# worldwide list of tube standards

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#### INTERNATIONAL

## ISO International Organization for Standardization

PO Box 56 CH-1211 Geneve 20 Switzerland

Tel (41) 22 749 01 11 - Fax (41) 22 733 34 30

Web site: www.iso.ch

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so	International Organization for Standardization
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9330 - 3	Welded steel tubes for pressure purposes - technical delivery conditions - electric resistance and induction welded unalloyed and alloyed steel tubes with specified low temperature properties
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10124	Seamless and welded (except submerged arc-welded) steel tubes for pressure purposes - ultrasonic testir for the detection of laminar imperfections
10332	Seamless and welded (except submerged arc-welded) steel tubes for pressure purposes - ultrasonic testir for the verification of hydraulic leak-tightness
10543	Seamless and hot-stretch-reduced welded steel tubes for pressure purposes - full peripheral ultrasonic thickness testing
10763	Hydraulic fluid power - plain-end, seamless and welded precision steel tubes - dimensions and nominal working pressures
10803	Design method for ductile iron pipes
11484	Steel tubes for pressure purposes - qualification and certification of non-destructive testing (NDT) personne
11496	Seamless and welded steel tubes for pressure purposes - ultrasonic testing of tube ends for the detection laminar imperfections
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11961	Petroleum and natural gas industries - steel pipes for use as drill pipe - specification
12094	Welded steel tubes for pressure purposes - ultrasonic testing for the detection of laminar imperfections in strips/plates used in the manufacture of welded tubes
12095	Seamless and welded steel tubes for pressure purposes - liquid penetrant testing
12096	Submerged arc-welded steel tubes for pressure purposes - radiographic testing of the weld seam for the detection of imperfections
13663	Welded steel tubes for pressure purposes - ultrasonic testing of the area adjacent to the weld seam for the detection of laminar imperfections
13664	Seamless and welded steel tubes for pressure purposes - magnetic particle inspection of the tube ends for the detection of laminar imperfections
13665	Seamless and welded steel tubes for pressure purposes - magnetic particle inspection of the tube body for the detection of surface imperfections

#### **NORTH AMERICA**

#### API American Petroleum Institute

1220 L Street, NW Washington, DC 20005 USA

Tel (1) 202 682 8000 Web site: www.api.org

5L	Line pipe
5LC	Corrosion resistant alloy line pipe
5LD	Corrosion resistant alloy clad or lined steel pipe
5CT	Casing and tubing
5D	Drill pipe
2B	Offshore structural steel pipe
5LCP	Coiled line pipe
5B	Threading, gaging and thread inspection of casing, tubing and line pipe threads (ANSI approved 7/12/93)
RP 5L 2	Internal coating of line pipe for non-corrosive gas transmission service
RP 5L 7	Unprimed internal fusion bonded epoxy coating of line pipe
RP 5C 7	Recommanded practice for coiled tubing operations in oil and gas well services

## ASTM American Society for Testing and Materials

100 Barr Harbor Drive West Conshohocken PA19428-2959 USA

Tel (1) 610 832 9585 - Fax (1) 610 832 9555

Web site: www.astm.org

A 53	Steel pipe, black and hot-dipped, zinc-coated, welded and seamless
A 106	Seamless carbon steel pipe for high temperature service
A 134	Electric-fusion arc-welded steel pipe (sizes NPS 16 and over)
A 135	Electric-resistance-welded steel pipe
A 139	Electric-fusion arc-welded steel pipe (NPS 4 and over)
A 161	Seamless low-carbon and carbon-molybdenum steel still tubes for refinery service
A 178	Electric-resistance welded carbon steel boiler tubes
A 179	Seamless cold drawn low carbon steel heat exchanger and condenser tubes
A 192	Seamless carbon steel boiler tubes for high-pressure service
A 200	Seamless intermediate alloy steel still tubes for refinery service
A 209	Seamless carbon-molybdenum alloy-steel boiler and superheater tubes
A 210	Seamless medium-carbon steel boiler and superheater tubes
A 213	Seamless ferritic and austenitic alloy steels boiler superheater, and heat-exchanger tubes
A 214	Electric-resistance-welded carbon steel heat-exchanger and condenser tubes

Electric-resistance-welded carbon steel boiler and superheater tubes for high-pressure service  Welded austenitic steel boiler, superheater, heat-exchanger, and condenser tubes  Electric-resistance-welded ferritic alloy-steel boiler and superheater tubes  Welded and seamless steel pipes piles
Electric-resistance-welded ferritic alloy-steel boiler and superheater tubes
, ,
Welded and seamless steel pipes piles
Copper brazed steel tubing
Seamless and welded ferritic/martensitic stainless steel tubing for general service
Seamless and welded austenitic stainless steel tubing for general service
Seamless and welded austenitic stainless steel sanitary tubing
Seamless austenitic chromium-nickel steel still tubes for refinery service
Seamless and welded austenitic stainless steel pipes
Seamless and welded steel pipe for low-temperature service
Seamless and welded carbon and alloy steel tubes for low-temperature service
Seamless ferritic alloy steel pipe for high-temperature service
Electric fusion welded austenitic chromium nickel alloy steel pipe for high temperature service
Carbon and ferritic alloy steel forged and bored pipe for high-temperature service
Seamless austenitic steel pipe for high temperature central station service
Metal-arc-welded steel pipe for use with high-pressure transmission systems
Welded large diameter austenitic steel pipe for corrosive or high-temperature service
Seamless and electric-welded low-alloy steel tubes
Centrifugally cast ferritic alloy steel pipe for high temperature service
Austenitic steel forged and bored pipe for high-temperature service
General requirements for carbon, ferritic alloy, and austenitic alloy steel tubes
Centrifugally cast austenitic steel pipe for high temperature service
Cold formed welded and seamless carbon steel structural tubing in rounds and shapes
Hot formed welded and seamless carbon steel structural tubing
Seamless stainless steel mechanical tubing
Cold drawn buttweld carbon steel mechanical tubing
Electric-resistance-welded carbon and alloy steel mechanical tubing
Seamless carbon and alloy steel mechanical tubing
Plain end seamless and electric-resistance-welded steel pipe for high-pressure pipe-type "cable circuits"
Seamless carbon steel pipes for atmospheric and lower temperatures
General requirements for specialized carbon and alloy steel pipe
Electric resistance-welded coiled steel tubing for gas and fuel oil lines
Welded stainless steel mechanical tubing
Seamless cold drawn carbon steel feedwater heater tubes
Electric-resistance-welded low-carbon steel pipe for the chemical industry
Seamless and welded carbon steel water-well pipe
Steel tubes, low-carbon, tapered for structural use
Hot formed welded and seamless high-strength low-alloy structural tubing
Seamless and welded austenitic stainless steel tubing (small-diameter) for general service
Centrifugally cast carbon steel pipe for high temperature service
Electric-fusion-welded steel pipe for atmospheric and lower temperatures
Electric-fusion-welded steel pipe for high-pressure service at moderate temperatures
Welded austenitic stainless steel feedwater heater tubes
Carbon and alloy steel pipes, electric-fusion-welded for high-pressure service at high temperatures
Practices for packaging, marking, and loading methods for steel products for domestic shipment  High strength low-alloy welded and seamless steel pipe

STM	American Society for Testing and Materials
A 771	Austenitic stainless steel tubing for breeder reactor core components
A774	As welded wrought austenitic stainless steel fittings for general corrosive service at low and moderate temperature
A 778	Welded, unannealed austenitic stainless steel tubular products
A 787	Electric-resistance-welded metallic coated carbon steel mechanical tubing
A 789	Seamless and welded ferritic/austenitic stainless steel tubing for general service
A 790	Seamless and welded ferritic/austenitic stainless steel pipe
A 795	Black and hot-dipped zinc-coated (galvanized) welded and seamless steel pipe for fire protection use
A 803	Welded ferritic stainless steel feed water heater tubes
A 813	Single or double welded austenitic stainless steel pipe
A 814	Cold worked welded austenitic stainless steel pipe
A 822	Seamless cold drawn carbon steel tubing for hydraulic system service
A 826	Austenitic and ferritic stainless steel duct tubes for breeder reactor core compenents
A 847	Cold formed welded and seamless high strength, low alloy structural tubing with improved atmospheric corrosion resistance
A 851	High frequency induction welded, unannealed, austenitic steel condenser tubes
A 865	Steel pipe, black and hot-dipped, zinc-coated welded and seamless
A 872	Centrifugally cast ferritic/austenitic stainless steel pipe for corrosive environments
A 908	Stainless steel needle tubing
A 928	Ferritic/austenitic duplex stainless steel pipe electric fusion welded with addition of filler metal
B 111	Standard specification for copper and copper-alloy seamless condenser tubes and ferrule stock
B 161	Nickel seamless pipe and tube
B 163	Seamless nickel and nickel alloy condenser and heat exchanger tubes
B 165	Nickel copper alloy (UNS N04400)* seamless pipe and tube
B 167	Nickel chromium iron alloys (UNS N06600, N06601, and N06690) seamless pipe and tubes
B 337	Seamless and welded titanium and titanium alloy pipe
B 338	Seamless and welded titanium and titanium alloy tubes for condensers and heat exchangers
B 407	Nickel iron chromium alloy seamless pipe and tubes
B 423	Nickel iron chromium molybdenum copper alloy (UNSN08825 and N08221) seamless pipe and tube
B 444	Nickel chromium molybdenum columbium alloys, pipe and tubes
B 535	Nickel iron chromium silicon alloys (UNS N08330) seamless and welded pipe
B 622	Seamless nickel and nickel-cobalt alloy pipe and tube
B 626	Standard specification for welded nickel and nickel-cobalt alloy tube
B 668	Seamless tubes
B 673	UNS N08904, UNS N08925, and UNS N08926 welded pipe for general corrosion applications
B 674	Standard Specification for UNS N08904, UNS N08925, and UNS N08926 welded tube
B 676	Standard specification for UNS N08367 welded tube
B 677	UNS N08904 and UNS N08925 seamless pipe and tube
B 704	Welded UNS N06625 and UNS N08825 alloy tubes
B 705	Nickel alloy (UNS N06625 AND N08825) welded pipe
B 729	Seamless pipe and tube
F 1083	Pipe, steel, hot-dipped zinc-coated (galvanized) welded for fence structures

#### AWWA American Water Works Association

6666 West Quincy Avenue Denver, Colorado 80235 USA

Tel (1) 303 794 7711

Web site: www.awwa.org

Steel water pipe, 6 inches (150 mm) and larger
Coal tar protective coatings and linings for steel water pipelines - enamel and tape - hot applied
Cement-mortar protective lining and coating for steel water pipe - 4 in. (100mm) and larger - shop applied
Liquid-epoxy coating systems for the interior and exterior of steel water pipelines
Fusion-bonded epoxy coating for the interior and exterior of steel water pipelines
Tape coating systems for the exterior of steel water pipelines
Underground installations of polyvinyl chloride (PVC) pressure pipe and fittings for water

#### ANSI American National Standards Institute

11 West 42nd Street 13th floor New York, N.Y. 10036 USA

Tel (1) 212 642 49 00 - Fax (1) 212 398 00 23

Web site: www.ansi.org

B 1.20.1	Pipe threads, general purpose (inch)
B 2.1	Specification for welding procedure and performance qualification
B 16.25	Butt welding ends
B 31.1	Power piping
B 31.3	Process piping
B 31.4	Liquid transportation systems for hydrocarbons, liquid petroleum gas, anhydrous ammonia, and alcohols
B 31.8	Gas transmission and distribution piping systems
B 36.10	Welded and seamless wrought steel pipe
B 36.19	Stainless steel pipes
C 80.1	Rigid steel conduits - zinc coated
C 80.3	Electrical metallic tubing - zinc coated
C 80.6	Intermediate metal conduit - zinc coated

#### UL Underwriters Laboratories

333 Pfingsten Road Northbrook, IL 60062-2096 USA

Tel (1) 847 272 8800 - Fax (1) 847 272 8129

Web site: www.ul.com

6	Rigid metal conduits
797	Electrical metallic tubing
1242	Intermediate metal conduit

#### CSA Canadian Standards

45 O'Connor Street, Suite 1200 Ottawa ON K1P 6N7 Canada

Tel (1) 613 238 3222 - Fax (1) 613 995 4564

Web site: www.scc.ca

Z 245 - 1 Steel Line Pipe

#### SAE Society of Automotive Engineers

400 Commonwealth Drive Warrendale, PA 15096-0001 USA

Tel (1) 724 776 4841 - Fax (1) 724 776 5760

Web site: www.sae.org

J 525	Welded and Cold Drawn Low-Carbon Steel Tubing Annealed for Bending and Flaring
J 526	Welded Low-Carbon Steel Tubing
J 527	Brazed double wall low-carbon steel tubing
AMS 5645	Steel bars, forgings, tubing, and rings, corrosion and heat resistant 18CR - 10NI - 0.40TI (SAE 30321) solution heat treated
AMS 5646	Steel, corrosion and heat resistant, bars, wire, forgings, tubing, and rings 18Cr - 11Ni - 0.60(Cb -Ta) (SAE 30347) solution heat treated
AMS 5648	Steel bars, forgings, tubing, and rings, corrosion and heat resistant 17CR - 12NI - 2.5MO (SAE 30316) solution heat treated
AMS 5651	Steel bars, forgings, tubing, and rings, corrosion and heat resistant 25CR - 20NI (SAE 30310) solution heat treated
AMS 5653	Steel bars, forgings, tubing, and rings, corrosion and heat resistant 17CR - 12NI - 2.5MO (SAE 30316L) solution heat treated
AMS 5732	Steel bars, wire, forgings, tubing, and rings, corrosion and heat resistant 15CR - 25.5NI - 1.2MO - 2.1TI - 0.006B - 0.30V consumable electrode melted 1800°F (982°C) solution and precipitation heat treated
AMS 6415	Bars, forgings, and tubing 0.80Cr 1.8Ni 0.25Mo (0.38-0.43C)

#### **LATIN AMERICA**

#### NBR Brazilian Standards

Av. 13 de Maio, no 13, 28o andar 20003-900 - Rio de Janeiro-RJ Brazil

Tel (55) 21 210 3122 - Fax (55) 21 220 1762

Web site: www.abnt.org.br

119 Cold rolled seamless low carbon steel tubes for heat exchangers and condensers 120 Manganese tubes electrically welded carbon steel for boilers 121 Electrically welded carbon steel tubes for boilers and super heaters for use under high-pressure conditions 122 Carbon and alloy steel tubes electrically welded for mechanical applications 123 Steel plating for tubes used for oil and gas fluid transfer 124 Carbon-molybdenum seamless steel tubes for boilers and super heaters 125 Carbon-molybdenum seamless steel tubes for boilers and super heaters 126 Steel tubes classified by their method of application 127 Steel tubes dassified by their method of application 128 Tubular steel products 129 Shape and dimension superficial and internal deficiencies, in tubular steel products 129 Carbon steel tubes for withworth threading, for common use in fluid conduction 129 Steel-chrome-molybdenum and chrome-molybdenum-silico seamless tubes for refinery furnaces 129 Steel-chrome-molybdenum and chrome-molybdenum-silico seamless tubes for refinery furnaces 129 Steel-chrome-molybdenum and chrome-molybdenum-silica cold finished seamless tubes, for heat exchangers 129 Steel-chrome-molybdenum and chrome-molybdenum-silica cold finished seamless tubes, for heat exchangers 129 Steel-chrome-molybdenum and chrome-molybdenum-silica cold finished seamless tubes, for heat exchangers 129 Steel tubes for conduction with an ANSI/ASME B1.20.1 thread - basic dimensions 129 Carbon steel and alloy ferritic and austenitic steel tubes, seamless or welded, general requirements 129 Medium carbon seamless steel tubes for bigh pressure boilers and super heaters 129 Medium carbon seamless steel tubes for bigh pressure boilers and super heaters 129 Carbon steel electrically welded tubes for bigh pressure boilers and super heaters 129 Carbon steel electrically welded tubes for bigh pressure boilers and super heaters 129 Carbon steel electrically welded tubes for bigh pressure boilers and super heaters 129 Carbon steel electrically welded tubes for bigh press	70	Carbon and alloy steel seamless tubes for mechanical applications
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5598 Rigid carbon steel electrical conduit with protective coating and NBR 6414 thread 5599 Precision made welded carbon steel tubes 5602 Steel tubes, seamless or welded, for low temperatures 5603 Ferritic seamless steel tubes for high temperature fluid conduction 5605 Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction) 5622 Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations 5686 Carbon steel and alloy steel tubes for refinery furnaces - welded joints 5689 Materials for asphalt base coating used in steel tubes for water supply conduction 5690 Preparation of asphalt enamel used for steel tubes coating 5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5596	Carbon steel electrically welded tubes for high pressure boilers and super heaters
5599 Precision made welded carbon steel tubes 5602 Steel tubes, seamless or welded, for low temperatures 5603 Ferritic seamless steel tubes for high temperature fluid conduction 5605 Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction) 5622 Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations 5686 Carbon steel and alloy steel tubes for refinery furnaces - welded joints 5689 Materials for asphalt base coating used in steel tubes for water supply conduction 5690 Preparation of asphalt enamel used for steel tubes coating 5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5597	Rigid carbon steel threaded electrical conduit and accessories with protective coating
Steel tubes, seamless or welded, for low temperatures  Ferritic seamless steel tubes for high temperature fluid conduction  Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction)  Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations  Carbon steel and alloy steel tubes for refinery furnaces - welded joints  Materials for asphalt base coating used in steel tubes for water supply conduction  Preparation of asphalt enamel used for steel tubes coating  Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5598	Rigid carbon steel electrical conduit with protective coating and NBR 6414 thread
Ferritic seamless steel tubes for high temperature fluid conduction  Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction)  Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations  Carbon steel and alloy steel tubes for refinery furnaces - welded joints  Materials for asphalt base coating used in steel tubes for water supply conduction  Preparation of asphalt enamel used for steel tubes coating  Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5599	Precision made welded carbon steel tubes
Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction)  Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations  Carbon steel and alloy steel tubes for refinery furnaces - welded joints  Materials for asphalt base coating used in steel tubes for water supply conduction  Preparation of asphalt enamel used for steel tubes coating  Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5602	Steel tubes, seamless or welded, for low temperatures
Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations Carbon steel and alloy steel tubes for refinery furnaces - welded joints  Materials for asphalt base coating used in steel tubes for water supply conduction Preparation of asphalt enamel used for steel tubes coating  Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5603	Ferritic seamless steel tubes for high temperature fluid conduction
5686 Carbon steel and alloy steel tubes for refinery furnaces - welded joints 5689 Materials for asphalt base coating used in steel tubes for water supply conduction 5690 Preparation of asphalt enamel used for steel tubes coating 5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5605	Carbon steel and alloy steel tubes, seamless or welded, for low temperature use (except fluid conduction)
5689 Materials for asphalt base coating used in steel tubes for water supply conduction 5690 Preparation of asphalt enamel used for steel tubes coating 5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5622	Carbon steel tubes with helical seam for use in water, air and low-pressure steam in industrial installations
5690 Preparation of asphalt enamel used for steel tubes coating 5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5686	Carbon steel and alloy steel tubes for refinery furnaces - welded joints
5922 Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles	5689	Materials for asphalt base coating used in steel tubes for water supply conduction
	5690	Preparation of asphalt enamel used for steel tubes coating
Round steel tubes - flattening test	5922	Steel tubes for fuel injection in diesel engines for use in road vehicles, tractors and similar vehicles
	6154	Round steel tubes - flattening test

NBR	Brazilian Standards
6205	Round steel tubes - flanging test
6206	Round steel tubes - widening test
6316	Chrome-nickel-steel seamless tubes for refinery furnaces
6321	Seamless carbon steel tubes for the conduction of high temperature fluids
6338	Round steel tubes - bending test
6358	Welded or seamless carbon steel and alloy steel tubes for thermal exchange (boilers, exchangers and furnaces) - basic dimensions
6591	Welded round, square, rectangular and special carbon steel tubes for industrial use
6640	Welded round carbon steel tubes, semi-tube smoothing test.
7433	Tubular steel products - determination of mechanical properties in tension
7543	Seamless or welded, austenitic stainless steel tubes for conduction
7734	Chrome molybdenum steel 4130 for seamless tubes of aeronautical quality
8261	Round, square or rectangular tubular section of cold rolled carbon steel, seamless or welded, for structural use
8476	Precision made seamless steel tubes
8860	Steel tubes - discontinuity detection by parasite currents (eddy - current) with magnetic saturation
8861	Stainless, austenitic and similar alloy steel tubes - discontinuity detection by parasite currents (eddy - current) without magnetic saturation
9791	Flux velocity in steel tubes for naval construction
9797	Electrically welded carbon steel tubes for water supply conduction
9914	Plain end steel tubes for elastic joint
9915	Rubber sealing ring for steel tubes and connections with elastic joint
10252	Ferritic and austenitic seamless alloy steel tubes for boilers super heaters and heat exchangers
10515	Internal coating with cement mortar for carbon steel tubes and fittings
11745	Coal tar based material for the coating of steel tubes used for water supply
11796	Zinc coated steel tubes, PN 150, with a rapid coupling joint for irrigation
12015	Rapid coupling elastic joint for zinc coated steel tubes PN 150 for irrigation - performance check
12016	Zinc coated steel tubes, PN 150, with a rapid coupling joint for irrigation - determination of resistance to short term internal hydrostatic pressure
13061	Plain end steel tubes with elastic joint and nominal diameter between 700 mm and 1200 mm
13222	Application of asphalt enamel in steel tubes and parts used for water supply
13780	Application of a coal based tar enamel in steel tubes and parts used for water supply

#### NOM Mexican Bureau of Norms

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B 10	Black and hot-dipped galvanized welded carbon steel tubes for general service
B 056	Siderurgical industry - Flexible metal conduit
B 064	Cast iron soil pipe and fittings
B 137	Electric resistance-welded carbon steel tubes for low-pressure boilers.
B 177	Black and hot-dipped galvanized welded carbon steel tubes

IOM	Mexican Bureau of Norms
B 199	Cold formed welded carbon steel structural tubing in rounds and shapes
B 200	Hot formed welded carbon steel structural tubes with a round or rectangular section
B 208	Steel tubes for the protection of electric cables (conduit) - heavy type
B 209	Steel tubes for the protection of electric cables (conduit) - semi-heavy type
B 210	Steel tubes for the protection of electric cables (conduit) - light and semi-light type
C 012	Fiber reinforced - Cement - Pressure pipes - specifications
C 028	Different forms to expand automotive tubing
C 340	Building industry - prestressed concrete pipes - water sampling for analysis and evaluation of potentially agresive parameters to the pipeline
D 037	Seamless steel fuel injection tubes used in the automotive industry
E 145	Plastic industry - PVC piping unplasticized poly (vinyl chloride) (PVC) pipes for pressure water supply - english series - specifications
W 019	Tube - brass
W 028	Lead, cadmium and zinc pipes - test method
W 123	Copper and copper alloys products - connections and pipelines - hydrostatic test
W 124	Copper and copper alloys products - connections and pipelines - pneumatic test

#### **COVENIN** Venezuelian Commission on Industrial Standards

Avda. Andrés Bello-Edf. Torre Fondo Común Piso 11 y 12 51116, Sabana Grande Caracas 1050 Venezuela

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11	Galvanized pipe for electrical installations
538	Galvanized rigid steel tubes (conduit) for electrical installations
843	Seamless or welded carbon steel tubes for general service in pressurized fluid transportation
1478	Line tubing for general service in the petroleum industry
2063	Cold formed welded and seamless carbon steel structural tubing in rounds and shapes
2541	Casing and production tubing for general service in the petroleum industry
2577	Galvanized steel intermediate metallic tubing for electrical installations
2585	Electric resistance-welded carbon steel tubes for exhaust pipe manufacture for passenger and light commercial vehicles
3030	Seamless and welded carbon, ferritic alloy and austenitic alloy steel tubes. General requirements
3335	Black and hot-dipped galvanized seamless and welded, heavy carbon steel tubes
3336	Black and hot-dipped galvanized seamless and welded, carbon steel tubes for general service

#### IRAM Argentinian Standards Institute

Peru 552/556 1068 Buenos Aires Argentina

Tel (54) 11 4345 6606 - Fax (54) 11 43 45 34 68

Web site: www.iram.com.ar

2592 Electric resistance welded pipe

IAS U 500 - 25 Steel fluid transportation tubes for general service

IAS U 500 - 26 Black and hot-dipped galvanized seamless and welded, carbon steel tubes for fluid transportation

#### NAG Argentinian Standards

150 Steel pipes for gas transportation in internal installations

#### **EUROPE**

## EN European Comittee for Standardization

36 rue de Stassart B-1050 Bruxelles Belgium

Tel (32) 2 550 08 11 - Fax (32) 2 550 08 19

Web site: www.cenorm.be

39	Steel tubes for scaffolding
253	Preinsulated bonded pipe systems for underground hot water networks - pipe assembly of steel service pipes, polyurethane thermal insulation and outer casing of polyethylene
448	Preinsulated bonded pipe systems for underground hot water networks - fitting assemblies of steel service pipes, polyurethane thermal insulation and outer casing of polyethylene
489	Preinsulated bonded pipe systems for underground hot water networks - joint assembly for steel service pipes, polyurethane thermal insulation and outer casing of polyethylene
545	Ductile iron, pipes, fittings, accessories and their joints for water pipelines - requirements and test methods
598	Ductile iron pipes, fittings, accessories and their joints for sewerage application - requirements and test methods
640	Reinforced concrete pressure pipes and distributed reinforcement concrete pressure pipes (non-cylinder type), including joints and fittings
641	Reinforced concrete pressure pipes, cylinder type, including joints and fittings
642	Prestressed concrete pressure pipes, cylinder and non-cylinder, including joints, fittings and specific requirements for prestressing steel for pipes
969	Ductile iron pipes, fittings accessories and their joints for gas pipelines - requirements and test methods
1057	Copper and copper alloys - seamless, round copper tubes for water and gas in sanitary and heating applications
1127	Stainless steel tubes - dimensions, tolerances and conventional masses per unit length
9455 - 12	Soft soldering fluxes - test methods - steel tube corrosion test
10208	Steel pipes for pipelines for combustible fluids - technical delivery conditions
10208 - 1	Steel pipes for pipelines for combustible fluids - technical delivery conditions - pipes of requirement class A
10208 - 2	Steel pipes for pipelines for combustible fluids - technical delivery conditions - pipes of requirement class B
10210 - 1/2	Hot finished structural hollow sections of non-alloy and fine grain structural steel
10210 - 1	Hot finished structural hollow sections of non-alloy and fine grain structural steels - technical delivery requirements
10210 - 2	Hot finished structural hollow sections of non-alloy and fine grain structural steels - tolerances, dimensions and sectional properties
10216 - 1	Seamless steel tubes for pressure purposes
10216 - 2	Seamless steel tubes for pressure purposes - technical delivery conditions - unalloyed and alloyed steels with specified elevated temperature properties
10216 - 4	Seamless steel tubes for pressure purposes - technical delivery conditions - unalloyed and alloyed steels with specified low temperature properties
10216 - 5	Seamless steel tubes for pressure purposes - stainless steel tubes
10217 - 1	Welded steel tubes for pressure purposes - technical delivery conditions - unalloyed steels with specified room temperature properties  Carbon steel tubes suitable for welding or threading
10217 - 2	Welded steel tubes for pressure purposes - technical delivery conditions - unalloyed and alloyed steels with specified elevated temperature properties
10217 - 4	Welded steel tubes for pressure purposes - technical delivery conditions - ERW unalloyed and alloyed steels with specified low temperature propertie
10217 - 5	Welded steel tubes for pressure purposes - technical delivery conditions - submerged arc welded unalloyed and alloyed steels with specified elevated temperature properties
10217 - 7	Welded steel tubes for pressure purposes - technical delivery conditions - stainless steels

EN	European Comittee for Standardization
10219 - 1/2	Cold formed welded structural hollow sections of non-alloy and fine grain steels
10219 - 1	Cold formed welded structural hollow sections of non-alloy and fine grain steels - technical delivery condition
10219 - 2	Cold formed welded structural hollow sections of non-alloy and fine grain steels - tolerances, dimensions and sectional properties
10220	Seamless and welded steel tubes - dimensions and masses per unit length
10224	Steel pipes, joints and fittings for the conveyance of aqueous liquids including potable water
10225	Weldable structural steels for fixed offshore structures
10232	Metallic materials - tubes (in full section) - bend test
10233	Metallic materials - tubes - flattening test
10234	Metallic materials - tubes - drift expanding test
10235	Metallic materials - tubes - flanging test
10236	Metallic materials - tubes - ring expanding test
10237	Metallic materials - tubes - ring tensile test
10240	Internal and/or external protective coatings for steel tubes - specification for hot dip galvanized coatings applied in automatic plants
10246 - 1	Non destructive testing of steel tubes - automatic electromagnetic testing of seamless and welded (except submerged arc welded) ferromagnetic steel tubes for verification of hydraulic leak-tightness
10246 - 4	Non destructive testing of steel tubes - automatic full peripheral magnetic transducer/flux leakage testing of seamless ferromagnetic steel tubes for the detection of transverse imperfections
10246 - 5	Non destructive testing of steel tubes - automatic full peripheral magnetic transducer/flux leakage testing of seamless and welded (except submerged arc welded) ferromagnetic steel tubes for the detection of longitudinal emperfections
10246 - 6	Non destructive testing of steel tubes - automatic full peripheral ultrasonic testing of seamless steel tubes for the detection of transverse imperfections
10246 - 7	Non destructive testing of steel tubes - automatic full peripheral ultrasonic testig of seamless and welded (except submerged arc welded) steel tubes for the detection of longitudinal imperfections
10246 - 8	Non destructive testing of steel tubes - automatic ultrasonic testing of the weld seam of electric resistance and induction welded steel tubes for the detection of longitudinal imperfections
10246 - 9	Non destructive testing of steel tubes - automatic ultrasonic testing of the weld seam of submerged arcwelded steel tubes for the detection of longitudinal and/or transverse imperfections
10246 - 10	Non destructive testing of steel tubes - radiographic testing of the weld seam of submerged arc-welded stee tubes for the detection of imperfections
10246 - 14	Non destructive testing of steel tubes - automatic ultrasonic testing for the detection of laminal imperfections for seamless and welded (except submerged arc-welded) steel tubes
10246 - 15	Non destructive testing of steel tubes - automatic ultrasonic testing of strip/plate used in the manufacture of welded steel tubes for the detection of laminar imperfections
10246 - 16	Non destructive testing of steel tubes - automatic ultrasonic testing of the area adjacent to the weld seam of welded steel tubes for the detection of laminal imperfections
10246 - 17	Non destructive testing of steel tubes - ultrasonic testing of tube ends of seamless and welded steel tubes for the detection of laminar imperfections
10246 - 18	Non destructive testing of steel tubes - magnetic particle inspection of the tube ends for the detection of laminar imperfections of the detection of seamless and welded steel tubes
10255	Carbon steel tubes suitable for welding or threading
10256	Non destructive testing of steel tubes - qualification and competence of levels 1 and 2 non destructive testing personnel
10297 - 1	Steel tubes for general mechanical applications
10305 - 1	Precision steel tubes
11960	Petroleum and natural gas industries - steel pipes for use as casing or tubing for wells
11961	Petroleum and natural gas industries - steel pipes for use as drill pipes - specification

#### **WESTERN EUROPE**

#### DIN German Standards Institute

Burggrafenstrasse 6 D-10787 Berlin Germany

Tel (49) 30 26 01 0 - Fax (49) 30 26 01 12 31 ; (49) 30 26 28 125 (Information dept.)

28 125 (Information dept.) Web site: www.din.de

1263	Lead waste pipes and bends for drainage systems
1615	Welded circular unalloyed steel tubes not subject to special requirement - technical delivery conditions
1626	Welded circular unalloyed steel tubes subject to special requirements - technical delivery conditions
1628	High performance welded circular unalloyed steel tubes - technical delivery conditions
1629	Seamless circular unalloyed steel tubes subject to special requirements - technical delivery conditions
1630	High performance seamless circular unalloyed steel tubes - technical delivery conditions
1651	Free cutting steels - technical conditions of delivery
1754 - 1	Copper tubes - seamless drawn, dimension ranges and coordination of tolerances
1754 - 2	Copper tubes - seamless drawn, preferred dimensions for general purposes
1754 - 3	Copper tubes - seamless, preferred dimensions for pipelines
1755 - 1	Copper wrought alloy tubes - seamless drawn - dimension ranges and coordination of tolerances
1755 - 2	Copper wrought alloy tubes drawn - preferred dimensions for general purposes
1755 - 3	Copper wrought alloy tubes, seamless drawn - preferred dimensions for pipelines
1785	Wrought copper and copper alloy tubes for condensers and heat axchangers
2391	Steel seamless precision tubes
2391 - 1/2	Seamless precision steel tubes
2393 - 1/2	Welded precision steel tubes
2394 - 1/2	Welded and sized precision steel tubes
2395 - 1/2/3	Rectangular and square welded precision steel tube or hollow sections
2395 - 1	Rectangular and square welded steel hollow sections - dimensions
2395 - 2	Rectangular and square welded precision steel tube - technical terms of delivery for general use
2395 - 3	Rectangular and square electric-welded precision steel tubes - dimensions and technical conditions of delivery for tubes to be used in motor vehicle construction
2410 - 1	Tubes - general review of standards for steel tubes
2413 - 1/2	Design of steel pressure pipes
2440	Steel tubes medium-weight suitable for screwing
2441	Steel tubes heavy-weight suitable for screwing
2442	Steel tubes of specified quality suitable for screwing; nominal pressure 1 to 100
2444	Zinc coating on steel tubes, quality standard for hot dip galvanizing of steel tubes for installation purposes
2445 - 1/2	Seamless steel tubes for dynamic loads
2445 - 1	Seamless steel tubes for dynamic loads - hot finished tubes, nominal pressure 100 to 400
2445 - 2	Seamless steel tubes for dynamic loads - cold drawn tubes, nominal pressures 64 to 400
2448	Seamless steel pipes and tubes - dimensions, conventional masses per unit length
2449	Seamless steel tubes in ST 00, dimensions and range of application
2458	Welded steel pipes and tubes, dimensions, conventional masses per unit length

DIN	German Standards Institute
2470 - 1/2	Steel gas pipelines - Part 1 : for permissible working pressures up to 16 bar - pipes and fittings - Part 2 : for permissible working pressures exceeding 16 bar - requirements for pipeline components
2470 - 1	Steel gas pipelines for permissible working pressures up to 16 bar - pipes and fittings
2559	Edge preparation for welding - weld preparation inside diameter of steel pipes
2614	Cement mortar linings for ductile iron and steel pipes and fittings - application, requirements and testing
2916	Bending radi for seamless and welded steel tubes - design sheet
2917	Seamless steel tubes for superheated steam pipelines and headers
2999-1/6	Pipe threads for tubes and fittings
4427	Steel tubes for falsework and working scaffolds - requirements, tests (german version)
4922 - 1	Steel filter pipes for drilled wells with slot perforation and fisching (butt strap joint)
4922 - 2	Steel filter pipes for drilled wells with screwed connection DN 100 to DN 500
4922 - 3	Steel filter pipes for drilled wells - flanged connection, NW 500 to NW 1000 (Nominal Diameter 500 to 1000)
4927	DN 50 to DN 200 steel flanged well tubing
4930	Pipes for use in freezing shaft sinking - dimensions and technical delivery conditions
8563	Quality assurance in welding operations
11850	Stainless steel tubes for the food industry, dimensions, materials
14462 - 1/2	Water conduit for fire extinguishing
14462 - 1	Water conduit for fire extinguishing - definition of terms, diagrammatic views
14462 - 2	Water conduit for fire extinguishing - dry rising mains, PN 16, wired permanently in buildings
17118	Cold rolled steel sections - technical conditions of delivery
17121	Seamless circular steel tubes for structural steel work - technical delivery conditions
17124	Seamless circular fine grain steel tubes for structural steel work - technical delivery conditions
17173	Seamless circular tubes made from steels with low temperature toughness - technical delivery conditions
17174	Welded circular tubes made from steel with low temperature toughness - technical delivery conditions
17175	Seamless tubes of heat-resistant steels - technical conditions of delivery
17176	Seamless circular steel tubes for hydrogen service at elevated temperatures and pressures - technical delivery conditions
17177	Electric pressure-welded steel tubes for elevated temperatures - technical conditions of delivery
17178	Welded circular fine grain steel tubes subject to special requirements - technical delivery conditions
17179	Seamless circular fine grain steel tubes subject to special requirements - technical delivery conditions
17204	Seamless circular tubes made from steels for quenching and tempering - technical delivery conditions
17455	General purpose welded circular stainless steel tubes - technical delivery conditions
17456	General purpose seamless circular stainless steel tubes - technical delivery conditions
17457	Welded circular austenitic stainless steel tubes subject to special requirements - technical delivery conditions
17458	Seamless circular austenitic stainless steel tubes subject to special requirements - technical delivery conditions
17459	Seamless circular high-temperature austenitic steel tubes - technical delivery conditions
17671 - 2	Tubes of copper and wrought copper alloys - technical conditions of delivery
17679	Wrought copper and copper alloy tubes with rolled fins for use in heat exchangers
17751	Nickel and nickel alloy tubes - special properties
17861	Seamless circular titanium and titanium alloy tubes
19522 - 1	Cas iron spigot (SML) drainpipes and fittings - dimensions
19522 - 2	Cas iron spigot (SML) drainpipes and fittings - technical delivery conditions
19530 - 1	Steel socket pipes and fittings for sewers - dimensions
19530 - 2	Steel socket pipes and fittings for sewers - technical delivery conditions
28179	Steel U-tubes for tubular heat exchangers - technical delivery conditions
28180	Seamless steeltubes for tubular heat exchangers - dimensions, dimensional deviations and materials
28181	Welded steel tubes for tubularheat exchangers - dimensions, dimensional deviations and materials
28500	Cast iron pressure pipes and special casting - technical conditions of delivery

DIN	German Standards Institute
30670	Polyethylene coatings of steel pipes and fittings - requirements and testing
30671	Thermoset plastic coatings for buried steel pipes
30672	Coatings of corrosion protection tapes & heat shrinkable material for underground pipelines
30672 - 1	Coatings of corrosion protection tapes and heat shrinkable material for pipeline for operational temperatures up to 50°C
30673	Bitument coatings & linings for steel pipes, fittings & vessels
30674 - 1	Coating of ductile cast iron pipes - polyethylene coating
30674 - 2	Cement mortar coating for ductile iron pipes - requirements and testing
30674 - 3	Coating of ductile cast iron pipes - zinc coating with protective covering
30674 - 4	Coating of ductile cast iron pipes - bitumen coating
30674 - 5	External protection of ductile cast iron pipes - polyethylene sleeving
30678	Polypropylene coatings for steel pipes
40020	Conduit for electrical wiring, screwed steel conduit, plain conduit, couplers
40430	Steel conduit thread - dimensions
54141 - 1	Non destructive testing - eddy current testing of pipes and tubes - general remarks on testing using concentric test coils and the single-frequency method
54141 - 2	Non-destructive testing - eddy current testing of pipes and tubes - reference method for the determination and calibration of the properties of an eddy current testing system using concentric test coils
54141 - 3	Non-destructive testing - eddy current testing of pipes and tubes - procedure
59370	Steel sections - bright square edge angles - dimensions, permissible deviations, weights
59413	Cold rolled steel sections - permissible variations on dimensions, form and weight
59755	Nickel and nickel alloy tubes - dimensions

## BS British Standards

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Web site: www.bsi.org.uk

21	Pipe threads
31	Steel conduit and fittings for electrical wiring
534	Steel pipes, joints and specials for water and sewage
729	Hot dip galvanized coatings on iron and steel articles
778	Steel pipes and joints for hydraulic purposes
806	Design and construction of ferrous piping installations for and in connection with land boilers
879 - 1	Steel tubes for casing - water well casing
879 - 2	Thermoplastics tubes for casing and slotted casing - water well casing
970	Specification for wrought steels for mechanical and allied engineering purposes
1139 - 1/1.1	Metal scaffolding - tubes - steel tube
1139 - 1/1.2	Metal scaffolding - tubes - aluminium tube
1387	Screwed and socket steel tubes and tubulars and for plain end steel tubes suitable for welding or for screwing to BS 21 pipe threads
1615	Method for specifying anodic oxidation coatings on aluminium and its alloys
1717	Steel tubes for cycle and motorcycle purposes
3059 - 1/2	Steel boiler and superheater tubes

SS	British Standards
3059 - 1	Steel boiler and superheater tubes - low tensile carbon steel tubes without specified elevated temperature properties
3059 - 2	Steel boiler and superheater tubes - carbon, alloy and austenitic stainless steel tubes with specified elevated temperature properties
3074	Nickel and nickel alloys - seamless tubes
3600	Dimensions and masses per unit length of welded and seamless steel pipes and tubes for pressure purpose
3601	Carbon steel pipes and tubes with specified room temperature properties for pressure purposes
3602 - 1/2	Steel pipes and tubes for pressure purposes - carbon and carbon manganese steel with specified elevated temperature properties
3602 - 1	Steel pipes and tubes for pressure purposes - carbon and carbon manganese steel with specified elevated temperature properties - seamless and electric resistance welded including induction welded tubes
3602 - 2	Steel pipes and tubes for pressure purposes - carbon and carbon manganese steel with specified elevated temperature properties - longitudinally arc welded tubes
3603	Carbon and alloy steel pipes and tubes with specified low temperature properties for pressure purposes
3604 - 1/2	Steel pipes and tubes for pressure purposes - ferritic alloy steel with specified elevated temperature properties
3604 - 1	Steel pipes and tubes for pressure purposes - ferritic alloy steel with specified elevated temperature properties - seamless and electric resistance welded
3604 - 2	Steel pipes and tubes for pressure purposes - ferritic alloy steel with specified elevated temperature properties - longitudinally arc welded tubes
3605 - 1/2	Austenitic stainless steel pipes and tubes for pressure purposes
3605 - 1	Austenitic stainless steel pipes and tubes for pressure purposes - seamless tubes
3605 - 2	Austenitic stainless steel pipes and tubes for pressure purposes - longitudinally welded tubes
3606	Steel tubes for heat exchangers
3889 - 1A/2A	Methods for non-destructive testing of pipes and tubes
3889 - 1	Methods for non-destructive testing of pipes and tubes - methods of automatic ultrasonic testing for the detection of imperfections in wrought steel tubes
3889 - 2A	Methods for non-destructive testing of pipes and tubes - automatic eddy current testing of wrought steel tubes
4027	Sulfate-resisting portland cement requirements for composition, strength, physical and chemical properties of three strength classes
4127	Light gauge stainless steel tubes, primarily for water applications
4147	Bitumen based hot applied coating materials for protecting iron and steel including suitable primers where required
4164	Coal tar based hot applied coating materials for protecting iron and steel including a suitable primer
4568 - 1/2	Steel conduit and fittings with metric threads of ISO form for electrical installations
	otoor contain and many or man mount an oado or too form for ordering mountainers
4568 - 1	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers
4568 - 1 4568 - 2	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and
	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers
4568 - 2	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components
4568 - 2 4825 - 1 to 5	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint
4568 - 2 4825 - 1 to 5 4825 - 5	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2 4848 - 4	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections  Hot rolled structural steel sections - equal and unequal angles
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2 4848 - 4 5242 - 1/2	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections  Hot rolled structural steel sections - equal and unequal angles  Tubes for fluid power cylinder barrels
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2 4848 - 4 5242 - 1/2 5242 - 1	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections  Hot rolled structural steel sections - equal and unequal angles  Tubes for fluid power cylinder barrels - steel tubes with specially finished surfaces
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2 4848 - 4 5242 - 1/2 5242 - 1 5242 - 2	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections  Hot rolled structural steel sections - equal and unequal angles  Tubes for fluid power cylinder barrels - steel tubes with specially finished surfaces  Tubes for fluid power cylinder barrels - non ferrous metallic tubes with specially finished bores
4568 - 2 4825 - 1 to 5 4825 - 5 4848 - 2/4/5 4848 - 2 4848 - 4 5242 - 1/2 5242 - 1 5242 - 2 6258	Steel conduit and fittings with metric threads of ISO form for electrical installations - steel conduit bends and couplers  Steel conduit and fittings with metric threads of ISO form for electrical installations - fittings and components  Stainless steel tubes and fittings for the food inductry and other hygienic applications  Stainless steel tubes and fittings for the food inductry and other hygienic applications - recessed ring joint type couplings  Hot rolled structural steel sections  Hot rolled structural steel sections - hot finished hollow sections  Hot rolled structural steel sections - equal and unequal angles  Tubes for fluid power cylinder barrels  Tubes for fluid power cylinder barrels - steel tubes with specially finished surfaces  Tubes for fluid power cylinder barrels - non ferrous metallic tubes with specially finished bores  Hollow steel bars for machining

BS	British Standards
6323 - 5	Seamless and welded steel tubes for automobile, mechanical and general engineering purposes - specific requirements for electric resistance welded (including induction welded) steel tubes
6323 - 6	Seamless and welded steel tubes for automobile, mechanical and general engineering purposes - specific requirements for cold finished electric resistance welded (including induction welded) steel tubes
7668	Weldable structural steels - hot finished structural hollow section in weather resistant steels

## NF AFNOR (French Association for Standardization)

Tour Europe - Cedex 7 92049 Paris le Defense France

Tel (33) 1 42 91 55 55 - Fax (33) 1 42 91 56 56

Web site: www.afnor.fr

A 49 - 111	Steel tubes-plain end seamless tubes of commercial quality for general purposes at medium pressure - dimensions - technical delivery conditions
A 49 - 112	Steel tubes-plain end seamless hot rolled tubes with special delivery conditions - dimensions - technical delivery conditions
A 49 - 115	Steel tubes - hot finished seamless tubes suitable for threading dimensions - technical delivery conditions
A 49 - 117	Steel tubes - seamless plain end tubes for pipe-lines and other uses - ferritic and austenitic stainless steels dimensions - technical delivery conditions
A 49 - 141	Steel tubes - welded plain end tubes of commercial quality for general use at medium pressure - dimensions - technical delivery conditions
A 49 - 142	Steel tubes - longitudinally welded plain end tubes inferior or equal to 168,3 mm in unalloyed steels with special delivery conditions - dimensions - technical delivery conditions
A 49 - 145	Steel tubes - hot finished welded tubes suitable for threading - dimensions - technical delivery conditions
A 49 - 146	Steel tubes - unthreaded plain ended welded tubes for liquid - dimensions - technical delivery conditions
A 49 - 147	Steel tubes - plain end longitudinally welded tubes for pipelines and general use - austenitic stainless steels - dimensions - technical delivery conditions
A 49 - 148	Steel tubes - plain end longitudinally welded tubes for pipe lines and general use - ferritic stainless steels - dimensions - technical delivery conditions
A 49 - 150	Steel tubes - welded tubes to be coated or protected for water piping systems - dimensions - technical delivery conditions
A 49 - 160	Steel tubes. Welded tubes for heating panels encased in concrete. Dimensions. Technical delivery conditions.
A 49 - 207	Steel tubes - seamless or longitudinally welded stainless steel tubes for heat exchanger in aircraft construction - dimensions - technical delivery conditions
A 49 - 210	Steel tubes - seamless cold drawn tubes for fluids piping - dimensions - technical delivery conditions
A 49 - 211	Steel tubes - seamless plain-end tubes in unalloyed steels for fluid piping elevated temperatures - dimensions - technical delivery conditions
A 49 - 213	Steel tubes - seamless unalloyed and MO or CR-MO alloyed tubes for use at elevated temperatures - dimensions (with normal tolerances) - technical delivery conditions
A 49 - 214	Steel tubes - seamless austenitic steel tubes for use at elevated temperatures - dimensions (with normal tolerances) - technical delivery conditions
A 49 - 215	Steel tubes - seamless tubes for unalloyed or ferritic alloyed steel heat exchangers - dimensions - technical delivery conditions
A 49 - 217	Steel tubes - seamless tubes for heat exchangers - stainless austenitic and ferritic steels - dimensions - technical delivery conditions
A 49 - 218	Steel tubes - seamless tubes for furnaces austenitic stainless steels - dimensions with normal or reduced tolerances - technical delivery conditions
A 49 - 230	Steel tubes - plain end seamless tubes for pressure vessels and piping systems used at low temperatures - dimensions - technical delivery conditions
A 49 - 240	Steel tubes - plain ended steel tubes longitudinally welded without fusion for pressure vessels and piping systems at low temperatures - dimensions - technical delivery conditions

N <i>F</i>	AFNOR (French Association for Standardization)
A 49 - 241	Steel tubes - longitudinally pressure welded plain end tubes in non alloyed steel grades for fluid piping up to 425°C - diameters from 21,3 mm to 168,3 mm - dimensions technical
A 49 - 242	Steel tubes - longitudinally pressure welded tubes, D less than or equal to 168,3mm in unalloyed and low alloyed steels grades, used at moderate temperatures dimensions - technical delivery conditions
A 49 - 243	Steel tubes - longitudinally pressure welded tubes, D less than or equal to 168,3mm in unalloyed or ferritic alloyed steels grades, used at elevated temperatures dimensions - technical delivery conditions
A 49 - 244	Steel tubes. Welded austenitic stainless and austenitic ferritic steel rolled tubes for pressure service - dimensions - technical delivery conditions.
A 49 - 245	Steel tubes. Longitudinally pressure welded tubes from non alloy and ferritic alloy steels for heat exchanger in diameters from 15,9 mm and 76,1 mm inclusive - dimensions - technical delivery conditions.
A 49 - 247	Steel tubes - longitudinally welded tubes for heat exchangers austenitic stainless steels - dimensions - technical delivery conditions
A 49 - 249	Steel tubes - longitudinally welded plain end tubes for the food industry - austenitic stainless steels - dimensions - technical delivery conditions
A 49 - 250	Steel tubes - welded plain end tubes of commercial quality with or without special delivery conditions dimensions (D greater than or equal to 168,3 mm) - technical delivery conditions
A 49 - 252	Steel tubes - welded unalloyed steel tubes of diameter 168.3 to 1220 mm used at medium elevated temperatures - dimensions - technical delivery conditions
A 49 - 253	Steel tubes - longitudinally fusion welded unalloyed and ferritic alloyed steel tubes for use at elevated temperatures - dimensions - technical delivery conditions
A 49 - 310	Steel tubes - seamless precision tubes for mechanical application - dimensions - technical delivery conditions
A 49 - 311	Steel tubes - seamless tubes for mechanical application - dimensions - technical delivery conditions
A 49 - 312	Steel tubes - seamless tubes for mechanical application - supplementary series - dimensions - technical delivery conditions
A 49 - 317	Steel tubes - seamless plain end tubes for mechanical uses - austenitic stainless steels - dimensions - technical delivery conditions
A 49 - 323	Steel tubes - jacks for hydraulic transmissions - cold rolled or cold drawn seamless tubes - "ready for use" - dimensions - technical delivery conditions
A 49 - 330	Steel tubes - seamless cold drawn tubes for hydraulic and pneumatic power systems - dimensions - technical delivery conditions
A 49 - 341	Steel tubes - precision welded tubes for mechanical application - dimensions - technical delivery conditions
A 49 - 342	Steel tubes - welded steel tubes with improved machinability for mechanical machined parts - dimensions - dechnical delivery requirements.
A 49 - 343	Steel tubes - longitudinally welded tubes D<=168,3mm for engineering use - dimensions - technical delivery conditions
A 49 - 400	Steel tubes - longitudinally electric resistance welded unalloyed steel tubes 17,2<=406,4 mm for the transport of pressurized fluids - dimensions - technical delivery conditions
A 49 - 401	Steel tubes - longitudinally arc welded unalloyed steel pipes for fluid transporation piping and pressure vessels - dimensions - technical delivery conditions
A 49 - 402	Tubes en acier - tubes soudes helicoidalement par fusion en aciers non allies et micro allies pour canalisations de transport de fluide et appareils a pression - dimensions - conditions techniques
A 49 - 646	Steel tubes - round, square and rectangular precision steel tubes longitudinally induction welded from hot or cold-rolled flat products, coated or not coated - dimensions - technical delivery conditions.
A 49 - 647	Steel tubes - structural welded tubes circular, square, rectangular or oval, in ferritic or austenitic stainless steels - dimensions - technical delivery conditions
A 49 - 700	Steel tubes - hot dip galvanized coatings - requirements for tubes and accessoiries
A 49 - 701	Cement mortar inner coating
A 49 - 702	Outer and inner coating based on hydrocarbon binders, applied hot
A 49 - 704	Polyethelene outer coating
A 49 - 710	Steel tubes. External coating with three polyethylene based coating. Application through extrusion.
A 91 - 121	Hot dip galvanizing (immersion in molten zinc) - characteristic properties and test method
A 91 - 122	Metallic coatings - finished products of hot dip galvanized steel - specifications for the zinc coating and recommended method of fabrication for the products to be galvanized

#### UNI Italian National Standards Institute

Via Battistotti Sassi, 11/B 20133 Milano Italy

Tel (39) 2 70 02 41 - Fax (39) 2 70 10 61 49

Web site: www.unicei.it/uni

663	Seamless unalloyed steel tubes - plain tubes for general service - quality, specifications and testing
5462	Seamless steel tubes - tubes for boilers, appliances and piping for high-pressure, high-temperature heating systems - quality, specifications and testing
5745	Hot dip zinc coating of steel tubes - specifications and testing
5949	Low temperature service
6125	Conical gas threads for cable conduit tubes and relative fittings for explosion-proof electrical equipment (AD-PE). (ICS code: 21.040.30)
6363	Seamless and welded steel tubes for water pipes
6904	Seamless tubes of special alloyed corrosion and heat resisting stainless tubes
7091	Welded unalloyed steel tubes - plain tubes for general service
7287	Plain end seamless tubes of basic unalloyed steel
7288	Plain end non alloy steel welded tubes (ICS code: 23.040.10)
7683	Cable conduit tubes and threaded fittings for explosion-proof electrical equipment - seamless and welded tubes of unalloyed, zinc-coated steel
7684	Cable conduit tubes and threaded fittings for explosion-proof electrical equipment - zinc-coated or cadmium-coated unalloyed steel sleeves
7729	Plain end unalloyed steel seamless tubes of quality for mechanical applications
7810	Cold formed, flat steel products for metallic structures - hollow sections - quality, specifications and testing
7811	Cold formed steel products for metallic structures - circular hollow sections - dimensions and properties
7812	Cold formed steel products for metallic structures - square hollow sections - dimensions and properties
7813	Cold formed steel products for metallic structures - rectangular hollow sections - dimensions and properties
7946	Plain end welded steel precision tubes (ICS code: 23.040.10)
7947	Plain end welded externally calibrated, precision steel tubes
8488	Steel tubes for pipelines - petroleum and natural gas industries
8863	Unalloyed steel seamless and welded tubes suitable for screwing in accordance with UNI ISO 7.1
8913	Welded steel tubes for the automotive industry (ICS code: 77.140.75)
9099	Steel tubes used for underground or underwater piping. Extruded external polyethylene coating. (ICS code: 77.140.75)
10191	External fusion-bonded polyethylene coating - tubular steel products used for buried or submerged piping
ISO 7.1	Pipe threads where pressure-tight joints are made on the threads - dimensions, tolerances and designation

#### UNE Spanish Standards

Génova, 6 28004 Madrid Spain

Tel (34) 914 32 60 00 - Fax (34) 913 10 40 32

Web site: www.aenor.es

19 040	Carbon steel tubes for threading - measurements and masses - normal series
19 041	Carbon steel tubes for threading - measurements and masses - heavy series

JNE	Spanish Standards
19 042	Carbon steel tubes for threading - measurements and masses - light 1 series
19 043	Carbon steel tubes for threading - measurements and masses - light 2 series
19 045	Welded carbon steel tubes for threading - tolerances and characteristics
19 047	Galvanised welded steel tubes for water supply (hot and cold)
19 049 - 1	Tubos de acero inoxidable para instalaciones interiores de agua fria y calient - tubos
19 051	Welded steel tubes (not galvanized) for interior water installations
36 086	Steel tubes, high frequency longitudinally seamed
36 593	Plain end welded precision steel tubes - technical conditions for delivery
36 594	Plain end as welded and sized precision steel tubes - technical conditions for delivery
36 595	Square and rectangular steel tubes for ordinary uses, longitudinally pressure welded, cold formed and externally calibrated - dimensions - technical delivery conditions
36 864	Steel tubes, longitudinally welded, for pipelines and for reception installations of gaseous-fuel used no higher than 4 bar

#### NEN Dutch Standards

Kalfjeslaan 2 PO Box 5059 NL - 2600 GB Delft Netherlands

Tel (31) 15 2 690 390 - Fax (31) 15 2 690 190

Web site: www.nni.nl

2769	Steel tubing for construction and scaffolding - requirements and testing methods
3257	Steel conveyance pipes and sockets
6902	External polyethylene coating for underground steel pipes and fittings

#### SIS Swedish Standards

St Eriksgatan 115 Box 6455 S-113 82 Stockholm Sweden

Tel (46) 8 610 30 00 - Fax (46) 8 30 77 57 ; (46) 8 30 18

50 (Sales and Information Dept.)

Web site: www.sis.se

MNC 525	Steel - semi-manufactured products - tubes
MNC 811	Structural steels - tubes
MNC 831	Pressure vessel steels - tubes
SMS 326	Seamless and welded steel tubes suitable for screwing - medium series
SMS 327	Seamless and welded steel tubes suitable for screwing - heavy series
SMS 328	Steel tubes - tube sockets
SMS 887	Seamless steel tubes for mechanical application
SMS 1777	Seamless and welded steel tubes - dimensions and weights

SIS	Swedish Standards
SMS 1786	Seamless non-screwed steel tubes for general purposes
SMS 1795	Seamless steel tubes - cold worked precision steel tubes
SMS 1886	Welded non-screwed steel tubes for general purposes
SMS 1895	Welded steel tubes - cold worked precision steel tubes
SMS 3008	Seamless and welded stainless steel tubes - tubes for the food industry
SS 1787	Seamless steel tubes for pressure purposes
SS 1887	Welded steel tubes for pressure purposes
SS 2353	Cold drawn precision steel tubes for fluid power system
SS 2874	Lighting columns of steel tubes - columns designed for recreation grounds
SS 3001	Seamless stainless steel tubes
SS 3002	Welded stainless steel tubes
SS 3044	Seamless and welded stainless precision steel tubes
SS 11 43 05	Non-destructive testing - eddy current testing - steel - tubes
SS 21 97 01	Steel tubes for pressure purposes - technical delivery requirements
SS 21 97 03	Steel tubes for pressure purposes - technical delivery requirements
SS 21 97 11	Stainless steels - tubes for pressure purposes - test category I - technical delivery requirements
SS 21 97 13	Stainless steels - tubes for pressure purposes - test category II - technical delivery requirements
SS 21 97 16	Stainless steel tubes - welded tubes for pressure purposes - technical delivery requirements
SS 21 97 17	Stainless steel tubes - welded tubes for pressure purposes - technical delivery requirements
SS 21 97 18	Stainless steel tubes - welded tubes for pressure purposes - technical delivery requirements
SS ISO 8535-1	Compression-ignition engines - steel tubes for high-pressure fuel injection pipes - requirements for seamless colddrawn single-wall tubes
SS-HD 1039	Steel tubes for falsework and scaffolds - requirements and tests

#### SFS Finnish Standards

Maistraatinportti 2 00240 Helsinki Finland

Tel (358) 9 149 93 31 - Fax (358) 9 146 4925

Web site: www.sfs.fi

2005 ISO 4200	Plain end steel tubes, welded and seamless - general tables of dimensions and masses per unit length
2006	Seamless steel tubes, dimensions and weights
2007	Welded steel tubes - dimensions
2009	Seamless precision steel tubes, cold drawn and cold rolled - dimensions
2010	Steel tubes - tolerance systems
2144	Seamless steel tubes - steel Fe 00
2145	Seamless steel tubes - steel Fe 35
2146	Seamless steel tubes - steel Fe 45
2147	Seamless steel tubes - steel Fe 52
2148	Seamless steel tubes - steel Fe 55
2167	Welded steel pipes for gas, water and sewage
2230	Hydraulic piping - coupling threads, joint surfaces and tubes
2249	Wrought copper and copper alloys - seamless copper tubes for general purposes
2680	Pipes and fittings of grey iron for waste water - technical requirements for delivery

SFS	Finnish Standards
2681	Pipes of grey iron for waste water - dimensions
2689	Pipes for waste water - double branches diam. 80
2690	Pipes for waste water - corner branches diam. 87,5
2692	Pipes for waste water - inspection pipes
2693	Pipes for waste water - elbow diam. 87,5 for toilet
2694	Pipes for waste water - branches diam. 87,5 for toilet
2695	Pipes for waste water - straight connections for toilel
2723	Pipes and fittings of grey iron for waste water - joining pieces
3312	Steel tubes, medium-weight - suitable for screwing
3313	Steel tubes, heavy-weight for screwing
3314	Hot dip galvanized zinc-coatings on steel tubes
3347	Materials for pressure vessels - steel pipes
3511	Pipes for waste water - single branches diam. 45, 67,5 and 87,5
3512	Pipes for waste water - straight connections for toilet
3513	Pipes for waste water - straight connections for toilet
3514	Pipes for waste water - S-pipe
3980	Welded stainless steel mechanical tubing - dimensions and sectional properties
4161	Welded stainless steel pipes - dimensions, weights, pressure factors and technical delivery requirements
4174	Steel tubes - T-connections
4753	Service piping - fire fighting system indoors DN 50
4754	Service piping - fire fighting system outdoors 2 x DN 80
5128	Steel tubes - welded precision tubes - dimensions and material
5322	Steel tubes - extruded T-pipes
5590	Austenitic stainless steel piping - vacuum pipes - reinforcement ring

#### **EASTERN EUROPE AND MIDDL**

#### ISIRI Institute of Standards and Industrial Research of Iran

PO Box 14155-6139 Tehran Iran

Tel (98) 261 22 60 31-8 - Fax (98) 261 22 50 15

Web site: www.neda.net/ibr/isir.html

3360	Home gas pipes
3765	Water pipes

#### GOST Russian standards

Leninsky Prospekt 9 Moskva 117049 Russia

Tel (7) 095 236 40 44 - Fax (7) 095 237 60 32

Web site: www.gost.ru

550	Seamless steel tubes for petroleum processing and petrochemical industry - specifications
631	Internal-external upset drill pipes with couplings - specifications
632	Casing pipes with couplings - technical conditions
633	Tubing pipes and couplings - specifications
800	Bearing tubes - technical requirements
1060	Cold deformed seamless steel tubes for shipbuilding - specifications
3262	Water-supply and gas-supply steel pipes - technical conditions
5005	Steel electrowelded cold-deformed pipes for cardan shafts - specifications
6238	Casing and coring pipes for geology-exploring drilling and nipples for them - specifications
7909	Drill prospecting pipes and sockets - specifications
8639	Square steel pipes - range
8645	Rectangular steel tubes - range
8696	General-purpose electrically-welded spiral seam steel pipes - specifications
8731	Seamless hot rolled steel pipes - technical requirements
8732	Seamless hot deformed steel pipes - range of sizes
8733	Seamless cold and warm deformed tubes - technical requirements
8734	Seamless steel tubes cold deformed - range
9567	Precision steel tubes - range
9940	Seamless hot deformed tubes made of corrosion resistant steel
9941	Seamless cold and warm deformed tubes of corrosion-resistant steel - specifications
10498	Especially thin-walled seamless tubes from corrosion-resistant steel - specifications
10704	Electrically welded steel line-weld tubes - range
10705	Electrically welded steel tubes - specifications
10706	Electrically welded steel line-weld tubes - technical requirements

GOST	Russian standards
10707	Steel cold formed electrically welded tubes - technical conditions
11017	Steel seamless tubes for high pressure service - technical conditions
11068	Electrically tubes made of corrosion resistant steel - specifications
11249	Steel rolled up soldered double-layer tubes - technical conditions
13663	Shaped steel tubes - technical requirements
14162	Steel tubes of small dimensions (capillary) - specifications
19277	Seamless steel tubes for oil and fuel-lines - specifications
20295	Steel welded pipes for main oil and gas pipelines
21729	Cold deformed and hot-deformed structural carbon and alloyed steel tubes
21945	Seamless hot rolled tubes from alloys based on titanium - specifications
22897	Seamless cold deformed pipes from alloys based on titanium - specifications
23270	Tubes-billets for mechanical treatment - specifications
24030	Corrosion resistant steel seamless tubes for power engineering industry - specifications
26250	Drill pipes for borehole tools with removable core lifts - specifications

#### TS Turkish Standards

Necatibey Cad. 112 Bakanliklar TR-06100 Ankara Turkey

Tel (90) 312 417 83 30 - Fax (90) 312 425 43 99

Web site: www.tse.org.tr

302 Seamless precision steel tubes 346 Seamless, circular, unalloyed steel tubes for special purposes 381 Seamless steel pipes - temperature and pressure resistant 416 Welded steel pipes for general purposes 914 Internal and external galvanizing 1997 Flat - spiral welded unalloyed steel tubes 2169 Underground steel pipes corrosion protection rules 4356 Rules for hot applied bituminous coatings for corrosion protection of steel pipes 4357 Rules for hot applied coal tar based coatings for corrosion protection of steel pipes 5130 Copper brazed double wall steel tubes 5139 Rules for applied polyethylen coating for corrosion protection of steel pipes 5140 Rules for applied coal-tar epoxy coating for corrosion of steel pipes	
381 Seamless steel pipes - temperature and pressure resistant  416 Welded steel pipes for general purposes  914 Internal and external galvanizing  1997 Flat - spiral welded unalloyed steel tubes  2169 Underground steel pipes corrosion protection rules  4356 Rules for hot applied bituminous coatings for corrosion protection of steel pipes  4357 Rules for hot applied coal tar based coatings for corrosion protection of steel pipes  5130 Copper brazed double wall steel tubes  5139 Rules for applied polyethylen coating for corrosion protection of steel pipes  5140 Rules for applied coal-tar epoxy coating for corrosion of steel pipes	
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4357 Rules for hot applied coal tar based coatings for corrosion protection of steel pipes 5130 Copper brazed double wall steel tubes 5139 Rules for applied polyethylen coating for corrosion protection of steel pipes 5140 Rules for applied coal-tar epoxy coating for corrosion of steel pipes	
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5139 Rules for applied polyethylen coating for corrosion protection of steel pipes  5140 Rules for applied coal-tar epoxy coating for corrosion of steel pipes	
5140 Rules for applied coal-tar epoxy coating for corrosion of steel pipes	
5141 Rules of cathodic protection of underground steel pipeline	
5317 Welded square and rectangular steel tubes	
5437 Welding ends - preparation of ends of steel tubes and fittings for welding	
Non destructive testing methods eddy current examination of steel pipes and tubes	
6047 Line pipes, steel - for oil and natural gas industries	
6438 Welded precision steel tubes	
6475 Rectangular and square, welded, precision steel tubes for general use	
6476 Welded and sized precision steel tubes	

S	Turkish Standards
6814	Tubes - stainless steel - dimension, tolerance and unit length values
7402	Steel tubes - tolerance systems
7433	Steel tubes and tubular shaped accessories with circular cross - section - symbols to be used in specifications
7600	Stove pipes, stoves pipe elbows, stove pipe rosette-sheet steel
8054	Natural gas pipeline - steel piping systems design rules
8322	Seamless circular steel tubes for low (sud zero) temperature services
8481	Steel tubes for falsework and working scaffolds
8590	Concrete protective coating of steel water pipes
8843	Steel tubes for heat exchangers - welded
8844	Steel tubes for heat exchangers - seamless
8845	Steel tubes for rolls for conveyor belt idlers
8955	Natural gas service liner - rules for design and installation of steel line pipes
9341	Steel pipes for water pipelines
9800	Steel tubes for furniture round, oval, square and rectangular section
10038	Natural gas pipeline - steel piping installation rules
10485	Line pipes, steel - ultra high - test heat treated, for petroleum and natural gas industries pipe lines
10670	Flexible corrugated stainless steel tubes for gas burning appliances (up to 1,6 Mpa)
11004	Steel tubes - electric pressure welded (used at elevated temperatures)
11298	Rectangular and square, welded, precision steel tubes (used in motor vehicles)
11348	Zinc coating on steel tubes hot dip galvanized
ISO DIS 11961	Petroleum and natural gas industries - steel pipes for use as drill pipes - specification

#### CSN Czech Standards Institute

Biskupsky dvur 5 110 02 Praha 1 Czech Republic

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Web site: www.csni.cz

13 - 0072	Piping, marking of pipelines in plants according to the flowing liquids
38 - 6410	Gas piping of high pressure and very high pressure
38 - 6413	Medium-pressure gas mains and service pipes for middle-low pressure
38 - 6420	Industrial gas lines
42 - 0144	Spiral weld steel pipes
42 - 0165	Seamless carbon and alloy-steel tubes for low-temperature service
42 - 0250	Hot formed seamless carbon and alloy-steel tubes
42 - 0251	Seamless carbon and alloy-steel tubes for high-temperature service
42 - 0252	Seamless ferritic and austenitic steel tubes
42 - 0260	Cold drawn precision seamless carbon and alloy steel tubes
42 - 5710	Steel tubes suitable for screwing - medium series
42 - 5711	Steel tubes suitable for screwing - heavy series
42 - 5715	Hot formed seamless steel tubes
42 - 5716	Hot formed seamless steel with small tolerances
42 - 5720	Hot formed seamless square and rectangular steel tubes (including dimensions)

CSN	Czech Standards Institute
42 - 5738	Spiral weld steel pipes
42 - 5750	Seamless hot formed ferritic and austenitic steel tubes
42 - 5780	Seamless spigot steel tubes
42 - 5782	Seamless spigot steel tubes for butt-welding
42 - 5792	Steel tubes with double borders and rotary flange
42 - 6710	Cold drawn seamless carbon and alloy steel tubes with normal tolerances
42 - 6711	Precision seamless steel tubes
42 - 6712	Precision seamless steel tubes with increased accurancy
42 - 6730	Precision hexagonal seamless steel tubes (including dimensions)
42 - 6750	Seamless precision cold-formed ferritic and austenitic steel tubes

## MSZ Hungarian Standards

Üllöi út 25 Pf. 24. H-1450 Budapest 9 Hungary

Tel (36) 1 218 30 11 - Fax (36) 1 218 51 25

Web site: www.mszt.hu

17	Seamless tubes from unalloyed steels with increased quality requirements
29	Seamless tubes from unalloyed steels for general purposes
99	Seamless steel tubes - dimensions and masses per unit length
120 - 1/2/3	Steel tubes suitable for screwing
120 - 1	Steel tubes suitable for screwing - heavy series tubes
120 - 2	Steel tubes suitable for screwing - medium series
120 - 3	Steel tubes suitable for screwing - light series tubes
185	Longitudinal welded steel tubes - dimensions
186 - 1/2	Longitudinal welded steel tubes
186 - 1	Longitudinal welded steel tubes - commercial quality tubes
186 - 2	Longitudinal welded steel tubes - ligh quality tubes
326	Hot rolled channel sections - dimensions
382 - 1/2	Calibrated longitudinal welded steel tubes
382 - 1	Calibrated longitudinal welded steel tubes - dimensions
382 - 2	Calibrated longitudinal welded steel tubes - technical specification
2898 - 1/2	Cold drawn or cold rolled seamless precision steel tubes
2898 - 1	Cold drawn or cold rolled seamless precision steel tubes - dimensions and masses per unit length
2898 - 2	Cold drawn or cold rolled seamless precision steel tubes - technical requirements
2978 - 1/2	Cold drawn or cold rolled welded precision steel tubes
2978 - 1	Cold drawn or cold rolled welded precision steel tubes - dimensions and masses per unit length
2978 - 2	Cold drawn or cold rolled welded precision steel tubes - technical specification
3156	Drill pipes
3160	Steel casing with whitworth threads
3741	Spiral weld steel pipes with high quality requirements
3770	Spiral weld steel pipes with special quality requirements

MSZ	Hungarian Standards
4051	Seamless steel tubes with special quality requirements
4398	Longitudinally welded stainless and heat resisting steel tubes
4747	Steel tubes for elevated temperatures
7262	Cold formed steel sections - general technical requirements and tolerances
7328	Cold formed hollow steel sections - dimensions
17718	Rolled steel bell sections for mine safety framing

#### PN Polish Standards

UI. Elektoralna 2 PO Box 411 PL-00-950 Warszawa Poland

Tel (48) 22 620 5434 - Fax (48) 22 620 5434

Web site: www.pkn.pl

76 / G 44001 Flanged pipes for hydraulic filling  80 / H 74219 Steel seamless tubes for general application  83 / H 84017 Weather resistant tubes  84 / H 74220 Steel seamless tubes cold-rolled and drawn  85 / H 74252 Steel seamless boiler tubes	75 / H 74253	Steel seamless flanged pipes
83 / H 84017 Weather resistant tubes  84 / H 74220 Steel seamless tubes cold-rolled and drawn	76 / G 44001	Flanged pipes for hydraulic filling
84 / H 74220 Steel seamless tubes cold-rolled and drawn	80 / H 74219	Steel seamless tubes for general application
	83 / H 84017	Weather resistant tubes
85 / H 74252 Steel seamless boiler tubes	84 / H 74220	Steel seamless tubes cold-rolled and drawn
	85 / H 74252	Steel seamless boiler tubes
91 / H 74240 Steel seamless precision tubes	91 / H 74240	Steel seamless precision tubes

#### BN Polish Standards

75 / 0648 - 60	Steel seamless pipes with tapered socket
79 / 0656 - 01	Cold formed closed sections (welded)
82 / 0442 - 04	Flanged pipes for hydraulic filling
84 / 0648 - 81	Low alloy steel seamless tubes for operation at elevated temperature
85 / 0648 - 62	Steel seamless pipes for shipbuilding
85 / 0648 - 82	Hot rolled steel seamless tubes for mining hydraulic cylinders - dimensions
85 / 0648 - 83	Constructional steel seamless tubes with improved quality and for machining

#### TU Ukrainian Standards

174 Gorkiy Street GSP, Kyiv-6, 252650 Ukraine Tel (380) 44 226 29 71 - Fax (380) 44 226 29 70

1104 - 138100	Corrosion resistant gas line pipes
14 - 152 - 19	Electrically welded carbon steel pipes
14 - 152 - 21	Electrically welded rectangular (square) carbon steel pipes
14 - 159 - 233	Electric welded water and gas pipe from carbon steel
14 - 161 - 126	Seamless cold worked titan-based alloy tubing
14 - 161 - 128	Gas-lift pipes with threaded coupling and polymer seal
14 - 161 - 140	Casing pipes with buttress thread
14 - 3 - 143	Steel tubing for tubular rivets
14 - 3 - 156 - 6	Spiral welded pipes - corrosion resistant water pipelines
14 - 3 - 190	Electric longitudinal welded pipes - stainless steel
14 - 3 - 197	Seamless pipes made of corrosion-resistant steel grades with improved surface quality
14 - 3 - 251	Seamless tubes for plants of chemical and oil- chemical industry relative pressure
14 - 3 - 328	Tubes of special forms for motor-car industry
14 - 3 - 349	Seamless thin-walded finned pipes (4 fins)
14 - 3 - 460	Electric longitudinal welded pipes - stainless steel
14 - 3 - 474	Thin-walled cold deformed pipes from carbon and alloy steel
14 - 3 - 491	External upset geological prospecting drill pipes without threading
14 - 3 - 514	Casing pipes with FUM band seal of threaded joints
14 - 3 - 523	Steel pipes with polyethylene linng and connectors for them
14 - 3 - 615	Seamless cold worked titan-based alloy tubing
14 - 3 - 721	Spiral welded pipes - gas-oil line pipes
14 - 3 - 796	Seamless cold-finished tubes for steam boilers and pipelines from corrosion resistance steel grade
14 - 3 - 808	Spiral welded pipes - nuclear power station pipelines
14 - 3 - 820	Seamless cold worked titan-based alloy tubing
14 - 3 - 876	Steel non-threaded cold-finished tubes for shells with demountable core receivers
14 - 3 - 913	Longitudinal one seam submerged arc welded pipe for oil-gas
14 - 3 - 954	Spiral welded pipes - eating system pipelines
14 - 3 - 1128	Seamless hot worked steel pipe for gas-lift pipeline systems and oil and gas field equipment
14 - 3 - 1141	Brazed rolled-up double-ply steel tubing
14 - 3 - 1165	Square and rectangular tubing - alloyed steel
14 - 3 - 1171	Square and rectangular tubing - alloyed steel
14 - 3 - 1219	Bimetallic centrifugal-casted pipes, steel 30 outside
14 - 3 - 1228	Steel flat-oval drawn tubes
14 - 3 - 1282	Pump-compressor pipes with couplings - smooth and high pressure-sealed with increased plasticity and coloresistance
14 - 3 - 1318	Clad high precision pipes from corrosion-resistant grade of steel
14 - 3 - 1354	Steel non threaded pipes for casing and core geological prospecting pipes
14 - 3 - 1364	Spiral welded pipes - 75 Atmospheres Gas Line Pipes
14 - 3 - 1424	Longitudinal one seam submerged arc welded pipe for oil-gas
14 - 3 - 1464	Longitudinal double seam submerged arc welded pipe for oil-gas
14 - 3 - 1487	Casing pipes in ERW modification (OTTM thread)
14 - 3 - 1534	Pump-compressor pipes with couplings - smooth with polymer seal

TU	Ukrainian Standards
14 - 3 - 1571	Drill pipes with welded tool-joints
14 - 3 - 1588	Pump-compressor pipes with couplings - smooth and high pressure-sealed with increased plasticity and coloresistance
14 - 3 - 1600	Hor-worked pipe made out of steel grade 20UCh
14 - 3 - 1601	Seamless hot rolled Pipes - steel coupling pipes
14 - 3 - 1611	Casing geological prospecting pipes with gauged ends with right-handed threading
14 - 3 - 1618	Seamless hot rolled pipes - gas lifting system, gas-oil deposit equipment cold-resistant
14 - 3 - 1649	Thermally insulated oil and gas well pipes
14 - 3 - 1667	Casing pipes with polymer seals
14 - 3 - 1701	Seamless hot rolled pipes - oil transfer
14 - 3 - 1736	Casing pipes with increased plasticity and cold resistance
14 - 3 - 1747	Centrifugal-casted pipes
14 - 3 - 1760	Seamless hot rolled pipes - gas-oil pipelines, municipal economy, mechanical engineering
14 - 3 - 1762	Drill pipes with welded tool-joints having a reduced diameter
14 - 3 - 1772	Pump-compressor pipes
14 - 3 - 1780	Cold finished clad thin-walded pipes of large diameters made of corrosion-resistant grade of steel
14 - 3 - 1801	Seamless hot worked steel pipe for gas-lift pipe systems and oil and gas field equipment of northern regions
14 - 3 - 1831	Seamless hydrogen-sulfate-resistant pipe made out of steel grade 12GF-PV
14 - 3 - 1840	Spiral welded pipes - corrosion water pipelines
14 - 3 - 1849	Drill pipes with welded tool-joints
14 - 3 - 1850	Drill pipe with pipe end upset
14 - 3 - 1865	Seamless hot rolled pipes - for mechanized mine fasteners
14 - 3 - 1873	Longitudinal double seam submerged arc welded pipe for oil-gas
14 - 3 - 1894	Cold-finished tubes of variable section
14 - 3 - 1895	Longitudinal one seam submerged arc welded pipe for oil-gas
14 - 3 - 1918	Casing and core pipes for geological prospecting drilling and nipples for them Nippel joint with right-handed trapezium-shaped threading
14 - 3 - 1919	Geological prospecting drill pipes and couplings
14 - 3 - 1927	Drill pipes with prior mounted joints and couplings.
14 - 3 - 1938	Longitudinal double seam submerged arc welded pipe for oil-gas
14 - 3 - 1963	Seamless hot rolled pipes - pipe laying of wells and constructions
39 - 0147016 -	Casing pipes in ERW modification (buttress thread)
39 - 0147016 -	Pipe for general maintenance of drill holes
U 322 - 8 - 14	Longitudinal one seam submerged arc welded pipe for oil-gas
U 322 - 8 - 21	Longitudinal one seam submerged arc welded pipe for oil-gas
Y 322 - 8 - 10	Longitudinal one seam submerged arc welded pipe for oil-gas

#### **ASIA**

## JIS Japanese Industrial Standards

Ministry of International Trade and Industry (MITI) Standards Department 1-3-1, Kasumigaseki, Chyoda-Ku Tokyo 100-8921 Japan

Tel (81) 3 35 01 20 96 - Fax (81) 3 35 80 86 37

Web site: www.jisc.org

A 5525	Steel pipe piles
C 8305	Rigid steel conduits
G 3429	Seamless steel tubes for high pressure gas cylinder
G 3441	Alloy steel tubes for machine purposes
G 3442	Galvanized steel pipes for water service
G 3443	Coated steel pipe for water service
G 3444	Carbon steel tubes for general structural purposes
G 3445	Carbon steel tubes for machine structural purposes
G 3446	Stainless steel tubes for structure purposes
G 3447	Stainless steel sanitary tubing
G 3448	Light gauge stainless steel pipes for ordinary piping
G 3452	Carbon steel pipes for ordinary piping
G 3454	Carbon steel pipes for pressure service
G 3455	Carbon steel pipes for high pressure service
G 3456	Carbon steel pipes for high temperature service
G 3457	Arc welded carbon steel pipes
G 3458	Alloy steel pipes
G 3459	Stainless steel pipes
G 3460	Steel pipes for low temperature service
G 3461	Carbon steel boilers and heat-exchanger tubes
G 3462	Alloy steel boiler and heat-exchanger tubes
G 3463	Stainless steel boiler and heat-exchanger tubes
G 3464	Steel heat exchanger tubes for low temperature service
G 3465	Seamless steel tubes for drilling
G 3466	Carbon steel square pipes for general structural purposes
G 3467	Steel tubes for fire heater
G 3468	Arc welded large diameter stainless steel pipes
G 3469	Polyethylene coated steel pipes
G 3472	Electric resistance welded carbon steel tubes for automobile structural purposes
G 3473	Carbon steel tubes for cylinder barrels
G 3474	High tensile strength steel tubes for tower structural purposes
G 3491	Alsphalt protective coatings for steel water pipe
G 3492	Coal-tar enamel protective coating for steel water pipe
G 4903	Seamless nickel-chromium-iron alloy pipes
G 4904	Seamless nickel-chromium-iron alloy heat exchanger tubes
H 4631	Titanium pipes and tubes for ordinary piping

## JIS Japanese Industrial Standards

#### KS Korean Sandards

1599 Kwanyang-dong, Tong an-gu Anyang-shi, Kyonggi-do, 431-060 Rep. of Korea

Tel (82) 343 84 1861 - Fax (82) 343 84 6077

Web site: www.nitq.go.kr

B 0222	Taper pipe threads
C 8401	Rigid steel conduits
D 3507	Carbon steel pipes for ordinary piping
D 3517	Carbon steel tubes for machine structural purposes
D 3536	Stainless steel tubes for machine and structural purposes
D 3537	Galvanized steel pipes for water service
D 3562	Carbon steel pipes for pressure service
D 3563	Carbon steel tubes for boiler and heat exchanger
D 3564	Carbon steel pipes for high pressure service
D 3565	Coated steel pipes for water works
D 3566	Carbon steel tubes for general structural purposes
D 3568	Carbon steel square pipes for general structural purposes
D 3569	Steel pipes for low temperature service
D 3570	Carbon steel pipes for high temperature service
D 3571	Steel heat exchanger tubes for low temperature service
D 3572	Alloy steel boiler and heat exchanger tubes
D 3573	Alloy steel pipes
D 3574	Alloy steel tubes for machine purposes
D 3575	Seamless steel tubes for high pressure gas cylinder
D 3576	Stainless steel pipes
D 3577	Stainless steel tubes for high pressure gas cylinder
D 3583	Arc welded carbon steel pipes
D 3584	Seamless steel oil well casing, tubing and drill pipe
D 3585	Stainless steel sanitary tubing
D 3587	Steel tubes for fired heater
D 3588	Arc welded large diameter stainless steel pipes
D 3589	Polyethylene coated steel pipes
D 3595	Light gauge stainless steel pipes for ordinary piping
D 3598	Electric resistance welded carbon steel tubes for automobile structural purposes
D 3607	Polythylene coated steel pipes by powder fusion
D 3608	Steel pipes coated on the interior and exterior with epoxy powder coatings for water works
D 3618	Carbon steel tubes for cylinder barrels
D 3619	Polyethylene powder lining steel pipes for water works
D 3620	Fluoride resin coated double wall steel pipe for water works
D 3623	Corrosion resistance welded steel pipes for water service
D 3626	Coated steel pipes for water service

(S	Korean Sandards
D 3628	Stainless steel flexible pipes
D 3757	Seamless nickel - chromium iron alloy heat exchanger tubes
D 3758	Seamless nickel - chromium iron alloy pipes
D 3759	Titanium-palladium alloy pipes and tubes for ordinary piping and heat exchanger
D 3760	Galvanized steel pipes for vinyl housing
D 3761	Unplasticized polyvinyl chloride lining steel pipes
D 3780	High tensile strength steel tubes for tower structural purposes
D 4602	Steel pipe piles
D 8306	Alsphalt protective coatings for steel water pipe
D 8307	Coal-tar enamel protective coating for steel water pipe
D 8502	Liquid epoxy resin coating
F 4602	Steel pipe piles
F 8001	Steel pipe supports
F 8002	Steel pipe scaffolding
F 8003	Prefabricated steel pipe scaffolding
V 3983	Dredging pipe

## GB Chinese National Standards

T8163	Pipe for liquid transportation
T8162	Structure pipe
T5312	Tube for shipbuilding
T8713	Cold drawn high precision tube
3087	Seamless steel tubes for low and medium pressure boiler
3091	Galvanized welded steel pipe for low-pressure service
3092	Welded steel pipe for low pressure service
3093	High-pressure seamless steel tubes for diesel engine
3094	Cold drawn seamless special-shape steel pipe
T3639	Cold drawn or cold rolled precision seamless steel tubes
5310	Seamless steel tubes and pipes for high pressure boiler
5312	Carbon steel seamless steel tubes for ship
6479	High pressure seamless steel tubes for chemical fertilizer equipments
6728	Square and rectangular tubing (dimension and weight)
8162	Hot rolled seamless tubes for pipeline, vessel and equipment structures
8163	Fluid transfering pipe
9711	Spirally submerged - arc welded steel pipe for oil and naturel gas
9948	Seamless steel tubes for petroleum cracking
13296	Seamless stainless steel tubes for boiler and heat exchanger
13792	Longitudinally welded pipe
13793	Longitudinal pipe

GB	Chinese National Standards
14291	Longitudinally welded pipe
14975	Stainless steel seamless tubes for structures
14976	Stainless steel seamless pipes for fluid transport
14980	Major diameter welded steel pipe for low pressure liquid service
T17396	Hot rolled seamless tubes for hydraulic cylinder

## SY Chinese National Standards

5036	Spirally submerged - arc welded steel pipe for pressure service
5037	Spirally submerged - arc welded steel pipe for ordinary fluid
5038	Spirally ERW line pipe for pressure fluid service - mill hydrostatic test pressure
5039	Spirally ERW line pipe for general low - pressure fluid service - mill hydrostatic test pressure
5040	Spirally submerged - arc welded steel pipe for piling
5297	Longitudinal pipe
5384	Longitudinal pipe

## YB

T5052	Geological drilling pipe
T5035	Seamless steel tube for auto semi-shaft casing
n1	Tube for cannon
235	Geological Drilling Tube
2056	Welded steel pipes for low pressure use
2606	Rigid steel conduits
4028	Welded Steel Pipe for Deep-Well Dump
4178	Welded steel pipes
4435	Carbon steel tubes for general structural purposes
4437	Carbon steel tubes for machine structural purposes
4626	Carbon steel pipes for pressure service
5802	Stainless steel tube for mechanical and structural purposes
6445	Carbon steel pipes for ordinary piping
7141	Carbon steel square pipes for general structural purposes

YB	
7883	Stainless steel boiler and heat-exchanger tubes
Z 12	Bearing tube

#### IS Indian Standards

Manak Bhavan 9 Bahadur Shah Zafar Marg New Delhi 110002 India

Tel (91) 11 323 6584 - Fax (91) 11 323 9399 Web site: wwwdel.vsnl.net.in/bis.org

1161	Steel tubes for structural purposes
1239	Mild steel tubes, tubulars and other wrought steel fittings
1914 - 1/4	Carbon steel boilers tubes and superheater tubes
1978	Line pipes
1979	High test line pipe
2039 - 1/3	Steel tubes for bicycle and allied purposes
2416	Boiler and superheater tubes for marine and naval purposes
3074	Steel tubes for automotive purposes
3589	Seamless or electrically welded steel pipes for water, gas and sewage (169,3 to 2032 mm outside diameter)
3601	Steel tubes for mechanical and general engineering purposes
3609	Chrome molybdenum steel, seamless, boiler and superheater tubes
4270	Steel tubes used for water wells
4516	Elliptical mild tubes
4711	Methods for sampling of steel pipes, tubes and fittings
4712	Forged steels, socket-welding
4922	Hollow steel section for structural use
4923	Hollow steel tubes (suitable for welding for aircraft purposes)
5429	Dimensions for steel tubes for automotive purposes
5433	Oil well steel casing pipes and couplings
5504	Spiral welded pipes
5929	Inspection and testing procedure for circular steel tubes for aircraft purposes
6011	Carbon steel tubes for use on board ships for pressure services
6286	Tubes for low temperature service
6392	Seamless ferritic alloy steel pipes for high temperature steam service
6631	Steel pipes for hydraulic purposes
6647	Drill pipes for use in oil or natural gas wells
6913	Stainless steel tubes for the food and beverage industry
7138	Steel tubes for furniture purposes
7174	Carbon steel tubes for use on board ships for working pressure 0,7 to 1,7 N / mm
8036	Mild steel transformer cooling tubes
8119	Copper brazed steel tubing
9158	Cold drawn high pressure fluid power cylinder tubes
9295	Steel tubes for idler for belt conveyers

Indian Standards	
Lancing pipes	
Steel tubes for heat exchangers	
Thin walled flexible quick coupling pipes	
Seamless steel tubes for manufacturing high pressure gas cylinders	
High carbon chromium (bearing) steel tubes for the manufacture of bearing races	
	Lancing pipes Steel tubes for heat exchangers Thin walled flexible quick coupling pipes Seamless steel tubes for manufacturing high pressure gas cylinders

#### SNI Indonesia National Standards

Manggala Wanabakti Blok IV Lt. 4 Jl. Gatot Subroto, Senayan Jakarta 12710 Indonesia

Tel (62) 21 574 7043 to 44 - Fax (62) 21 574 7045

Web site: www.bsn.or.id

05 - 0069	Union pipe (conduit)
07 - 0039	Zinc coated steel pipes - specification and test method
07 - 0067	Carbon steel pipes for machines structures - specification and test method
07 - 0068	Carbon steel pipes for general structure - specification and test method
07 - 0071	Spiral welded steel pipes - specification and test method
07 - 0242	Specification and test method of seamless steel pipes for steam boilers and superheaters
07 - 0537	Steel pipes for petroleum and natural gas pipeline
07 - 0728	High tested steel pipes for petroleum and natural gas pipeline
07 - 1313	Steel pipes for water supply - interior layer using cement mix
07 - 1343	Coal for enamel exterior protective coatings steel pipes
07 - 1857	Grey cast iron ground pipe
07 - 2858	Stainless steel pipes
07 - 3074	Cast iron drainage pipes and fittings - spigot series
07 - 3081	Ductile cast iron pipes and accessories for non pressure pipes lines
07 - 3090	Straight circular sheet metal ducts with a lock type spiral seam and straight rectangular sheet metal duct for air distribution

#### AS Australian Standards

PO Box 1055 Strathfield, NSW 2135 Australia

Tel (61) 2 97 46 47 00 - Fax (61) 2 97 46 84 50

Web site: www.standards.com.au

1074	Steel tubes and tubulars for ordinary service
1163	Structural steel hollow sections
1281	Cement mortar lining of steel pipes and fittings

48	Australian Standards
1396	Steel water bore casing
1450	Steel tubes for mechanical purposes
1518	Extruded high density polyethylene protective coating for pipes
1579	Arc welded steel pipes and fittings for water and waste water
1722 - 1	Pipe threads of whitworth form - sealing pipe threads
1722 - 2	Pipe threads of whitworth form - fastening pipe threads
4041	Pressure piping
4118 - 2.1	Fire sprinkler systems - piping - General
4750(INT)-200	Electrogalvanized (zinc) coatings on ferrous hollow sections



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