / October 1995	Textiles - Hand Knitting Yarns	<p>This standard covers hand knitting yarns made of wool, acrylic, viscose, mercerized cotton and synthetic blends containing at least 10% wool and/or mohair or made from a mixture of acrylic and polyamide or polyester.</p> <p>This standard does not cover machine knitting yarns and lace yarns.</p>
167.	TS 11917 / December 1995	Fasteners - Flat Hexagon Nuts For Nipples and Screw Heads For Electrical Tubular Heating Elements, Metal - Sheathed	This standard covers flat hexagon nuts with fine pitch thread for nipples and screw heads of metal-sheathed electrical tubular heating elements.
168.	TS 11918 / October 2013	Fasteners - Hexagon Nuts With Knuckle Thread; For Motive Power Units Turnbuckles and Drawbars	This standard covers hexagon nuts with 7 mm pitch round screw metric knuckle thread, in grade B, strength class 14H used to motive power units turnbuckles and drawbars.

			This standard is covers the definition, classification and properties, sampling, inspection and tests and placing on the market of hexagon nuts with knuckle thread.
169.	TS 11919 / October 2013	Fasteners - Hexagon Nuts - Castle Nut With Knuckle Thread For Motive Power Units Turnbuckles and Drawbars	<p>This standard covers hexagon castle nuts with 7 mm pitch round screw metric knuckle thread, in grade B, strength class 14H used to motive power units turnbuckles and drawbars.</p> <p>This standard covers the definition, classification and properties, sampling, inspection, tests and the way of placed on the market of castle nuts.</p>
170.	TS 12091 / October 1996	Steel Hose Clamps - Worm Drive	This standard specifies steel hose clamps with worm drive used in hose connection systems.
171.	TS 12429 / April 1998	Hexagon set screws with small hexagon and full dog point	This standard specifies dimensions and technical delivery conditions for coarse and fine pitch thread M6 to M56 hexagon set screws with small hexagon and full dog point, assigned to product grade A. These screws are only to be used as forcing screws.
172.	TS 12430 / April 1998	Hexagon set screws with small hexagon half dog point and flat cone point	<p>This standard specifies dimensions and technical delivery conditions for M8 to M52 hexagon fit bolts, assigned to product grade A (for size M10 or Less) or product grade B (for size M12 or greater).</p> <p>Only the dimensions and tolerances of hexagon fit bolts with a diameter larger than M39 are subject to this standard, and other properties must be determined by an agreement.</p>
173.	TS 12431 / April 1998	Hexagon set screws with small hexagon half dog point and flat cone point	This standard specifies dimensions and thechnical delivery conditions for coarse and fine pitch thread M6 to M36 hexagon set screws with small hexagon, half dog point and flat cone point, assigned to product grade A. These screws are mly to be used as forcing screws.
174.	TS 12432 / April 2017	Hexagon fit bolts for steel structures supplied with or without hexagon nuts	<p>This standard, covers the dimensions and technical delivery conditions for M12 to M30 hexagon head bolts of product grade C used for steel structures.</p> <p>This standard also covers nuts and washers to be used with these bolts.</p>

			Hexagon head bolts conforming to this standard are also suitable for use in aluminum constructions and composite constructions.
175.	TS 12433 / April 2017	Bolts with reduced shank	<p>This standard covers the specifications and dimensions of bolts with nominal diameter $M3 \leq d \leq M30$, which tapered shank diameter smaller than the tread diameter, and various head styles. This standard does not cover the specifications for thin-stem bolts (studs) threaded on both sides.</p> <p>Bolts within the scope of this standard are divided into two as Type K (short body) and Type L (long body) according to their intended use. The head shapes of these bolts are given in Table 2. Type K is designed for bolting parts into threaded holes (for example, for attaching a cover to the body); Type L is designed for situations where the bolt must be used with the nut.</p> <p>Bolts, should be designed with a spring-loaded safety ring where loosening must be prevented.</p> <p>Symbols and abbreviations of bolt sizes are given in TS EN ISO ISO 225.</p>
176.	TS 12435 / March 2016	Hexagon head bolts with hexagon nut for steel structures	<p>This standard specifies requirements for M12 to M30 hexagon head bolts for supply with hexagon nut, assigned to product grade C, for use in structural steel bolting. These bolts shall always be used together with A type washers as specified in DIN 7989.</p> <p>In addition, the hexagon head bolts conforming to this standard are also suitable for use in aluminum constructions and composite constructions.</p>
177.	TS 12829 / April 2002	Textiles - Touch and close fasteners - General purpose - Hooked - Polyamid	<p>This standard covers the definition, classification and properties of sampling, inspection, test methods and the way of placed on the market for hooked touch and closed fasteners made of polyamid for general use.</p> <p>This standard does not cover hooked touch and closed fasteners used in vital areas (parachute, life jacket, etc.) and clamping bands used as fasteners (for fastening materials such as pipes, cables) in the open air, underground and in water.</p>

178.	TS 12848 / April 2002	Textiles - Touch and close fasteners - General purpose - Mushroom	<p>This standard covers the definition, classification and properties of sampling, inspection, test methods and the way of placed on the market for mushroom touch and closed fasteners with a mushroom head made of polypropylene and knot part made of polyamid for general use.</p> <p>This standard does not cover hooked touch and closed fasteners used in vital areas (parachute, life jacket, etc.) and clamping bands used as fasteners (for fastening materials such as pipes, cables) in the open air, underground and in water.</p>
179.	TS 13043 / April 2003	Cotton Yarn - Carded - Grey - Single - Open-End	<p>This standard covers the definition, classification and properties sampling, inspection and tests and the way of placing on the market of carded raw, single ply, woven open-end cotton yarns.</p>
180.	TS EN 3-10 / January 2011	Portable fire extinguishers - Part 10: Provisions for evaluating the conformity of a portable fire extinguisher to EN 3 - 7	<p>This document specifies the minimum requirements for attesting the conformity of portable fire extinguishers to EN 3-7, as well as the requirements for the quality and production control of the fire extinguishers. It specifies the documentation to be provided regarding:</p> <ul style="list-style-type: none"> - Identification of the applicant - Identification of the manufacturer, if not the applicant - Identification of subcontractor(s), if applicable - Identification of the extinguisher - Documents provided with the extinguisher - CE marking - Quality Management System - Extinguishing media toxicological information It specifies methods for: - type testing. - factory assessment - controls during production.

			<p>NOTE 1 - A test report and a satisfactory audit supporting documentation may form the basis for a applicant to request a certification of his product from an EA accredited certification body.</p> <p>Additional requirements may be made by national regulations and/or quality marks.</p> <p>NOTE 2 - Where appropriate, component family testing may be applied.</p>
181.	TS EN 298 / July 2012	Automatic burner control systems for burners and appliances burning gaseous or liquid fuels	<p>This standard specifies the safety, construction and performance requirements for automatic burner control systems, programming units and flame detector devices, intended for use with gas and oil burners and gas and oil burning appliances, with or without fans and similar use.</p> <p>This standard is applicable to automatic burner control systems that include additional functions.</p> <p>This standard does not cover automatic burner control systems utilizing thermo-electric flame supervision devices.</p> <p>NOTE 1 - Standards for burners, appliances or processes which use automatic burner control systems, programming units or flame detectors can override the requirements of this standard.</p> <p>NOTE 2 - Provisions for production control are not part of this Standard.</p>
182.	TS EN 303-2 / December 2017	Heating boilers - Part 2: Heating boilers with forced draught burners; Special requirements for boilers with atomizing oil burners	<p>EN 303-1:2017 up to a nominal heat output of 1000 kW and EN 303-4 up to a nominal heat output of 70 kW with forced draught burners in accordance with EN 267 that are designed for operating with liquid fuels.</p> <p>The performance requirements of this standard apply to type testing to heating boilers (standard, low temperature and condensing boilers) which are tested on a test rig in accordance with the test code given in EN 304.</p> <p>This standard applies also to room sealed boilers as defined in EN 15035 regarding efficiency and emissions.</p>

183.	TS EN 589+A1 / March 2022	Automotive fuels - LPG - Requirements and test methods	<p>This document specifies requirements and test methods for marketed and delivered automotive Liquefied petroleum gas (LPG), with LPG defined as low pressure liquefied gas composed of one or more light hydrocarbons which are assigned to UN 1011, 1075, 1965, 1969 or 1978 only and which consists mainly of propane, propene, butane, butane isomers, butenes with traces of other hydrocarbon gases.</p> <p>This standard is applicable to automotive LPG for use in LPG engine vehicles designed to run on automotive LPG.</p> <p>NOTE: For the purposes of this standard, the terms “% (m/m)” and “% (V/V)” are used to represent respectively the mass fraction, μ, and the volume fraction, ϕ.</p> <p>WARNING - Attention is drawn to the risk of fire and explosion when handling LPG and to the hazard to health arising through inhalation of excessive amounts of LPG.</p> <p>LPG is a highly volatile hydrocarbon liquid which is normally stored under pressure. If the pressure is released large volumes of gas will be produced which form flammable mixtures with air over the range of approximately 2 % (V/V) to 10 % (V/V). This standard involves the sampling, handling and testing of LPG. Naked flames, unprotected electrical equipment electrostatic hazards etc. are sources of ignition for LPG.</p> <p>LPG in liquid form can cause cold burns to the skin. The national health and safety regulations apply.</p> <p>LPG is heavier than air and accumulates in cavities. There is a danger of suffocation when inhaling high concentrations of LPG.</p> <p>CAUTION - One of the tests described in this standard involves the operator inhaling a mixture of air and LPG vapour. Particular attention is drawn to the cautionary statement provided in A.1, where this method is referred to.</p>
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184.	TS EN 615 / January 2011	Fire protection - Fire extinguishing media- Specifications for powders (other than class d powders)	<p>This standard is applicable to fire extinguishing powders for fire classes A, B and C. It specifies, by means of defined test methods, minimum requirements for the chemical and physical properties and minimum extinguishing capabilities. Requirements are also specified for the information and data to be given by the supplier.</p> <p>This standard does not cover powders used for fire class D.</p>
185.	TS EN 755-1 / December 2016	Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 1: Technical conditions for inspection and delivery	<p>This standard specifies the technical conditions for inspection and delivery of wrought aluminium and aluminium alloy extruded rod/bar, tube and profile for general engineering applications.</p> <p>This standard does not apply to:</p> <ul style="list-style-type: none"> - forging stock (EN 603 (all parts)), - extruded precision profiles in alloys EN AW-6060 and EN AW-6063 (EN 12020 (all parts)), - products delivered in coils (EN 13957), - coiled tubes cut to length (EN 13957).
186.	TS EN 755-2 / December 2016	Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 2: Mechanical properties	<p>This standard specifies the mechanical property limits resulting from tensile testing applicable to aluminium and aluminium alloy extruded rod/bar, tube and profile.</p> <p>Technical conditions for inspection and delivery, including product and testing requirements, are specified in EN 755-1. Temper designations are defined in EN 515. The chemical composition limits for these materials are given in EN 573-3.</p>
187.	TS EN 853 / October 2015	Rubber hoses and hose assemblies - Wire braid reinforced hydraulic type - Specification	<p>This standard specifies requirements for four types of wire braid reinforced hoses and hose assemblies of nominal bore from 5 to 51. They are suitable for use with:</p> <ul style="list-style-type: none"> - hydraulic fluids in accordance with ISO 6743-4 with the exception of HFD R, HFD S and HFD T at temperatures ranging from -40°C to +100°C;

			<ul style="list-style-type: none"> - water based fluids at temperatures ranging from -40°C to +70 °C; - water at temperatures ranging from 0°C to +70°C. <p>This standard does not include requirements for end fittings. It is limited to the performance of hoses and hose assemblies.</p> <p>NOTE 1 - The hoses are not suitable for use with castor oil based and ester based fluids.</p> <p>NOTE 2 - Hoses and hose assemblies are not be operated outside the limits of this standard.</p> <p>NOTE 3 - Requirements for hydraulic hoses for underground mining are standardized in separate standards.</p>
188.	TS EN 854 / October 2015	Rubber hoses and hose assemblies - Textile reinforced hydraulic type - Specification	<p>This standard specifies requirements for three types of textile reinforced rubber hoses and hose assemblies of nominal bore from 5 to 100. The types are defined in Clause 3. They are suitable for use with:</p> <ul style="list-style-type: none"> - hydraulic fluids in accordance with ISO 6743-4 with the exception of HRD R, HFD S and HFD at temperatures ranging from -40°C to 100°C; - water-based fluids at temperatures ranging from -40°C to +70°C; - water at temperature ranging from 0°C to +70°C. <p>The standard does not include requirements for end fittings. It is limited to the performance of hoses and hose assemblies.</p> <p>NOTE 1 - The hoses are not suitable for use with castor oil based and ester based fluids.</p> <p>NOTE 2 - Hoses and hose assemblies are not be operated outside the limits of this standard.</p> <p>NOTE 3 - Requirements for hydraulic hoses for underground mining are standardized in separate standards.</p>

189.	TS EN 1092-2 / June 2010	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 2: Cast iron flanges	<p>This standard specifies requirements for circular flanges made from ductile, grey and malleable cast iron for DN 10 to DN 4000 and PN 2,5 to PN 63.</p> <p>It also specifies the types of flanges and their facings, dimensions and tolerances, bolt sizes, surface finish of jointing faces, marking, testing, quality assurance and materials together with associated pressure/temperature (p/T) ratings.</p>
190.	TS EN 1555-2 / September 2021	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 2: Pipes	<p>This standard specifies the characteristics of pipes made from polyethylene (PE) for piping systems in the field of the supply of gaseous fuels.</p> <p>It also specifies the test parameters for the test methods referred to in this document.</p> <p>In conjunction with Parts 1 and 3 to 5 of EN 1555, it is applicable to PE pipes, their joints and to joints with components of PE and other materials intended to be used under the following conditions:</p> <ul style="list-style-type: none"> a) for design purposes maximum operating pressure, MOP, up to 10 bar (including 10 bar) at a reference temperature of 20 °C; b) an operating temperature between -20 °C and 40 °C. <p>NOTE 1 - Derating coefficients are defined in EN 1555-5:2021 for operating temperatures between 20 °C and 40 °C.</p> <p>EN 1555 covers a range of maximum operating pressures and gives requirements concerning colours.</p> <p>It covers three types of pipe:</p> <ul style="list-style-type: none"> - PE pipes (outside diameter dn) including any identification stripes; - PE pipes with co-extruded layers on either or both the outside and/or inside of the pipe (total outside diameter dn) as specified in Annex A, where all layers have the same MRS rating. A coextruded pipe made of a combination of PE 100 and PE 100-RC layers shall be regarded as PE 100 and marked accordingly;

			<p>– PE pipes (outside diameter dn) with a peelable, contiguous thermoplastics additional layer on the outside of the pipe (‘coated pipe’) as specified in Annex B.</p> <p>NOTE 2 - It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.</p>
191.	TS EN 1555-3 / September 2021	Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 3: Fittings	<p>This standard specifies the characteristics of fusion fittings made from polyethylene (PE) as well as of mechanical fittings for piping systems in the field of the supply of gaseous fuels.</p> <p>It also specifies the test parameters for the test methods referred to in this document.</p> <p>In conjunction with Parts 1, 2, 4 and 5 of EN 1555, it is applicable to PE fittings, their joints and to joints with components of PE and other materials intended to be used under the following conditions:</p> <p>a) for design purposes maximum operating pressure, MOP, up to 10 bar (including 10 bar) at a reference temperature of 20 °C;</p> <p>b) an operating temperature between -20 °C and 40 °C.</p> <p>NOTE 1 - For operating temperatures between 20 °C and 40 °C, derating coefficients are defined in EN 1555-5:2021. EN 1555 (all parts) covers a range of maximum operating pressures and gives requirements concerning colours.</p> <p>NOTE 2 - It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.</p> <p>This standard is applicable for fittings of the following types:</p>

			<p>a) Electrofusion socket fittings; b) Electrofusion saddle fittings; c) Spigot end fittings (for butt fusion using heated tools and electrofusion socket fusion); d) Mechanical fittings.</p> <p>NOTE 3 - The fittings can be, for example, in the form of couplers, equal and reduced tees, reducers, saddles, elbows or caps.</p>
192.	TS EN 1568-1 / March 2018	Fire extinguishing media - Foam concentrates - Part 1: Specification for medium expansion foam concentrates for surface application to water-immiscible liquids	<p>This standard, specifies requirements for chemical and physical properties, and minimum performance requirements of medium expansion foams suitable for surface application to water-immiscible liquids. Requirements are also given for marking.</p> <p>WARNING - Any type approval according to this standard is invalidated by any change in composition of the approved product.</p> <p>Some concentrates conforming to this part of EN 1568 can also conform to other parts and therefore can also be suitable for application as low and/or high expansion foams.</p>
193.	TS EN 1568-2 / March 2018	Fire extinguishing media - Foam concentrates - Part 2: Specification for high expansion foam concentrates for surface application to water - immiscible liquids	<p>This standard specifies requirements for chemical and physical properties, and minimum performance requirements of high expansion foams suitable for surface application to water-immiscible liquids. Requirements are also given for marking.</p> <p>WARNING - Any type approval according to this standard is invalidated by any change in composition of the approved product.</p> <p>Some concentrates conforming to this part of EN 1568 can also conform to other parts and therefore can also be suitable for application as low and/or medium expansion foams.</p>
194.	TS EN 1568-3 / November 2018	Fire extinguishing media - Foam concentrates - Part 3: Specification for low expansion	<p>This standard specifies requirements for chemical and physical properties, and minimum performance requirements of low expansion foams suitable for</p>

		foam concentrates for surface application to water - immiscible liquids	<p>surface application to water-immiscible liquids. Requirements are also given for marking.</p> <p>WARNING - Any type approval according to this standard is invalidated by any change in composition of the approved product.</p> <p>Some concentrates conforming to this part of EN 1568 can also conform to other parts and therefore can also be suitable for application as medium and/or high expansion foams, and for application at low expansion to water-miscible liquids.</p>
195.	TS EN 1568-4 / March 2018	Fire extinguishing media - Foam concentrates - Part 4: Specification for low expansion foam concentrates for surface application to water - miscible liquids	<p>This standard specifies requirements for chemical and physical properties, and minimum performance requirements of low expansion foams suitable for surface application to water-miscible liquids. Requirements are also specified for marking.</p> <p>IMPORTANT - In this standard, the fire performance is tested using acetone and isopropanol as the fuel, to form the basis for the performance classification. However, there are a large number of water-miscible liquids which have more or less different properties to acetone and isopropanol. It has been shown by tests using other fuels that the performance of various foams can differ considerably. Examples of such fuel is Methyl Ethyl Ketone (MEK). It is therefore essential that the user checks for any unfavourable or unacceptable loss of efficiency when the foam is used against fires in any other water-miscible fuels than acetone and isopropanol respectively. The fire test conditions and procedure given in H.2 can be used in order to achieve results comparative with acetone and isopropanol respectively and related requirements.</p> <p>It is also essential for the user to note that other fuel depths and methods of application than those specified in H.2 can cause considerable loss of efficiency and these matters should be carefully considered by the user when assessing the suitability for particular applications.</p>

			<p>WARNING - Any type approval according to this standard is invalidated by any change in composition of the approved product.</p> <p>NOTE - Some concentrates conforming to this part of the EN 1568 series can also conform to other parts and therefore can also be suitable for application as medium and/or high expansion foams.</p>
196.	TS EN 1664 / January 2007	Prevailing torque type all - Metal hexagon nuts with flange	<p>This standard covers the specifications of prevailing torque type all-metal hexagon nuts with flange following:</p> <ul style="list-style-type: none"> - nominal diameter $M5 \leq d \leq M20$, - product grade A for a nominal diameter of $M5 \leq d \leq M16$ mm, - product grade B for nominal diameter $d > M16$, - strength classes 8, 10 and 12.
197.	TS EN 1759-1 / June 2010	Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, class designated - Part 1: Steel flanges, NPS 1/2 to 24	<p>This standard specifies the requirements for a single system of circular steel flanges in Class designations Class 150 to Class 2 500 and nominal sizes from NPS ½ to NPS 24.</p> <p>NOTE - The relationship between nominal diameter (DN) and nominal pipe size (NPS) is given for reference purposes in Tables 9 to 14.</p> <p>This standard specifies the flange types and their facings, dimensions, tolerances, threading, bolt sizes, flange jointing, face surface finish, marking, materials and pressure/temperature ratings.</p> <p>This standard does not apply to flanges made from bar stock by turning, or to flanges of types 11, 12, 13, 14 and 15 made from plate material.</p>
198.	TS EN 1765 / December 2016	Rubber hose assemblies for oil suction and discharge services - Specification for the assemblies	<p>This standard specifies the characteristics of four types of oil suction and discharge hose assemblies used for the conveyance of petroleum, including crude oils and other liquid petroleum products containing a maximum aromatics content of 50 % (v/v). It is not suitable for liquefied petroleum gas and natural gas.</p>

			Hose assemblies to this document can be used in the temperature range -20°C to 82°C . The hoses specified are in the size range of nominal bore 50 to 500 and may be smooth bore, rough bore or armoured rough bore. Hoses for use with petroleum products having an aromatic content greater than 50 % (v/v) are outside the scope of this document but the requirements may be used as a basis for such hoses on request to the manufacture
199.	TS EN 1947 / October 2014	Fire-fighting hoses - Semi-rigid delivery hoses and hose assemblies for pumps and vehicles	<p>This standard specifies the requirements and test methods for semi-rigid hoses for use on fire-fighting vehicles and trailer pumps. The hoses are intended for use at a maximum working pressure of 1,5 MPa for normal pressure hoses (category I) and 4,0 MPa for high pressure hoses (category II). The hoses are further subdivided into types and classes (see Clause 4).</p> <p>This Standard applies to hoses for fire-fighting purposes intended for use at ambient conditions within the temperature range -20°C to $+60^{\circ}\text{C}$.</p> <p>NOTE 1 - Hoses for use at ambient temperatures below -20°C can be supplied if they have been tested at the specified lower temperature in accordance with 6.5 and identified by their marking in Clause 8 h).</p> <p>Hoses conforming to this standard are intended for use with fire hose couplings conforming to the relevant national standards for couplings.' Requirements are also given for hose assemblies (see Clause 9) where these are fitted by the hose manufacturer.</p> <p>NOTE 2 - All pressures are expressed in megapascals. (1 MPa = 10 bar.)</p>
200.	TS EN 10001 / September 1996	Definition and classification of pig-irons	The purpose of this standard is to standardize the definition of pig-irons and the the sub-divisions of pig irons divided into different classes.
201.	TS EN 10056-1 / March 2017	Structural steel equal and unequal leg angles - Part 1: Dimensions	This standard specifies requirements for the nominal dimensions of hot-rolled equal and unequal leg angles. This standard does not apply to angles with square roots. These requirements do not apply to equal and unequal leg angles rolled from stainless steel.

202.	TS EN 10056-2 / February 2006	Structural steel equal and unequal leg angles - Part 2: Tolerances on shape and dimensions	<p>This standard covers tolerances on shape and dimensions of the mass of hot rolled structural steel equal and unequal leg angles.</p> <p>This standard does not apply to angle brackets.</p> <p>These requirements do not apply to equilateral angles and scaled angles rolled from stainless steel.</p>
203.	TS EN 10089 / October 2005	Hot-rolled steels for quenched and tempered springs - Technical delivery conditions	<p>This standard specifies the technical delivery requirements for round and flat bars, ribbed and grooved bars and rod manufactured from the alloy steels listed in Table 3, intended for hot-formed and subsequently heat-treated springs or cold-formed and subsequently heat-treated springs. The products are supplied in one of the heat-treatment conditions given for the different types of products in Table 1, lines 2 to 6, and in one of the surface conditions given in Table 2.</p> <p>In special cases, variations in these technical delivery requirements or additions to them may form the subject of an agreement at the time of enquiry and order (see annex A).</p> <p>In addition to the specifications of this standard, the general technical delivery requirements of EN 10021 are applicable.</p>
204.	TS EN 10111 / February 2013	Continuously hot rolled low carbon steel sheet and strip for cold forming - Technical delivery conditions	<p>This standard specifies the grades of continuously hot rolled low carbon steel sheet and strip (in coils) for cold forming.</p> <p>Depending on its actual width, strip is classified as:</p> <ul style="list-style-type: none"> - hot rolled wide strip if its width is greater than or equal to 600 mm; - hot rolled slit wide strip if its width is less than 600 mm. <p>For each grade, it specifies the chemical composition and the mechanical properties.</p> <p>This standard is applicable to products of thickness not less than 1,0 mm and not exceeding 11 mm.</p>

			<p>This standard is not applicable to products covered by following standards:</p> <ul style="list-style-type: none"> - hot rolled products of non-alloy structural steels for general use (see EN 10025 all parts); - steel sheet for pressure purposes (see EN 10028 all parts); - steel sheet for welded gas cylinders (see EN 10120); - quenched and tempered steels (see EN 10083-1 and EN 10083-2).
205.	TS EN 10202 / February 2003	Cold reduced tinmill products - Electrolytic tinfoil and electrolytic chromium/chromium oxide coated steel	<p>This standard specifies requirements for tinmill products in the form of sheets or coils for subsequent cutting into sheets. Tinmill products consist of single and double reduced low carbon mild steel electrolytically coated with either tin (tinfoil) or chromium/chromium oxide (ECCS).</p> <p>Single reduced tinmill products are specified in nominal thicknesses that are multiples of 0.005 mm from 0.17 mm up to and including 0.49 mm. Double reduced tinmill products are specified in nominal thicknesses that are multiples of 0.005 mm from 0.13 mm up to and including 0.29 mm. This standard applies to coils and sheets cut from coils in nominal minimum widths of 600 mm.</p> <p>NOTE - Standard width coils for specific uses, e.g. tabstock, may be slit into narrow strip for supply in coil form.</p>
206.	TS EN 10209 / December 2013	Cold rolled low carbon steel flat products for vitreous enamelling - Technical delivery conditions	<p>This standard is applied to cold rolled non-coated low carbon steel flat products in rolled widths equal to or over 600 mm and in thicknesses equal to or less than 3 mm, delivered in sheet, wide strip, slit wide strip or cut lengths obtained from slit wide strip or sheet.</p> <p>It is not applied to cold rolled narrow strip (rolling width <600 mm) nor to cold rolled flat products for which there is a specific standard, in particular the following:</p> <ul style="list-style-type: none"> - cold-rolled low carbon steel flat products for cold forming (EN 10130); - cold-rolled non oriented electrical steel sheet and strip delivered in fully processed state (EN 10106);

			<ul style="list-style-type: none"> - cold rolled electrical non-alloy and alloy steel sheet and strip delivered in the semi-processed state (EN 10341); - cold reduced blackplate (EN 10205); - steel sheet and strip for welded gas cylinders (EN 10120); - cold-rolled uncoated non-alloy mild steel narrow strip for cold forming (EN 10139); - cold-rolled structural steels for general purposes; - cold-rolled flat products made of high yield strength for cold forming (EN 10268).
207.	TS EN 10223-1 / June 2013	Steel wire and wire products for fencing and netting - Part 1: Zinc and zinc-alloy coated steel barbed wire	This standard covers conventional and reverse twisted barbed steel wire, which includes two strands of zinc and zinc alloy coated, tightly wound barbs, and twisted to restrict their movement between the barbs.
208.	TS EN 10250-1 / April 2003	Open die steel forgings for general engineering purposes - Part 1: General requirements	<p>This standard specifies general technical delivery conditions for open die forgings, forged bars and pre-forged and finished on a continuous rolling mills products for general engineering purposes.</p> <p>General information on technical delivery conditions is given in EN 10021.</p>
209.	TS EN 10250-3 / April 2003	Open die steel forgings for general engineering purposes - Part 3: Alloy special steels	<p>This standard specifies the technical delivery requirements for open die forgings, forged bars and products pre-forged and finished in ring rolling mills, manufactured from alloy special steel and supplied in the quenched and tempered condition.</p> <p>NOTE - The majority of steels listed in this Part of EN 10250 are identical to steels specified in EN 10083-1 and more extensive information on hardenability and technological properties is given in that standard.</p> <p>General information on technical delivery conditions is given in EN 10021.</p>
210.	TS EN 10254 / April 2012	Steel closed die forgings - General technical delivery conditions	This standard specifies the general delivery conditions for steel closed die forgings.

			<p>These forgings are produced by blow or pressure of the heated product at a suitable temperature (hot or warm) in a die, which in the forming process shapes the material to the form of the die.</p> <p>Similar products such as warm extrusions and upset forgings, are also regarded as part of the process.</p> <p>This standard applies also to closed die forgings when their surface is partially treated subsequently by cold forming or coining, in order to improve the surface quality or to obtain more precise dimensional accuracy.</p> <p>This standard does not apply to open die forgings, process in which the tooling does not fully surround the components produced.</p>
211.	TS EN 10255+A1 / March 2010	Non-Alloy steel tubes suitable for welding and threading - Technical delivery conditions	<p>This standard covers a number of options for the finish of tube ends and coatings and requirements for circular non-alloy steel tubes suitable for welding and threading.</p> <p>This standard covers tubes of specified outside diameter 10.2 mm to 165.1 mm (thread size 1/8 to 6) in two series, medium and heavy, and three types of designated thicknesses.</p> <p>NOTE - Tubes manufactured according to this document can be used for the conveyance of fluids as well as for other applications.</p>
212.	TS EN 10305-1 / December 2016	Steel tubes for precision applications - Technical delivery conditions - Part 1: Seamless cold drawn tubes	<p>This standard specifies the technical delivery conditions for seamless cold drawn steel tubes of circular cross section for precision applications with specified outside diameter $D \leq 380$ mm.</p> <p>This standard may also be applied to other types of cross sections.</p> <p>Tubes according to this document are characterized by having precisely defined tolerances on dimensions and a specified maximum surface roughness. Typical fields of application are in the automotive, furniture and general engineering industries.</p>

213.	TS EN 10341 / December 2007	Cold rolled electrical non-alloy and alloy steel sheet and strip delivered in the semi-processed state	<p>This standard specifies cold-rolled electrical non- oriented non-alloyed or alloyed steel sheet and strip delivered in nominal thicknesses of 0.50 mm and 0.65 mm in the semi-processed condition, that is without final heat treatment; in particular, it specifies general requirements, magnetic properties, geometric characteristics and tolerances and technological characteristics, as well as the inspection procedure.</p> <p>This standard applies to materials intended for use in magnetic circuit construction.</p> <p>These magnetic materials correspond to Clause C21 and Clause B2 of IEC 60404-1:2000, respectively.</p>
214.	TS EN 12186 / December 2014	Gas infrastructure - Gas pressure regulating stations for transmission and distribution - Functional requirements	<p>This standard contains the relevant functional requirements for gas pressure regulating stations, which form part of gas transmission or distribution systems. It is applicable to the design, materials, construction, testing, operation and maintenance of gas pressure regulating stations.</p> <p>This standard does not apply to gas pressure regulating stations commissioned prior to the publication of this standard.</p> <p>This standard, covers the stations which have a maximum upstream operating pressure that does not exceed 100 bar. For higher maximum upstream operating pressures this standard should be used as a guideline.</p> <p>If the inlet pipework of the station is a service line and the maximum upstream operating pressure does not exceed 16 bar and the design flow rate is equal to or less than 200 m³ /h under normal conditions, EN 12279 is applied.</p> <p>Basic system requirements for gas pressure regulating stations are contained in this standard.</p>

			<p>Requirements for individual components (valves, regulators, safety devices, pipes, etc.) or installation of the components are contained in the relevant standards.</p> <p>NOTE - For combined regulating and measuring stations, the additional requirements of EN 1776 can be applied.</p> <p>The requirements in this standard is not applied to the design and construction of auxiliary facilities such as sampling, calorimetry, odorization systems and density measuring. These facilities are covered by the appropriate standards, where existing, or other relevant standards.</p> <p>The requirements of this standard are based on good gas engineering practice under conditions normally encountered in the gas industry. Requirements for unusual conditions cannot be specifically provided for, nor are all engineering and construction details prescribed.</p> <p>The requirements in this Standard are based on the physical and chemical data of gaseous fuels –including non-conventional gases – in accordance with Table 1 of EN 437:2003+A1:2009 for first and second family gases.</p> <p>Additional requirements in the case of gaseous fuels heavier than air and/or sour gases are not covered by this standard.</p> <p>The objective of this standard is to ensure the safe operation of such stations. However, this does not relieve all concerned of the responsibility for taking the necessary care and applying effective quality management during the design, construction and operation.</p>
215.	TS EN 12449+A1 / December 2019	Copper and copper alloys - Seamless, round tubes for general purposes	This standard specifies the composition, property requirements and tolerances on dimensions and form for seamless round drawn copper and copper alloy tubes for general purposes supplied in the size range from 3 mm up to and including 450 mm outside diameter and from 0,3 mm up to and including 20 mm wall thickness.

			<p>The sampling procedures and the methods of test for verification of conformity to the requirements of this standard are also specified.</p> <p>NOTE - Tubes having an outside diameter less than 80 mm and/or a wall thickness greater than 2 mm in certain alloys are most frequently used for free machining purposes which are specified in EN 12168.</p>
216.	<p>TS EN 13206:2017+A1 / November 2020</p>	<p>Plastics- Thermoplastic covering films for use in agriculture and horticulture</p>	<p>This standard specifies requirements for the dimensional, mechanical, optical and thermal properties of thermoplastic films used to cover permanent or temporary greenhouses, walkways and low tunnels in which vegetable, fruit and flower crops are grown.</p> <p>Lay-flat perforated cover films are also in the scope of this standard.</p> <p>This standard specifies a classification for the durability of coating films and the test methods referred to in this standard.</p> <p>This standard specifies also test methods for the determination of the chlorine and sulfur contents of films subjected to use.</p> <p>This standard is applicable to thermoplastic covering films used in agriculture and horticulture in Europe, in the thickness range 20 µm up to more than 250 µm, based on polyethylene and/or ethylene copolymers materials, of the following types: non-thermal films, thermal clear films and thermal diffusing films.</p> <p>This standard also defines guidance for installation, use and disposal of covering films. It defines the conventional expected lifetime, as well as rules that allow evaluating the remaining use potential in the event of a failure before the normal end-of-use date.</p> <p>NOTE - These rules allow estimating the residual value of the films. These provisions only apply to the film itself and the damage it has undergone. Any other problem falls within the scope of professional practices and the general terms and conditions of sale.</p>

217.	TS EN 13207 / April 2018	Plastics - Thermoplastic silage films and tubes for use in agriculture	<p>This standard specifies the requirements related to dimensional, mechanical and optical characteristics of thermoplastic films and tubes used during the manufacture of silage and designed to last at least one year for protecting fodder.</p> <p>This standard, covers the classification for the durability of silage films and the test methods referred to in this standard.</p> <p>This standard is applicable to transparent, black, white or coloured (e.g. black/white) thermoplastic silage films based on polyethylene, ethylene copolymer, EVOH and polyamide.</p> <p>These films have been designed for covering bunker silos, silage tubes or silage clamps for preserving forage. They protect the forage and preserve it from rain and air. These films have not been intended to cover bales piles (e.g. straw bales and hay bales).</p> <p>Silage films obtained by sealing two or more films in machine direction are out of the scope of this document.</p> <p>This standard also defines installation, use and removal conditions of silage films. It defines the conventional useful lifetime, as well as rules that allow evaluating the remaining use potential in the event of a failure before the normal end-of-use date.</p> <p>NOTE - These rules allow estimating the residual value of the films. These provisions only apply to the film itself and the damage it has undergone. Any other problem falls within the scope of professional practices and the general terms and conditions of sale.</p>
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218.	TS EN 13942 / January 2012	Petroleum and natural gas industries - Pipeline transportation systems - Pipeline valves	<p>This 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 ISO 13623 for the petroleum and natural gas industries.</p> <p>This standard is not applicable to subsea pipeline valves, as they are covered by a separate International Standard (ISO 14723).</p> <p>This Standard is not applicable to valves for pressure ratings exceeding PN 420 (Class 2500).</p> <p>On-land supply systems used by the gas supply industry are excluded from the scope of this standard.</p>
219.	TS EN 13601 / September 2021	Copper and copper alloys - Copper rod, bar and wire for general electrical purposes	<p>This Standard specifies the composition, property requirements including electrical properties, and tolerances on dimensions and form for copper rod, bar and wire for general electrical purposes.</p> <p>Cross-sections and size ranges are like this:</p> <ul style="list-style-type: none"> - round, square and hexagonal rod with diameters or widths across-flats from 2 mm up to and including 160 mm; - bar with thicknesses from 2 mm up to and including 40 mm and widths from 3 mm up to and including 250 mm; - round, square, hexagonal and rectangular wire with diameters or widths across-flats from 2 mm up to and including 25 mm, as well as thicknesses from 0,5 mm up to and including 12 mm with widths from 1 mm up to and including 250 mm. <p>The sampling procedures and test methods for verification of conformity to the requirements of this document are also specified.</p> <p>NOTE - Drawn, round copper wire, plain or tinned, single or multiline, for the manufacture of electrical conductors is specified in EN 13602.</p>

220.	TS EN 14141 / December 2013	Valves for natural gas transportation in pipelines - Performance requirements and tests	<p>This standard is applied to all valves (plug, ball, gate and check valves) used in onshore transmission pipelines for transport of natural gas in accordance with EN 1594, but with a differing temperature range according to the following three classes in accordance with EN 682:</p> <ol style="list-style-type: none"> 1) -10 °C to 60 °C; 2) -20 °C to 60 °C; 3) the range stated by the purchaser for special design. <p>This standard comprises all valves which are components of the pipeline. This standard specifies valves for pipelines with a maximum operating pressure (MOP) over 16 bar. Control valves and safety valves are excluded from the scope of this standard.</p> <p>This standard specifies requirements and appropriate verification tests carried out during production and for certification purposes to verify that the valves conform to the requirements. A summary of the product and type tests is given in Annex G.</p> <p>This Standard makes reference to EN 13942. All the requirements of EN 13942 should be met unless otherwise stated. Paragraphs marked with a dot [•] indicate requirements which are identical to EN 13942.</p> <p>Additional national requirements and tests in accordance with individual national legal regulations not yet harmonised may be necessary and are to be advised in the purchase order.</p>
221.	TS EN 14350 / November 2020	Child care articles - Drinking equipment - Safety requirements and test methods	<p>This standard specifies safety requirements relating to the materials, construction, performance, packaging and product information for drinking equipment intended for children of 0 to 48 months (see B.2) of age:</p> <ul style="list-style-type: none"> - Re-usable containers and re-usable drinking accessories; - Single-use containers and drinking accessories sold with these containers; - Single-use feeding teats;

			<p>– Ready to use feeding teats.</p> <p>This standard does not include requirements for the cleanliness of ready to use and single use products.</p> <p>This standard is not applied to products designed for specialist clinical medical applications, e.g. those relating to cleft lip palates.</p> <p>This standard is not applied to drinking equipment made from ceramics.</p> <p>This standard is not applied to bags intended for storage only.</p> <p>This standard is not applied to drinking equipment which is supplied with fluids or food when purchased and to feeding accessories fixed to it.</p> <p>This standard is not applicable to soothers. Safety requirements and test methods for soothers are specified in EN 1400.</p> <p>This standard is not applicable for cutlery and other feeding utensils. Safety requirements and test methods for Cutlery and other feeding equipment are specified in EN 14372.</p> <p>For drinking equipment excluded from the scope, the applicable requirements of this document is considered whenever possible.</p>								
222.	TS EN 15800 / January 2011	Cylindrical helical springs made of round wire - Quality specifications for cold coiled compression springs	<p>This standard covers the cylindrical helical compression springs made of round spring wire. Cold coiled compression springs can be made with wire up to about 16 mm diameter. (See also EN 13906-1).</p> <p>Cylindrical helical springs made of round wire from materials called in this standard are subject to the limiting values in Table 1:</p> <p>Table 1</p> <table border="1" data-bbox="1095 1225 1989 1386"> <thead> <tr> <th>Characteristic</th> <th>Cold coiled compression springs</th> </tr> </thead> <tbody> <tr> <td>Wire diameter</td> <td>$0.07 \text{ mm} \leq d \leq 16 \text{ mm}$</td> </tr> <tr> <td>Mean coil diameter</td> <td>$0,63 \text{ mm} \leq D \leq 200 \text{ mm}$</td> </tr> <tr> <td>Length of unloaded spring</td> <td>$L_0 \leq 630 \text{ mm}$</td> </tr> </tbody> </table>	Characteristic	Cold coiled compression springs	Wire diameter	$0.07 \text{ mm} \leq d \leq 16 \text{ mm}$	Mean coil diameter	$0,63 \text{ mm} \leq D \leq 200 \text{ mm}$	Length of unloaded spring	$L_0 \leq 630 \text{ mm}$
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			<table border="1"> <tr> <td>Number of active coils</td> <td>$n \geq 2$</td> </tr> <tr> <td>Spring index</td> <td>$4 \leq w \leq 20$</td> </tr> </table> <p>A specification for the parameters of cold formed helical compression springs is given in Annex B.</p>	Number of active coils	$n \geq 2$	Spring index	$4 \leq w \leq 20$
Number of active coils	$n \geq 2$						
Spring index	$4 \leq w \leq 20$						
223.	TS EN 16983 / December 2016	Disc springs - Quality specifications - Dimensions	<p>This standard specifies the set of requirements that ensure the correct functioning of disc spring. These include requirements relating to the materials and manufacturing process, tolerances on dimensions and spring forces, and also the permissible relaxation and fatigue life of such springs as a function of stress.</p> <p>All requirements specified here are minimum requirements.</p> <p>This standard covers three dimensional series of disc springs.</p> <p>NOTE - In this standard, disc springs are divided into three groups and three dimensional series. Classification into groups is based on the manufacturing process, which is a function of the material thickness. The assignment of disc springs to dimensional series is governed by the h_0/t ratio.</p>				
224.	TS EN 22568 / December 1997	Hand and machine - Operated Circular Screwing Dies and Hand - Operated Die Stocks	<p>This standard covers the general dimensions of hand-operated and machine-operated screwing dies. Depending on the screw diameters and pitches, these dimensions are given below,:</p> <ul style="list-style-type: none"> - Outer diameter - Thickness - Cutting zone length - General connection dimensions. <p>This standard also specifies the interchangeability dimensions of hand-operated die stocks.</p>				
225.	TS EN 24015 / April 1998	Hexagon head bolts; product grade B; reduced shank (shank diameter=pitch diameter)	<p>This standard gives specifications for hexagon head bolts with metric dimensions and thread diameters from 3 up to and including 20 mm, with reduced shank (shank diameter pitch diameter), of product grade B.</p>				

226.	TS EN 50182 / January 2003	Conductors for overhead lines - Round wire concentric lay stranded conductors	<p>This standard specifies the electrical and mechanical characteristics of round wire concentric lay bare overhead electrical conductors stranded in alternate directions, with or without grease as per EN 50326, made of one or a combination of any of the following:</p> <ul style="list-style-type: none"> a) Hard drawn Aluminium as per EN 60889 designated AL1 b) Aluminium alloy as per EN 50183 designated AL2 to AL7 c) Zinc coated steel wire as per EN 50189 with grade and class designated ST1A, ST2B, ST3D, ST4A, ST5E, and ST6C. d) Aluminium-clad steel wire as per EN 61232 with class designation 20SA (grades A and B), 27SA, 30SA and 40SA. <p>Conductors made of zinc coated steel wires only are not included.</p>
227.	TS EN 50189 / March 2002	Conductors for overhead lines - Zinc coated steel wires	<p>This standard applies to round zinc-coated steel wires used wires used in the construction and/or reinforcement of conductors for overhead power transmission purposes.</p> <p>Each wire diameter of this standard is intended to cover all wires used in constructions in the range from 1.25 mm to 5.50 mm, including coating.</p> <p>Wire types are indicated as STyz. y represents the grade of steel and z the grade of zinc coating.</p> <p>To meet the needs of conductor users, the combination of steel grade and zinc coating covered by this standard are ST1A, ST2B, ST3D, ST4A, ST5E and ST6C only.</p> <p>The specified properties are those before the knitting process.</p>
228.	TS EN 50347 / February 2005	General purpose three - Phase induction motors having Standard dimensions and outputs - Frame numbers 56 to 315 and flange numbers 65 to 740	<p>This EN 50347 covers general purpose standard dimensioned three-phase induction motors for 50 Hz with rated voltages not exceeding 690 V for industrial purposes having dimensions selected from IEC 60072-1. The range related with frame and flange numbers of these three phase induction motors are given as following:</p>

			<ul style="list-style-type: none"> - Frame numbers – shaft-heights: 56 mm to 315 mm - Flange numbers - pitch circle diameter of flange: 65 mm to 740 mm
229.	TS EN 60076-1 / April 2012	Power transformers - Part 1: General	<p>This part of IEC 60076 applies to three-phase and single-phase power transformers (including auto-transformers) with the exception of certain categories of small and special transformers such as:</p> <ul style="list-style-type: none"> - single-phase transformers with rated power less than 1 kVA and three-phase transformers less than 5 kVA; - transformers, which have no windings with rated voltage higher than 1 000 V; - instrument transformers; - traction transformers mounted on rolling stock; - starting transformers; - testing transformers; - welding transformers; - explosion-proof and mining transformers; - transformers for deep water (submerged) applications. <p>When IEC standards do not exist for such categories of transformers (in particular transformer having no winding exceeding 1000 V for industrial applications), this part of IEC 60076 may still be applicable either as a whole or in part.</p> <p>This standard does not cover the rules that would make a transformer suitable for mounting in a location accessible to the public.</p> <p>For these categories of power transformers and reactors that have their own standards, this standard is only applicable within the scope of the specific reference in the other standard. There are standards such as following:</p> <ul style="list-style-type: none"> - General reactors (IEC 60076-6), - Dry-type transformers (IEC 60076-11),

			<ul style="list-style-type: none"> - Self-protected transformers (IEC 60076-13), - Gas-filled power transformers (IEC 60076-15), - Transformers for wind turbine applications (IEC 60076-16), - Traction transformers and traction reactors (IEC 60310), - Static converter transformers for industrial applications (IEC 61378-1), - Static converter transformers for HVDC applications (IEC 61378-2) <p>Some parts in this standard, it is stated or recommended that an “agreement” be reached on alternative or additional technical solutions or processes. Such an agreement is made between the manufacturer and the buyer. Topics should preferably be set out at the outset and these agreements should be included in the contract technical specifications.</p>
230.	TS EN 60254-1 / February 2007	Lead-acid traction batteries - Part 1: General requirements and methods of test	<p>This part of IEC 60254 is applicable to lead-acid traction batteries used as power sources for electric propulsion.</p> <p>The tests defined are relevant to all traction battery applications which include road vehicles, locomotives, industrial trucks and mechanical handling equipments. Tests which may be used specifically to test batteries developed for use in vehicles such as light passenger vehicles, motor cycles, light commercial vehicles, etc. may be found in alternative standards e.g. IEC 61982-2.</p> <p>The object of this standard is to specify certain essential characteristics of traction batteries or cells, together with the relevant test methods of those characteristics.</p> <p>Although Part 2 of this standard defines dimensions of commonly used traction cells, the tests in Part 1 may be applied to cells and monobloc batteries of other dimensions, if the application is appropriate.</p>
231.	TS EN 60383-1 / December 1998	Insulators for overhead lines with a nominal voltage above 1000V Part 1: Ceramic or glass insulator units for A.C. systems -	<p>This part of IEC 383 applies to insulators of ceramic material or glass for use on a.c. overhead power lines and overhead traction lines with a nominal voltage greater than 1000 V and a frequency not greater than 100 Hz.</p>

		<p>Definitions, Test methods and acceptance criteria.</p>	<p>It also applies to insulators for use on d.c. overhead electric traction lines.</p> <p>This part applies to string insulator units, rigid overhead line insulators and to insulators of similar design when used in substations.</p> <p>It does not apply to insulators forming parts of electrical apparatus or to parts used in their construction or to post insulators which are covered by IEC 168: Tests on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages greater than 1 000 V.</p> <p>It may be regarded as a provisional standard for insulators for use on d.c. overhead power lines. IEC 438: Tests and dimensions for high-voltage d.c. insulators, gives general guidance for those insulators.</p> <p>NOTE - An international standard dealing with tests on insulators for d.c. overhead lines is in preparation and is intended to replace the relevant clauses of IEC 438.</p> <p>Tests on insulator strings and insulator sets (for example, wet switching impulse voltage) are dealt with in part 2 of IEC 383.</p> <p>NOTES</p> <p>1 - This part does not include artificial pollution tests, radio-interference tests or residual strength tests.</p> <p>These subjects and relevant test methods are dealt with in the following IEC reports:</p> <p>IEC 437: Radio interference test on high-voltage insulators</p> <p>IEC 507: Artificial pollution tests on high-voltage insulators to be used on a.c. systems</p> <p>IEC 797: Residual strength of string insulator units of glass or ceramic material for overhead lines after mechanical damage of the dielectric.</p>
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			<p>2 - The term "ceramic material" is used in this part to refer to porcelain materials and, contrary to North American practice, does not include glasses.</p> <p>The object of this part is:</p> <ul style="list-style-type: none"> - to define the terms used; - to define insulator characteristics and to prescribe the conditions under which the specified values of these characteristics shall be verified; - to prescribe test methods; - to prescribe acceptance criteria. <p>This part does not include requirements dealing with the choice of insulators for specific operating conditions.</p> <p>NOTE - A guide for the choice of insulators under polluted conditions has been published, see IEC 815.</p> <p>Numerical values for insulator characteristics are specified in IEC 305, IEC 433 and IEC 720.</p>
232.	TS EN 60383-2 / January 1999	Insulators for overhead lines with a nominal voltage above 1000 V - Part 2: Insulator strings and insulator sets for a.c. systems - Definitions, test methods and acceptance criteria	<p>This standard covers insulator strings and insulator sets consisting of string string insulator units made of ceramic material or glass used on a.c. overhead power lines with a nominal voltage greater than 1000 Volts and a frequency not greater than 100 Hz.</p> <p>This standard is also applied to insulator strings and insulator sets used in direct current power transmission lines.</p> <p>This standard applies to string insulator units and insulator sets of similar design when used in power distribution and transformer substations.</p> <p>This standard can be regarded as a temporary standard for insulator strings, insulator sets and composite insulator sets used in direct current power transmission lines.</p>

			<p>The purpose of this standard is to describe standard electrical test procedures and acceptance criteria to verify the defined characteristics of insulator strings and insulator sets covered by this standard.</p> <p>The purpose of these tests and characteristics is to provide a common basis for designers, users and suppliers of power transmission line, insulator and line equipment when the description, evaluation or verification of the electrical characteristics of such equipment is required.</p> <p>These tests on insulators, whether supplied individually, in strings or in sets, are not intended to be mandatory tests.</p> <p>NOTES</p> <p>1- Tests on chain insulator units are covered in IEC 60383-1. Tests on combined insulators are reviewed in IEC 61109.</p> <p>2- This standard does not contain artificial contamination or radio interference tests. These subjects and related test methods are examined in the following IEC standards.</p> <p>IEC 60437: Radio Interference Test on High Voltage Insulators</p> <p>IEC 60507: Artificial Contamination Tests for High Voltage Insulators Used in Alternating Current Systems.</p> <p>3- Investigations of power arc experiments are still ongoing.</p>
233.	TS EN 60454-3-12 / February 2008	Pressure-sensitive adhesive tapes for electrical purposes - Part 3: Specifications for individual materials - Sheet 12: Requirements for polyethylene and polypropylene film tapes with pressure-sensitive adhesive	<p>This standard specifies the requirements for strips of polyethylene and polypropylene film with a pressure sensitive adhesive.</p> <p>Materials conforming to this standard provide certain performance levels. However, not only this standard, but also the properties required to give adequate performance in the application in question should be taken into account when selecting the material for a particular application by the user.</p>

234.	TS EN 60708 / July 2011	Low-frequency cables with polyolefin insulation and moisture barrier polyolefin sheath	<p>This standard is intended to define polyolefin-insulated cables for insertion into local outdoor networks.</p> <p>This standard is applicable to polyolefin insulated and moisture barrier polyolefin sheathed telephone cables, filled or unfilled with copper conductors, and used as:</p> <ul style="list-style-type: none"> a) Cables suitable for installation in ducts. b) Cables suitable for direct burial in the ground. c) Cables with integral suspension strand for aerial installations. <p>This standard is in accordance with ITU-T Recommendations.</p> <p>This standard includes general design details and requirements for dimensions and other constructional details as well as mechanical, electrical and environmental characteristics for all types of low-frequency cables with polyolefin insulation (solid or cellular), filled or unfilled, and moisture barrier polyolefin sheath (with integral suspension strand).</p>
235.	TS EN ISO 683-5 / September 2021	Heat treatable steels, alloy steels and free-cutting steels- Part 5: Nitriding steels	<p>This standard gives the technical delivery requirements for</p> <ul style="list-style-type: none"> - semi-finished products, e.g. blooms, billets, slabs (see note 1), - bars (see note 1), - wire rod, - hot-rolled plates (see note 2), and - hammer or drop forgings (see note 1) <p>manufactured from the nitriding steels listed in Table 3 and supplied in one of the heat-treatment conditions given for the different types of products in Table 1, rows 2 to 5, and in one of the surface conditions given in Table 2.</p> <p>These steels are generally designed for the fabrication of quenched and tempered and, subsequently, nitriding machine parts.</p>

236.	TS EN ISO 1403 / December 2019	Rubber hoses, textile-reinforced, for general-purpose water applications - Specifications	<p>This standard specifies the requirements for three types of general-purpose textile-reinforced rubber water hose with an operating temperature range of -25 °C to +70 °C and a maximum working pressure of up to 2.5 MPa (25 bar).</p> <p>These hoses cannot be used for potable (drinking) water, dishwasher inlets, firefighting hoses, special agricultural machines or collapsible water hoses.</p> <p>These hoses can be used with additives which lower the freezing point of water.</p>
237.	TS EN ISO 1482 / December 2012	Slotted countersunk (flat) head tapping screws	This standard specifies the characteristics of slotted countersunk (flat) head tapping screws with thread sizes from ST 2.2 to ST 9.5 inclusive.
238.	TS EN ISO 1483 / January 2012	Slotted raised countersunk (oval) head tapping screws	This standard specifies the characteristics of slotted raised countersunk (oval) head tapping screws with thread sizes from ST 2.2 to ST 9.5 inclusive.
239.	TS EN ISO 2009 / April 2013	Slotted countersunk flat head screws - Product grade A	<p>This standard specifies the characteristics of slotted countersunk flat head screws of product grade A and with threads from M1.6 to M10 inclusive.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898-1, ISO 965-2 and ISO 3506-1.</p>
240.	TS EN ISO 2010 / April 2013	Slotted raised countersunk head screws - Product grade A	<p>This standard specifies the characteristics of countersunk slotted raised head screws of product grade A and with threads from M1.6 to M10 inclusive.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898-1, ISO 965-2 and ISO 3506-1.</p>
241.	TS EN ISO 2398 / January 2017	Rubber hoses, textile-reinforced, for compressed air - Specification	This document specifies the requirements for three types, three classes and two categories of textilereinforced rubber hose for compressed air, up to a maximum working pressure of 25 bar with an operating temperature range of -40 °C to +70 °C, depending on the type and category.

242.	TS EN ISO 2560 / November 2020	Welding consumables - Covered electrodes for manual metal arc welding of non-alloy and fine grain steels - Classification	<p>This document specifies requirements for the classification of covered electrodes and deposited metal in the as-welded condition and in the post-weld heat-treated condition for manual metal arc welding of non-alloy and fine grain steels with a minimum yield strength of up to 500 MPa or a minimum tensile strength of up to 570 MPa.</p> <p>This document is a combined specification providing for classification utilizing a system based on the yield strength and the average impact energy of 47 J of all-weld metal, or utilizing a system based on the tensile strength and the average impact energy of 27 J of all-weld metal.</p> <p>a) Clauses, subclauses and tables which carry the suffix letter "A" are applicable only to covered electrodes classified to the system based on the yield strength and the average impact energy of 47 J of all weld metal in this document.</p> <p>b) Clauses, subclauses and tables which carry the suffix letter "B" are applicable only to covered electrodes classified to the system based on the tensile strength and the average impact energy of 27 J of all weld metal in this document.</p> <p>c) Clauses, subclauses and tables which do not have either the suffix letter "A" or the suffix letter "B" are applicable to all covered electrodes classified in this document.</p>
243.	TS EN ISO 2702 / April 2013	Heat-treated steel tapping screws - Mechanical properties	<p>The primary objective of this document is to ensure that tapping screws will form mating threads in materials into which they are normally driven without deforming their own thread and without breaking during assembly or service.</p> <p>This document specifies the characteristics of heat-treated steel tapping screws, with tapping screw thread from ST2.2 to ST9.5 inclusive in accordance with ISO 1478, together with the corresponding test methods.</p>
244.	TS EN ISO 2858 / June 2012	End-suction centrifugal pumps (rating 16 bar) - Designation,	This sandard specifies the principal dimensions and nominal duty point of end-suction centrifugal Pumps having a maximum operating rating of 16 bar.

		nominal duty point and dimensions	
245.	TS EN ISO 3266 / April 2013	Forged steel eyebolts grade 4 for general lifting purposes	<p>This standard specifies the general characteristics, performance and critical dimensions necessary for interchangeability and compatibility with other components, of forged steel eyebolts grade 4 for general lifting purposes. These eyebolts can be used for axial and inclined loading.</p> <p>This standard specifies the dimensions of the eyes of eyebolts permitting direct connection with shackles of the same working load limit as those defined in ISO 2415. These dimensions also allow designs with a larger eye which can permit direct connection with sling hooks of similar working load limit.</p> <p>This standard covers all significant hazards, hazardous situations and events relevant to eyebolts grade 4 as defined in Clause 4.</p> <p>This standard is applicable to eyebolts grade 4 for use in the temperature range of -20°C to 200°C.</p> <p>This standard is not applicable to eyebolts which are not forged in one piece.</p> <p>This standard is not applicable to forged steel eyebolts grade 4 manufactured before the date of its publication as a standard.</p>
246.	TS EN ISO 3821 / March 2020	Gas welding equipment- Rubber hoses for welding, cutting and allied processes	<p>This standard, specifies requirements for rubber hoses (including twin hoses) for welding, cutting and allied processes.</p> <p>This standard specifies requirements for rubber hoses for normal duty of 2 MPa (20 bar) and light duty [limited to hoses for maximum working pressure of 1 MPa (10 bar) and with bore up to and including 6,3 mm].</p> <p>This document is applied to hoses operated at temperatures -20 °C to +60 °C and used in:</p> <ul style="list-style-type: none"> - gas welding and cutting; - arc welding under the protection of an inert or active gas;

			<p>– processes allied to welding and cutting, (in particular, heating, brazing, and metallization.)</p> <p>This standard does not specify requirements for hose assemblies; these are detailed in ISO 8207.</p> <p>This standard is applied neither to thermoplastics hoses nor to hoses used for high pressure [$>0,15$ MPa ($>1,5$ bar)] acetylene.</p>
247.	TS EN ISO 4014 / December 2012	Hexagon head bolts - Product grades A and B	<p>This document specifies the characteristics of hexagon head bolts with threads from M1.6 up to and including M64, of product grade A for threads M1.6 to M24 and nominal lengths up to and including 10 d or 150 mm, whichever is shorter and product grade B for threads over M24 or nominal lengths over 10 d or 150 mm, whichever is shorter.</p> <p>If in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards such as ISO 724, ISO 888, ISO 898-1, ISO 965-1, ISO 3506-1, ISO 4753 and ISO 4759-1.</p>
248.	TS EN ISO 4016 / April 2013	Hexagon head bolts - Product grade C	<p>This standard specifies the characteristics of hexagon head bolts with threads from M5 up to and including M64, of product grade C.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 888, ISO 898-1, ISO 965-1 and ISO 4759-1.</p>
249.	TS EN ISO 4017 / October 2014	Fasteners - Hexagon head screws - Product grades A and B	<p>This standard specifies the characteristics of hexagon head screws with threads from M1.6 up to and including M64, of product grade A for threads M1.6 to M24 and nominal lengths up to and including 10 d or 150 mm, whichever is the shorter, and product grade B for threads over M24 or nominal lengths over 10 d or 150 mm, whichever is the shorter.</p> <p>NOTE - This type of product is the same as that covered by ISO 4014 with the exception of threading up to head and nominal lengths up to and including 200 mm as preferred lengths.</p>

			<p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 888, ISO 898-1, ISO 965-1, ISO 3506-1, ISO 4753 and ISO 4759-1.</p>
250.	TS EN ISO 4018 / November 2011	Hexagon head screws - Product grade C	<p>This document specifies the characteristics of hexagon head screws with threads from M5 up to and including M64, of product grade C.</p> <p>NOTE - This type of product is the same as in ISO 4016, except that it is threaded up to the head.</p> <p>If, in special cases specifications other than those listed in this standard are required, they can be selected from existing International Standards such as ISO 724, ISO 888, ISO 898-1, ISO 965-1 and ISO 4759-1.</p>
251.	TS EN ISO 4032 / October 2013	Hexagon nuts, style 1 - Product grades A and B	<p>This document specifies the characteristics of hexagon regular nuts (style 1) with threads from M1.6 up to and including M64, with product grade A for threads D smaller than or equal to M16 and product grade B for threads D larger than M16.</p> <p>If, in special cases specifications other than those listed in this standard are required, they can be selected from existing International Standards such as ISO 724, ISO 898-2, ISO 965-1, ISO 3506-2 and ISO 4759-1.</p> <p>NOTE - See ISO 4033 for hexagonal high nuts (style 2).</p>
252.	TS EN ISO 4033 / June 2013	Hexagon high nuts (style 2) - Product grades A and B	<p>This document specifies the characteristics of hexagon high nuts (style 2) with threads from M5 up to and including M36, with product grade A for threads D smaller than or equal to M16 and product grade B for threads D larger than M16.</p> <p>If, in special cases specifications other than those listed in this standard are required, they can be selected from existing International Standards such as ISO 724, ISO 898-2, ISO 965-1 and ISO 4759-1.</p> <p>NOTE - See ISO 4032 for normal hexagonal nuts (style 1).</p>

253.	TS EN ISO 4034 / April 2014	Hexagon regular nuts (style 1) - Product grade C	<p>This standard specifies the characteristics of hexagon regular nuts (style 1) with threads from M5 up to and including M64 and product grade C.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1 and ISO 4759-1.</p>
254.	TS EN ISO 4035 / June 2013	Hexagon thin nuts chamfered (style 0) - Product grades A and B	<p>This standard specifies the characteristics of chamfered hexagon thin nuts (style 0), with threads from M1.6 up to and including M64, with product grade A for threads $D \leq M16$ and product grade B for threads $D > M16$.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1, ISO 3506-2 and ISO 4759-1.</p>
255.	TS EN ISO 4957 / November 2018	Tool steels	<p>This standard specifies requirements for the following grades of wrought tool steels:</p> <ul style="list-style-type: none"> a) non-alloy cold-work tool steels; b) alloy cold-work tool steels; c) alloy hot-work tool steels; d) high-speed tool steels. <p>If not stated otherwise, this document is applied to all types of hot-rolled, forged, cold-drawn or coldrolled products or products produced by powder metallurgy, which are supplied in one of the surface and heat-treatment conditions given in 6.2 and Table 1.</p> <p>NOTE - Tables 2, 4, 6 and 8 cover only those steels which have gained certain international importance, which does not mean, however, that they are available in all industrial countries. In addition, a number of other steels for tools are specified in regional, national or company standards.</p>

			Where the heat resistance of the tools is of particular importance, as for example in the case of tools for hot forming glass, the material selection is based on ISO 4955.
256.	TS EN ISO 5172 / January 2010	Gas welding equipment - Blowpipes for gas welding, heating and cutting - Specifications and tests	<p>This standard covers the specifications and tests for blowpipes for gas welding, heating and cutting of metals. It is applied to manual blowpipes for welding and heating with a nominal thermal power up to 32000 kcal/h, and manual and machine cutting blowpipes with a cutting range up to 300 mm.</p> <p>This standard is not applied to air-aspirated blowpipes which are covered in ISO 9012.</p> <p>NOTE 1 - Blowpipes with greater nominal thermal power or cutting range can also be tested in accordance with this standard if the test requirements are suitable.</p> <p>NOTE 2 - For the most common fuel gases, the corresponding flow rates are given in Table A.1.</p> <p>NOTE 3 - Examples of blowpipes are shown in Annex B, which also gives the terminology concerning these blowpipes.</p> <p>In addition to terms used in two of the three official ISO languages (English and French), this annex gives the equivalent terms in German. These German terms are published under the responsibility of the member body for Germany (DIN) and are given for information only. Only the terms and definitions given in the official languages can be considered as ISO terms.</p>
257.	TS EN ISO 5199 / April 2008	Technical specifications for centrifugal pumps - Class II	This standard specifies the requirements for Class II centrifugal pumps of single-stage, multistage, horizontal or vertical construction, with any drive and any installation for general application. Pumps used in the chemical process industries (e.g. those conforming to ISO 2858) are typical of those covered by this standard.

			<p>This standard includes design features concerned with installation, maintenance and safety for these pumps including baseplate, couplings and auxiliary piping, but it does not specify any requirements for the driver other than those related to its rated power output.</p> <p>Where application of this standard has been called for and requires a specific design feature, alternative designs may be offered which meet the intent of this standard provided that the alternative is described in detail.</p> <p>Pumps not complying with all the requirements of this standard may be offered for consideration provided that all deviations are stated.</p>
258.	TS EN ISO 6134 / March 2017	Rubber hoses and hose assemblies for saturated steam - Specification	<p>This document specifies requirements for two types of hoses and hose assemblies, low pressure with a maximum working pressure of 6 bar and high pressure with a maximum working pressure of 18 bar, made of rubber and hose fittings made of metal, designed to convey saturated steam and hot water condensate.</p> <p>Each type is divided into two classes having either an oil resistant or non-oil resistant cover.</p> <p>NOTE - Information on the frequency of testing of hose assemblies in use and storage is given in Annex A and Annex B</p>
259.	TS EN ISO 7046-1 / December 2012	Countersunk flat head screws (common head style) with type H or type Z cross recess - Product grade A - Part 1: Steel screws of property class 4.8	<p>This standard specifies the characteristics of countersunk flat head screws with threads from M1.6 to M10 inclusive, of product grade A and property class 4.8, and with type H or type Z cross recess.</p> <p>If, in special cases, specifications other than those listed in this part of ISO 7046 are required, they can be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898-1 and ISO 965-2.</p>
260.	TS EN ISO 7046-2 / February 2012	Countersunk flat head screws (common head style) with type H or type Z cross recess - Product	<p>This part of ISO 7046 specifies the characteristics of recessed countersunk flat head screws with threads M2 up to and including M10, of grade A and of</p>

		grade A - Part 2: Steel screws of property class 8.8, stainless steel screws and non-ferrous metal screws	property class 8.8 for steel, A2-70 for stainless steel and CU2 and CU3 for non-ferrous metals. If, in special cases, specifications other than those listed in this part of ISO 7046 are required, they can be selected from existing International Standards, for example ISO 261, ISO 888, ISO 898-1, ISO 965-2, ISO 3506-1, ISO 4759-1 and ISO 8839.
261.	TS EN ISO 7050 / January 2012	Cross-recessed countersunk (flat) head tapping screws	This standard specifies the characteristics of cross-recessed pan head tapping screws with thread sizes from ST 2.2 to ST 9.5 inclusive.
262.	TS EN ISO 7051 / January 2012	Cross-recessed raised countersunk (oval) head tapping screws	This document specifies the characteristics of cross recessed raised countersunk (oval) head tapping screws with thread sizes from ST 2.2 to ST 9.5 inclusive.
263.	TS EN ISO 8673 / June 2013	Hexagon regular nuts (style 1) with metric fine pitch thread - Product grades A and B	This standard specifies the geometry of hexagon nuts with nominal thread diameter from 8 mm up to and including 64 mm and the mechanical properties of hexagon regular nuts (style 1) with metric fine pitch thread in product grade A for nominal thread diameters $8 \text{ mm} \leq D \leq 16 \text{ mm}$ and in product grade B for nominal diameters $16 \text{ mm} < D \leq 39 \text{ mm}$. If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1, ISO 3506-2 and ISO 4759-1. NOTE - As there is an insufficient nut height due to the fine pitch thread, there is a higher probability of nut thread stripping. Hence, high nuts (style 2) according to ISO 8674 are preferably used.
264.	TS EN ISO 8674 / June 2013	Hexagon high nuts (style 2) with metric fine pitch thread - Product grades A and B	This document specifies the characteristics of hexagon high nuts (style 2) with metric fine pitch thread, with nominal thread diameters D from 8 mm up to and including 36 mm, with product grade A for sizes D smaller than or equal to 16 mm and product grade B for sizes D larger than 16 mm.

			If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1 and ISO 4759-1.
265.	TS EN ISO 8675 / June 2013	Hexagon thin nuts chamfered (style 0) with metric fine pitch thread - Product grades A and B	<p>This standard specifies the characteristics of chamfered hexagon thin nuts (style 0), with metric fine pitch thread, with nominal thread diameters, D, from 8 mm up to and including 64 mm, with product grade A for sizes $D \leq 16$ mm and product grade B for sizes $D > 16$ mm.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 898-2, ISO 965-1, ISO 3506-2 and ISO 4759-1.</p>
266.	TS EN ISO 8748 / January 2008	Spring-type straight pins - Coiled, heavy duty	<p>This standard specifies the characteristics of heavy duty coiled spring-type straight pins made of steel or of austenitic or martensitic stainless steel, with nominal diameter, $d < (\text{Index})1 >$, from 1.5 mm to 20 mm inclusive.</p> <p>NOTE - Spring-type straight pins, coiled, standard duty and spring type straight pins, coiled, light duty, are the subjects of ISO 8750 and ISO 8751 respectively.</p>
267.	TS EN ISO 8750 / January 2010	Spring-type straight pins - Coiled, standard duty	<p>This standard specifies the characteristics of standard duty coiled spring-type straight pins made of steel or of austenitic or martensitic stainless steel, with nominal diameter, $d < (\text{Index})1 >$, from 0.8 mm to 20 mm inclusive.</p> <p>NOTE - Spring-type straight pins, coiled, heavy duty and spring type straight pins, coiled, light duty, are the subjects of ISO 8748 and ISO 8751 respectively.</p>
268.	TS EN ISO 8751 / January 2008	Spring-type straight pins - Coiled, light duty	<p>This standard specifies the characteristics of coiled light duty spring-type straight pins made of steel or of austenitic or martensitic stainless steel, with a nominal diameter, $d1$, from 1.5 mm to 8 mm inclusive.</p> <p>NOTE - Spring-type straight pins, coiled, heavy duty, and spring type straight pins, coiled, standard duty, are the subjects of ISO 8748 and ISO 8750, respectively.</p>

269.	TS EN ISO 8752 / December 2011	Spring-type straight pins - Slotted, heavy duty	This standard specifies the characteristics of slotted spring-type straight pins, made of steel or of austenitic or martensitic stainless steel, heavy duty with nominal diameter, d_1 , from 1 mm to 50 mm inclusive.
270.	TS EN ISO 8765:2011 / November 2011	Hexagon head bolts with metric fine pitch thread-Product grades A and B	<p>This standard specifies the characteristics of hexagon head bolts with metric fine pitch thread with nominal thread diameters, d, from 8 mm to 64 mm, of product grade A for nominal thread diameters, d, from 8 mm to 24 mm and nominal lengths, l, up to and including $10d$ or 150 mm, whichever is the shorter, and of product grade B for nominal thread diameters, d, over 24 mm or nominal lengths, l, over $10d$ or 150 mm, whichever is the shorter.</p> <p>If, in special cases, specifications other than those listed in this standard are required, they can be selected from existing International Standards, for example ISO 724, ISO 888, ISO 898-1, ISO 965-1, ISO 3506-1, ISO 4753 and ISO 4759-1.</p> <p>It is intended that coarse thread bolts according to ISO 4014 be the first choice.</p>
271.	TS EN ISO 10642 / December 2019	Fasteners - Hexagon socket countersunk head screws with reduced loadability	<p>This standard, specifies the characteristics of hexagon socket countersunk head screws with reduced loadability due to head design, in steel and stainless steel, with metric coarse pitch threads M2 to M20, and with product grade A.</p> <p>NOTE 1 - Other dimensional options are given in ISO 888, ISO 965-1 and ISO 4753.</p> <p>NOTE 2 - The reduced loadability (related to the countersunk head dimensions in combination with penetration of the hexagon socket specified in this document) implies a limitation of ultimate tensile load; see Table 5.</p> <p>NOTE 3 - Particular attention is needed to ensure alignment of the countersunk head with the bearing surface of the countersink in the assembly.</p>

272.	TS EN ISO 11961 / March 2020	Petroleum and natural gas industries - Steel drill pipe	<p>This 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). The requirements for PSL-1 form the basis of this standard. The requirements that define different levels of standard technical requirements for PSL-2 and PSL-3 are in Annex G.</p> <p>This standard covers the following grades of drill-pipe:</p> <ul style="list-style-type: none"> - grade E drill-pipe; - high-strength grades of drill-pipe, grades X, G and S; - enhanced H₂S resistance drill pipe, grades D and F. <p>A typical drill-pipe configuration is given, showing main elements and lengths (see Figure B.1). The main dimensions and masses of the grades of drill-pipe are given in both SI units (see Table A.1) and in USC units (see Table C.1).</p> <p>This standard can also be used for drill-pipe with tool joints not specified by ISO or API standards.</p> <p>By agreement between purchaser and manufacturer, this document can also be applied to other drillpipe body and/or tool-joint dimensions. This document lists supplementary requirements that can optionally be agreed between purchaser and manufacturer, for testing, performance verification and non-destructive examination (see Annex E).</p> <p>This document does not consider performance properties, nor performance degradation of the product when in service.</p> <p>NOTE 1 - In this standard, drill-pipe is designated by label 1, label 2, grade of material (E, X, G, S, D and F), upset type and type of rotary shouldered</p>
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			<p>connection. Designations are used for the purpose of identification in ordering.</p> <p>NOTE 2 - Reference can be made to ISO 10424-2 or API Spec 7-2 for the detailed requirements for the threading of drill-pipe tool joints.</p> <p>NOTE 3 - Reference can be made to API RP 7G for the performance properties of the drill-pipe.</p>
273.	TS EN ISO 13337 / December 2011	Spring-type straight pins - Slotted, light duty	This standard specifies the characteristics of slotted spring-type straight pins, made of steel, austenitic or martensitic stainless steel, light duty with nominal diameter, d_1 , from 2 mm to 50 mm inclusive.
274.	TS EN ISO 13500 / July 2010	Petroleum and natural gas industries- Drilling fluid materials - Specifications and tests	This 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). This standard is intended for the use of manufacturers of named products.
275.	TS EN ISO 14890 / June 2013	Conveyor belts - Specification for rubber or plastics covered conveyor belts of textile construction for general use	<p>This standard specifies requirements for rubber and/or plastics covered conveyor belting of textile construction for general surface use on flat or troughed idlers.</p> <p>This standard is not suitable or valid for light conveyor belts as described in ISO 21183-1.</p> <p>Items that are not requirements of this standard, but need to be agreed between the manufacturer and the purchaser, are included in Annex A. A list of the details intended to be supplied by the purchaser of belting with an enquiry is given in Annex B.</p>

276.	TS EN ISO 15481 / January 2003	Cross recessed pan head drilling screws with tapping screw thread	This standard specifies the characteristics of cross recessed pan head drilling screws with tapping screw threads from ST 2.9 up to and including ST 6.3.
277.	TS EN ISO 15482 / January 2003	Cross recessed countersunk head drilling screws with tapping screw thread	This standard specifies the characteristics of recessed countersunk head drilling screws with tapping screw threads from ST 2.9 up to and including 6.3.
278.	TS EN ISO 15483 / January 2003	Cross recessed raised countersunk head drilling screws with tapping screw thread	This standard specifies the characteristics of cross recessed countersunk head drilling screws with tapping screw threads from ST 2.9 up to and including ST 6.3
279.	TS IEC 60189-2 / November 2011	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 2: Cables in pairs, triples, quads and quintuples for inside installations	<p>This part of IEC 60189 is applicable to cables for inside installations, intended for the interconnection of the following:</p> <ul style="list-style-type: none"> - transmission equipment; - telecommunications equipment; - equipment for data processing. <p>NOTE - It is the responsibility of the manufacturer to establish quality assurance by quality control procedures which will ensure that the product will meet the requirements of this standard. It is not intended that a complete testing programme must be carried out on every length of conductor and cable. When the purchaser wishes to specify acceptance tests or other quality procedures, it is essential that agreement be reached between the purchaser and the manufacturer by the time of ordering.</p>
280.	TS IEC 60189-3 / January 2012	Low-frequency cables and wires with PVC insulation and PVC sheath - Part 3: Equipment wires with solid or stranded conductor wires, PVC insulated, in singles, pairs and triples	<p>This part of IEC 60189 is applicable to equipment wires with solid or stranded conductor, polyvinyl chloride (PVC) insulated, in singles, pairs and triples to be used for internal wiring of telecommunication equipment, industrial and consumer electronic equipment.</p> <p>NOTE - It is the responsibility of the manufacturer to establish quality assurance by quality control procedures which will ensure that the product will meet the requirements of this standard. It is not intended that a complete testing programme must be carried out on every length of conductor. When</p>

			the purchaser wishes to specify acceptance tests or other quality procedures, it is essential that agreement be reached between the purchaser and the manufacturer by the time of ordering.
281.	TS IEC 60502-4 / February 2014	Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m=1,2$ kV) up to 30 kV ($U_m=36$ kV) – Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m=7,2$ kV) up to 30 kV ($U_m=36$ kV)	<p>This part of IEC 60502 specifies the test requirements for type testing of accessories for power cables with rated voltages from 3.6/6 (7,2) kV up to 18/30 (36) kV, complying with IEC 60502-2.</p> <p>Accessories for special applications, such as aerial cables, submarine or ship cables or hazardous situations (explosive environments, fire-resistant cables or seismic conditions), are not included.</p> <p>It is not necessary to repeat these tests, once successfully completed, unless changes are made in the materials, design or manufacturing process which might affect the performance characteristics.</p> <p>Test methods are included in IEC 61442.</p> <p>NOTE - This standard does not invalidate existing approvals of products achieved on the basis of national standards and specifications and/or the demonstration of satisfactory service performance. However, products approved according to such national standards or specifications cannot directly claim approval to this IEC standard. It may be possible, subject to agreement between supplier and purchaser, and/or the relevant conformity assessment body, to demonstrate that conformity to the earlier standard can be used to claim conformity to this standard, provided an assessment is made of any additional type testing that may need to be carried out. Any such additional testing that is part of a sequence of testing cannot be done separately.</p>
282.	TS ISO 246 / July 2010	Rolling bearings - Cylindrical roller bearings, separate thrust collars - Boundary dimensions	This standard specifies the width, the maximum outside diameter, the bore and the bore minimum chamfer of separate thrust collars for cylindrical roller bearings in diameter series 0, 2, 3, and 4 as specified in ISO 15.

			Dimensions for overall width and other geometrical features are not specified as they are dependent on the internal design of the bearings.
283.	TS ISO 254 / April 2015	Belt drives - Pulleys - Quality, finish and balance	<p>This standard specifies the characteristics of quality which are common to all transmission pulleys. It establishes specific quality levels for the finish and balance of transmission pulleys and test pulleys.</p> <p>This standard is applicable to transmission pulleys for V-belts, V-ribbed belts, flat or synchronous belts; it does not apply to those pulleys for variable speed drives that have one or more moving flanges.</p> <p>The other characteristics of transmission pulleys can be found in the relevant International Standards.</p>
284.	TS ISO 525 / February 2021	Bonded abrasive products - Shape types, designation and marking	<p>This standard is applicable for grinding stone products (abrasive products) in general.</p> <p>NOTE 1 - Bonded abrasive products are e.g. grinding wheels, segments, sticks and stones. This standard specifies:</p> <ul style="list-style-type: none"> a) ISO type number and shape; b) dimensional symbols; c) standard profiles; d) specification; e) designation; f) marking requirements. <p>NOTE 2 - This document is general and is complemented by ISO 603 (all parts) that is applicable for dimensions, by ISO 6103 that is applicable for permissible unbalance and by ISO 13942 that is applicable for limit deviations and tolerances.</p> <p>This document is not applicable for superabrasive products and coated abrasive products.</p>

285.	TS ISO 606 / April 2021	Short-pitch transmission precision roller and bush chains, attachments and associated chain sprockets (ISO 606:2015)	<p>This standard specifies the characteristics of short-pitch precision roller and bush chains with associated sprockets suitable for the mechanical transmission of power and allied applications.</p> <p>It covers dimensions, tolerances, length measurement, preloading, minimum tensile strengths and minimum dynamic strength.</p> <p>Although Clause 5 is applied to chain sprockets for cycles and motor cycles, this standard is not applicable to their chains, which are covered by ISO 9633 and ISO 10190, respectively</p>
286.	TS ISO 1174-2 / April 2003	Assembly tools for screws and nuts - Driving squares Part 2: Driving squares for power hand socket tools	<p>This part of ISO 1175 specifies the dimensions and designation of driving squares for power socket tools.</p> <p>Manually operated power hand socket tools are given in 1174-1.</p>
287.	TS ISO 2725-1 / February 2021	Assembly tools for screws and nuts - Square drive sockets - Part 1: Hand-operated sockets	<p>This standard covers the dimensions, designation and marking of hand-operated “non-impact” square drive sockets conforming to ISO 1174-1.</p> <p>NOTE 1 - Hand-operated “non-impact” square drive sockets covered by this standard are the ones identified in ISO 1703 under reference numbers 2 2 02 01 0.</p> <p>This standard does not cover the technical specifications of the products covered. Technical specifications are given in ISO 1711-1 standard.</p>
288.	TS ISO 2725-3 / February 2021	Assembly tools for screws and nuts - Square drive sockets - Part 3: Machine-operated sockets ("non-impact")	<p>This standard specifies dimensions, designation, and marking of machine-operated “non-impact” square drive sockets.</p> <p>NOTE - Machine-operated “non-impact” square drive sockets covered by this document are the ones identified in ISO 1703 under reference numbers 2 2 02 01 0.</p>
289.	TS ISO 3315 / February 2021	Assembly tools for screws and nuts - Driving parts for hand -	<p>This standard is applicable to driving parts of hand-operated square drive socket wrenches.</p>

		operated square drive socket wrenches - Dimensions and tests	<p>NOTE - The driving parts covered by this standards are the ones identified in ISO 1703:2018 under reference No. 6 1 00 01 0 and 6 1 00 01 1, 6 1 00 03 0, 6 1 00 04 0, 6 1 00 05 0 and 6 1 00 05 1, 6 1 00 06 0 and 6 1 00 06 1, 6 1 00 09 0 as well as 6 1 00 10 0 and 6 1 00 10 1.</p> <p>This standard covers;</p> <ul style="list-style-type: none"> a) the overall dimensions; b) the minimum Rockwell hardness value for their driving squares; c) the method of torque testing; d) the minimum torsional strength values; e) the designation; f) the marking
290.	TS ISO 3317 / April 2016	Assembly tools for screws and nuts - Square drive adaptor with hexagon or cylindrical flat drive, for power socket wrenches	<p>This standard prescribes the technical specifications for square drive adaptor hexagon or cylindrical flat inserts for power socket wrenches. It applies to square drive adaptor with hexagon drive or with cylindrical flat end drive as defined in ISO 1173, and to driving squares for power socket wrenches as defined in ISO 1174-2.</p> <p>Square drive adaptors with hexagon drive for power socket wrenches are listed under number 5 2 00 02 0 in ISO 1703.</p>
291.	TS ISO 3996 / April 2008	Road vehicles - Brake hose assemblies for hydraulic braking systems used with non-petroleum - Base brake fluid	<p>This standard specifies the test procedures for, and performance requirements and marking of hydraulic brake hose assemblies to be used in hydraulic brake systems of road vehicles of which the nominal inside diameter of the hose is 3, 2 mm or 4, 8 mm.</p> <p>This standard applies to assemblies made of a hose fabricated from cord and synthetic elastomers and assembled with metal end fittings for use with non-petroleum-base brake fluids in accordance with ISO 4925.</p>
292.	TS ISO 5251 / April 2003	Stainless steel butt welding fittings	<p>This standard, specifies the dimensions, tolerances, and the generally used grades of stainless steel for butt welding bends Type 3D (90 and 180 degree) With and without straight straight ends and type 5D (90 degree) comcentric</p>

			and eccentric reducer, tees caps and stub ends with requirements as used for piping work.
293.	TS ISO 5290 / August 2015	Belt drives - Grooved pulleys for narrow V - belts - Groove sections 9N/J, 15N/J and 25N/J (effective system)	<p>This standard specifies the principal characteristics of grooved pulleys (for groove sections 9N/J, 15N/J and 25N/J) intended to take both single and joined narrow V-belts for industrial power transmission drives.</p> <p>Some background information on the series of effective diameters is given in annex A.</p> <p>NOTE - The effective width of a groove is regarded as the basic dimension of standardization in the effective system for grooves and for the corresponding narrow V-belts considered as a whole.</p>
294.	TS ISO 5291 / August 2015	Belt drives - Grooved pulleys for joined classical V-Belts - Groove sections AJ, BJ, CJ and DJ (Effective System)	<p>This standard specifies the principal characteristics of grooved pulleys (for groove sections AJ, BJ, CJ and DJ), intended to take joined classical V-belts for industrial power transmission drives.</p> <p>NOTE 1 - The effective width of a groove is regarded as the basic dimension of standardization for grooves and for the corresponding joined V-belts considered as a whole.</p> <p>NOTE 2 - The pitch line position can only be given approximately. The approximate pitch diameter of a pulley can be calculated by the following formula:</p> $d_p = d_e - 2b_e$
295.	TS ISO 6194-1 / March 2012	Rotary shaft lip-type seals incorporating elastomeric sealing elements - Part 1: Nominal dimensions and tolerances	<p>This part of ISO 6194 describes seals utilising elastomeric sealing elements. They are considered suitable for use under low-pressure conditions (see 6.1).</p> <p>This part of ISO 6194 shows seal types and examples. It also specifies the nominal dimensions and tolerances of the seals, shafts and housings, as well as a dimensional identification code.</p>

			NOTE - ISO 6194 is complementary to ISO 16589 which covers seals incorporating thermoplastic sealing elements.
296.	TS ISO 6194-4 / December 2013	Rotary shaft lip-type seals incorporating elastomeric sealing elements - Part 4: Performance test procedures	This part of ISO 6194 specifies test requirements for rotary shaft lip type seals. The tests may be used for qualification purposes. Materials quality control, dynamic testing and supplementary low temperature testing requirements are also covered.
297.	TS ISO 7041 / April 2015	Prevailing torque type hexagon nuts (with non-metallic insert), style 2 - Property classes 9 and 12	This standard specifies the characteristics of prevailing torque type hexagon nuts (with nonmetallic insert), style 2, with threads from M5 up to and including M36, in product grade A for threads up to and including M16, and product grade B for threads above M16, and with property classes 9 and 12. NOTE - The dimensions of the nuts correspond to those given in ISO 4033 plus prevailing torque feature. If other specifications are required, they can be selected from existing International Standards, e.g. ISO 261, ISO 724, ISO 898-2, ISO 965-2, ISO 2320 and ISO 4759-1.
298.	TS ISO 7375-2 / April 1999	Road vehicles - Coiled tube assemblies for air brake connection between towing and towed vehicles Part 2: Performance requirements	This part of ISO 7375 specifies the minimum requirements for coiled tube assemblies manufactured from thermoplastic tubing and with suitable end fittings. It applies to coiled tube assemblies for vehicle combinations equipped with air brake systems. This part of ISO 7375 does not apply to other thermoplastic tubing used in brake systems. The coiled tube assemblies covered by this part of ISO 7375 belongs to two possible categories: <ul style="list-style-type: none"> - tube assemblies for use up to a maximum working pressure of 1 000 kPa; - tube assemblies for use up to a maximum working pressure of 1 250 kPa;

			and within a temperature range between -40 °C and +100 °C.
299.	TS ISO 7720 / April 2015	Prevailing torque type all-metal hexagon nuts, style 2 - Property class 9	<p>This standard specifies the characteristics of prevailing torque type all-metal hexagon nuts, of style 2, with threads from M5 up to and including M36, in product grade A for threads up to and including M16, and product grade B for threads over M16, and with property class 9.</p> <p>NOTE 1 - The dimensions of the nuts, with the exception of the dimensions m_w and h_{max}, correspond to those given in ISO 4033.</p> <p>NOTE 2 - Nuts of property classes 5, 8, 10 and 12 are dealt with in ISO 7042.</p> <p>If other specifications are required, they can be selected from existing International Standards, e.g. ISO 261, ISO 724, ISO 898-2, ISO 965-2, ISO 2320 and ISO 4759-1.</p>
300.	TS ISO 8052 / September 2021	Mopeds - Direct current flasher units	<p>This standard specifies the electrical characteristics that direct current flasher units must comply with for mopeds sent for type testing.</p> <p>This standard is applied to flashers intended for use on mopeds, operating simultaneously or alternately with 6 V or 12 V electrical systems as defined in ISO 3833.</p>
301.	TS ISO 9981 / February 2021	Belt drives - Pulleys and V-ribbed belts for the automotive industry - PK profile: Dimensions	<p>This standard specifies the principal dimensional characteristics of V-ribbed pulley groove profiles, together with the corresponding endless V-ribbed belts of PK profile which are used predominantly for automotive accessory drive applications.</p> <p>This standard is not applied to the complete array of V-ribbed belts and pulleys of PH, PJ, PK, PL and PM profile for industrial and other non-automotive applications which are covered by ISO 9982. PK belt profile dimensions and tolerances are the same in both International Standards.</p> <p>6.2 and 6.3 of this standard is not applicable to elastic belts.</p>

302.	TS ISO 9982 / September 2021	Belt drives - Pulleys and V-ribbed belts for industrial applications - PH, PJ, PK, PL and PM profiles: dimensions	<p>This standard specifies the principal dimensional characteristics of V-ribbed pulley groove profiles, together with the corresponding endless V-ribbed belts, of PH, PJ, PK, PL and PM profiles which are used for general industrial applications except elastic belts.</p> <p>The PK belt was originally established for automotive accessory drive applications and ISO 9981 deals specifically with this particular field.</p>
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