

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### MTD 16 : Alloy Steels and Forging Sectional Committee

Scope: Standardization in the field of alloy & special steels and forging, including classification, designation and coding of related steels

Liaison: **ISO TC-17 SC-04 (P): Heat treatable and alloy steels** **ISO TC-17 SC-11 (P): Steel castings**

### Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10604 (Part 1) : 1983 <span style="color: green;">Reviewed In : 2023</span>	Specification for machining allowances and tolerances for open die steel forgings: Part 1 carbon and low alloy steel forgings: Part 1 carbon and low alloy steel forgings	March, 2023	-	Indigenous
2	IS 10604 (Part 2) : 1983 <span style="color: green;">Reviewed In : 2023</span>	Machining allowances and tolerances for open die steel forgings: Part 2 high alloy steel forgings	March, 2023	-	Indigenous
3	IS 10631 : 1983 <span style="color: green;">Reviewed In : 2024</span>	Specification for stainless steel for welding electrode core wire	April, 2024	1	Indigenous
4	IS 10632 (Part 1) : 1983 <span style="color: green;">Reviewed In : 2024</span>	Specification for non magnetic stainless steels for electrical applications: Part 1 general requirements	April, 2024	1	Indigenous
5	IS 10632 (Part 2) : 1983 <span style="color: green;">Reviewed In : 2024</span>	Specification for non magnetic stainless steels for electrical applications: Part 2 specific requirements for binding wires	April, 2024	1	Indigenous
6	IS 10632 (Part 3) : 1983 <span style="color: green;">Reviewed In : 2024</span>	Specification for non magnetic stainless steels for electrical applications: Part 3 specific requirements for sheets, strips and plates	April, 2024	1	Indigenous
7	IS 11169 (Part 1) : 2022 <span style="color: green;">4954:2018</span>	Specification for steels for cold heading/cold extrusion applications: Part 1 wrought carbon and low alloy steels		1	Not Equivalent
8	IS 11169 (Part 2) : 1989 <span style="color: green;">Reviewed In : 2019</span> <span style="color: green;">ISO 4954</span>	Steels for cold heading/cold extrusion applications: specification: Part 2 stainless steels	April, 2019	1	Not Equivalent
9	IS 11169 (Part 2) : 2023 <span style="color: green;">ISO 4954</span>	STEELS FOR COLD HEADING/COLD EXTRUSION APPLICATIONS part 2 stainless steels-SPECIFICATION (first revision)		-	Not Equivalent
10	IS 11185 : 1984	Specification for technical supply	April, 2024	1	Indigenous

	Reviewed In : 2024	conditions for hot rolled and forged steel bars for use in machine tool industry			
11	IS 11946 : 1987 Reviewed In : 2023	Specification for soft magnetic iron strips	March, 2023	2	Indigenous
12	IS 11947 : 1987 Reviewed In : 2023	Specification for soft magnetic iron rods, bars, flats and sections	March, 2023	1	Indigenous
13	IS 11952 : 1986 Reviewed In : 2024	Specification for steels for piston pins (Gudgeon Pins)	April, 2024	1	Indigenous
14	IS 12045 : 1987 Reviewed In : 2023	Specification for alloys used in electrical resistance metallic heating elements	March, 2023	1	Indigenous
15	IS 12145 : 1987 Reviewed In : 2024	Specification for quenched and tempered alloy steel forgings for pressure vessels	April, 2024	1	Indigenous
16	IS 12146 : 1987 Reviewed In : 2023	Specification for carbon manganese steel forgings for pressure vessels	March, 2023	1	Indigenous
17	IS 12390 : 1988 Reviewed In : 2024	Specification for iron nickel alloy 36 for ceramic sealing	April, 2024	-	Indigenous
18	IS 12391 : 1988 Reviewed In : 2024	Specification for iron nickel controlled expansion sealing alloys	April, 2024	-	Indigenous
19	IS 12549 : 1988 Reviewed In : 2024	Specification for iron nickel cobalt sealing alloy	April, 2024	-	Indigenous
20	IS 12658 : 2024	Grinding media rolled/forged carbon and Carbon - Chromium steels - Specification First Revision		-	Indigenous
21	IS 12836 : 1989 Reviewed In : 2019	36 - Nickel iron soft magnetic rods - Specification	April, 2019	-	Indigenous
22	IS 12881 : 1990 Reviewed In : 2019	36 - Nickel iron soft magnetic strips - Specification	April, 2019	-	Indigenous
23	IS 12882 : 1990 Reviewed In : 2024	48 - Nickel iron soft magnetic strip - Specification	April, 2024	-	Indigenous
24	IS 13352 : 1992 Reviewed In : 2024	Stock for forgings produced from continuously cast blooms, billets and slabs - Specification	April, 2024	-	Indigenous
25	IS 13387 : 1992 Reviewed In : 2024	Tool steel forgings for metal forming - Specification	April, 2024	1	Indigenous
26	IS 13795 (Part 1) : 1993 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Glossary of terms relating to special alloys	April, 2024	-	Indigenous
27	IS 14331 : 1995 Reviewed In : 2023	Steels for high temperature bolting applications - Specification	March, 2023	1	Indigenous
28	IS 14652 : 1999 Reviewed In : 2023	18 percent nickel maraging steel bars and rods - Specification	March, 2023	1	Indigenous
29	IS 14698 : 1999 Reviewed In : 2023	Carbon and low alloy steel billets, blooms, slabs and bars for manufacture of shell bodies and proof shots used in defence services - Specification	March, 2023	-	Indigenous
30	IS 1570 (Part 1) : 1978 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Schedules for wrought steels: Part 1 steels specified by tensile and/or yield properties (First Revision)	April, 2024	1	Indigenous

31	IS 1570 (Part 2/Sec 1) : 1979 Reviewed In : 2021	Schedules for wrought steels: Part 2 carbon steels (Unalloyed Steels): Sec 1 wrought products (Other Than Wires) with specified chemical composition and related properties (First Revision)	March, 2021	-	Indigenous
32	IS 1570 (Part 2/Sec 2) : 1987 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Schedules for wrought steels: Part 2 carbon steels (Unalloyed Steels): Sec 2 carbon steel wires with related properties (First Revision)	April, 2024	-	Indigenous
33	IS 1570 (Part 3) : 1979 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Schedules for wrought steels: Part 3 carbon and carbon - Manganese free cutting steels (First Revision)	April, 2024	-	Indigenous
34	IS 1570 (Part 4) : 1988 Reviewed In : 2023	Schedules for wrought steels: Part 4 alloy steels (Alloy Constructional And Spring Steels) with specified chemical composition and mechanical properties (First Revision)	March, 2023	-	Indigenous
35	IS 1570 (Part 5) : 1985 Reviewed In : 2023	Schedules for wrought steels: Part 5 stainless and heat - Resisting steels (Second Revision)	March, 2023	-	Indigenous
36	IS 1570 (Part 6) : 1996 Reviewed In : 2023	Schedules for wrought steels: Part 6 carbon and alloy tool steels (First Revision)	March, 2023	-	Indigenous
37	IS 1570 (Part 7) : 1992 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Schedule for wrought steels: Part 7 steels for elevated temperature service (Creep Resistant Steels)	April, 2024	-	Indigenous
38	IS 15997 : 2012 Reviewed In : 2022	Low nickel austenitic stainless steel plate, sheet, and strip for utensils and kitchen appliances - Specification	October, 2022	2	Indigenous
39	IS 16733 : 2018 ISO 11692 : 1994 Reviewed In : 2024 ISO 11692:1994	Ferritic-Pearlitic Engineering Steels for Precipitation Hardening from Hot-Working Temperatures	March, 2024	-	Identical under dual numbering
40	IS 17111 : 2019 ISO 683-17 : 2014 Reviewed In : 2024 ISO 683-17	Heat - Treated steels, alloy steels and free - Cutting steels - Ball and roller bearing steels	March, 2024	-	Identical under dual numbering
41	IS 1871 (Part 1) : 1987 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Commentary on indian standard schedules for wrought steels: Part 1 steels specified by tensile and/or yield properties [complementary to IS : 1579 (Part 1) - 19781] (First Revision)	April, 2024	-	Indigenous
42	IS 1871 (Part 2) : 1987 Reviewed In : 2024 Decision taken to Reaffirm and	Commentary on Indian Standard schedules for wrought steels: Part 2 carbon steels (Unalloyed Steels) complementary to is : 1570 (Part 2) - 19791 (First Revision)	April, 2024	-	Indigenous

	Archive				
43	IS 1871 (Part 3) : 1987 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Commentary on Indian Standard schedules for wrought steels: Part 3 carbon and carbon manganese free cutting steels [ complementary to IS : 1570 (Part 3) - 1979 ] (First Revision)	April, 2024	-	Indigenous
44	IS 18755 : 2024	Tri-ply SS-AL-SS material used for manufacture of utensils and kitchen appliances Specification		-	Indigenous
45	IS 1956 (Part 6) : 1976 Reviewed In : 2023	Glossary of terms relating to iron and steel: Part 6 forging (Including Drop Forging) (First Revision)	March, 2023	2	Indigenous
46	IS 2004 : 1991 Reviewed In : 2023	Carbon steel forgings for general engineering purposes - Specification (Third Revision)	March, 2023	-	Indigenous
47	IS 2611 : 1964 Reviewed In : 2023	Specification for carbon chromium molybdenum steel forgings for high temperature service	March, 2023	-	Indigenous
48	IS 3261 : 1980 Reviewed In : 2023	Specification for carbon steel forgings for shipbuilding industry (First Revision)	March, 2023	-	Indigenous
49	IS 3431 : 1982 Reviewed In : 2022	Specification for steel for the manufacture of volute helical and laminated springs for automotive suspension (Second Revision)	March, 2022	3	Indigenous
50	IS 3445 : 1992 Reviewed In : 2024	Forged steel rolls - Specification (First Revision)	April, 2024	-	Indigenous
51	IS 3469 (Part 13) : 1974 Reviewed In : 2023	Tolerances for closed die steel forgings (First Revision)	March, 2023	-	Indigenous
52	IS 3479 : 1966 Reviewed In : 2023	General requirements for steel drop, upset and press forgings	March, 2023	-	Indigenous
53	IS 3739 : 1987 Reviewed In : 2023	Dimensional tolerances for carbon and alloy constructional steel ( First revision )	March, 2023	-	Indigenous
54	IS 3748 : 2022 4957:2018 4957:2018	Tool Steels - Specification		-	Identical under dual numbering
55	IS 3930 : 1994 Reviewed In : 2024	Flame and induction hardening steels - Specification (Second Revision)	April, 2024	-	Indigenous
56	IS 4367 : 1991 Reviewed In : 2024	Alloy steel forgings for general industrial use - Specification (First Revision)	April, 2024	2	Indigenous
57	IS 4368 : 1967 Reviewed In : 2024	Specification for alloy steel billets, blooms and slabs for forging for general engineering purposes	April, 2024	1	Indigenous
58	IS 4398 : 1994 Reviewed In : 2024	Carbon - Chromium steel for the manufacture of balls, rollers and bearing races - Specification (Second Revision)	April, 2024	3	Indigenous
59	IS 4431 : 1978 Reviewed In : 2024 ISO 683-4	Specification for carbon and carbon manganese free cutting steels (First Revision)	April, 2024	2	Not Equivalent
60	IS 4432 : 1988 Reviewed In : 2024 ISO 683-3	Specification for case hardening steels (First Revision)	April, 2024	1	Not Equivalent
61	IS 4454 (Part 4) :	Steel wires for mechanical springs:	March, 2022	2	Not Equivalent

	2001 Reviewed In : 2022 ISO 6931-1	Part 4 stainless steel wire (Second Revision)			
62	IS 5517 : 1993 Reviewed In : 2024 ISO 683-1 & 2	Steels for hardening and tempering - Specification (Second Revision)	April, 2024	3	Not Equivalent
63	IS 5518 : 1996 Reviewed In : 2024	Steels for die blocks for drop forging - Specification (Second Revision)	April, 2024	-	Indigenous
64	IS 5522 : 2014 Reviewed In : 2024	Stainless steel sheets and strips for utensils - Specification (Third Revision)	April, 2024	2	Indigenous
65	IS 5651 : 1987 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Specification for steels for pneumatic tools (First Revision)	April, 2024	1	Indigenous
66	IS 6528 : 1995 Reviewed In : 2023 ISO I6143-3	Stainless steel wire - Specification (First Revision)	March, 2023	-	Not Equivalent
67	IS 6529 : 1996 Reviewed In : 2023	Stainless steel blooms, billets and slabs for forging - Specification (First Revision)	March, 2023	2	Indigenous
68	IS 6603 : 2024 ISO I6143-2	Stainless Steel Semi-Finished Products, Bars, Wire Rods and Bright Bars " Specification (Second Revision)		-	Not Equivalent
69	IS 6911 : 2017 Reviewed In : 2022 ISO 9444-1 & 2, 9445-1 & 2,15510,	Stainless steel plate, sheet and strip - Specification (Second Revision)	March, 2022	5	Not Equivalent
70	IS 7494 : 2023 ISO 683-15:1992	ALLOYS FOR INTERNAL COMBUSTION ENGINE VALVE APPLICATIONS 1/2 SPECIFICATION (Second Revision)		-	Not Equivalent
71	IS 8748 : 2023	FORGED/ ROLLED CTC SEGMENTS -SPECIFICATION (First Revision)		-	Indigenous
72	IS 9100 : 1979 Reviewed In : 2023	Methods of sampling steel forgings	March, 2023	-	Indigenous
73	IS 9294 : 2023	COLD-ROLLED STAINLESS STEEL STRIPS FOR RAZOR BLADES - Specification (First Revision)		-	Indigenous
74	IS 9516 : 1980 Reviewed In : 2024 ISO 4955	Specification for heat resisting steels	April, 2024	2	Not Equivalent
75	IS 963 : 1958 Reviewed In : 2021	Specification for chrome molybdenum steel bars and rods for aircraft purposes	February, 2021	3	Indigenous
76	IS 9683 : 1980 Reviewed In : 2023	Specification for carbon and low alloy steel forgings for fired and unfired pressure vessels	March, 2023	-	Indigenous
77	IS 9684 : 2024	TECHNICAL CONDITIONS FOR THE SUPPLY OF THE HOT ROLLED BILLETS, BLOOMS, SLABS AND BARS FOR		-	Indigenous

	CLOSED DIE FORGINGS (First Revision)		
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### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
1	MTD 16 (22223) Revision of: IS 14698:1999	CARBON AND LOW ALLOY STEEL BILLETS BLOOMS SLABS AND BARS FOR MANUFACTURE OF SHELL BODIES AND PROOF SHOTS USED IN DEFENCE SERVICES - SPECIFICATION
2	MTD 16 (22224) Revision of: IS 14652:1999	18 percent nickel maraging steel bars and rods - Specification
3	MTD 16 (22238) Revision of: IS 6529:1996	Stainless steel blooms billets and slabs for forging - Specification
4	MTD 16 (22239) Revision of: IS 9683:1980	SPECIFICATION FOR CARBON AND LOW ALLOY STEEL FORGINGS FOR FIRED AND UNFIRED PRESSURE VESSELS FIRST REVISION
5	MTD 16 (22241) Revision of: IS 9100:1979	METHODS OF SAMPLING STEEL FORGINGS FIRST REVISION
6	MTD 16 (22242) Revision of: IS 1956:1976	GLOSSARY OF TERMS RELATING TO IRON AND STEEL PART 6 FORGING INCLUDING DROP FORGING SECOND REVISION
7	MTD 16 (22243) Revision of: IS 3469:1974	TOLERANCES FOR CLOSED DIE STEEL FORGINGS SECOND REVISION
8	MTD 16 (22244) Revision of: IS 11946:1987	SPECIFICATION FOR SOFT MAGNETIC IRON STRIPS FIRST REVISION
9	MTD 16 (22245) Revision of: IS 11947:1987	SPECIFICATION FOR SOFT MAGNETIC IRON RODS BARS FLATS AND SECTIONS FIRST REVISION
10	MTD 16 (22246) Revision of: IS 12045:1987	SPECIFICATION FOR ALLOYS USED IN ELECTRICAL RESISTANCE METALLIC HEATING ELEMENTS FIRST REVISION
11	MTD 16 (22248) Revision of: IS 12146:1987	SPECIFICATION FOR CARBON-MANGANESE STEEL FORGINGS FOR PRESSURE VESSELS FIRST REVISION

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
1	MTD 16 (26393)	Stainless steel sheets and strips for utensils - Specification Third Revision Amendment - 1

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
1	MTD 16 (22234) Revision of: IS 10604:1983	Specification for Machining allowances and tolerances for open die steel forgings Part 2 high alloy steel forgings

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	MTD 16 (22233) Revision of: IS 10604:1983	Specification for machining allowances and tolerances for open die steel forgings Part 1 carbon and low alloy steel forgings Part 1 carbon and low alloy steel forgings
2	MTD 16 (22240) Revision of: IS 10604:1983	GENERAL REQUIREMENTS FOR STEEL DROP UPSET AND PRESS FORGINGS FIRST REVISION
3	MTD 16 (25873) Revision of: IS 10604:1983	Heat - Treated steels alloy steels and free - Cutting steels - Ball and roller bearing steels

#### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

## Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	MTD 16 (15634) Revision of: IS 6528:1995	Stainless steel wire - Specification Second Revision
2	MTD 16 (25131)	Specification for iron nickel alloy 36 for ceramic sealing Amendment - 1
3	MTD 16 (25282)	Forged steel rolls - Specification First Revision Amendment - 1
4	MTD 16 (25285)	Specification for iron nickel controlled expansion sealing alloys Amendment - 1
5	MTD 16 (25287)	Specification for iron nickel cobalt sealing alloy Amendment - 1
6	MTD 16 (25290)	36 - Nickel iron soft magnetic rods - Specification Amendment - 1
7	MTD 16 (25292)	36 - Nickel iron soft magnetic strips - Specification Amendment - 1
8	MTD 16 (25294)	48 - Nickel iron soft magnetic strip - Specification Amendment - 1

**Total Published Standards:75 Total Standards Under development:24**

### Aspect Wise Report

Product : 55  
 Code of Practices : 4  
 Methods of Test : 0  
 Terminology : 2  
 Dimensions : 12  
 System Standard : 0  
 Safety Standard : 0  
 Others : 3  
 Service Specification : 0  
 Process Specification : 0  
 Unclassified : 0

### Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 1870 : 1965 Reviewed In : 2014	Comparison of Indian and overseas standards for wrought steels for general engineering purposes
2	IS 3749 : 1978	Tool and die steels for cold work
3	IS 4430 : 1979 Reviewed In : 2019	Specification for mould steels First Revision
4	IS 5489 : 1975 Reviewed In : 2019	Specification for carburizing steels for use in bearing industry First Revision
5	IS 6527 : 1995 Reviewed In : 2024 ISO 16143-2	Stainless steel wire rods - Specification First Revision
6	IS 7291 : 1981 Reviewed In : 2019 ISO 683	Specification for high speed tool steels First Revision
7	IS 9175 (Part 1) : 1979 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 1 chemical composition
8	IS 9175 (Part 2) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 2 15c8 grade steel
9	IS 9175 (Part 3) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 3 25c8 grade steel
10	IS 9175 (Part 4) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 4 30c8 grade steel
11	IS 9175 (Part 5) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 5 35c8 grade steel
12	IS 9175 (Part 6) : 1986 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 6 mechanical and physical properties of 40c8 grade steel
13	IS 9175 (Part 7) : 1986	Specification for rationalized steels for the automobile and ancillary industry Part 7 mechanical

	Reviewed In : 2019	and physical properties of 45c8 grade steel
14	IS 9175 (Part 8) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 8 55c8 grade steel
15	IS 9175 (Part 9) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 9 11c10s25 grade steel
16	IS 9175 (Part 10) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 10 14c14s14 grade steel
17	IS 9175 (Part 11) : 1985 Reviewed In : 2019	Specification for rationalized steels for automobile and ancillary industry mechanical and physical properties Part 11 25c12s14 grade steel
18	IS 9175 (Part 12) : 1988 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 12 mechanical and physical properties of 35 mn6mo3s15
19	IS 9175 (Part 13) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 13 mechanical and physical properties of 40c15s12 grade steel
20	IS 9175 (Part 15) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 15 mechanical and physical properties of 37c15 grade steel
21	IS 9175 (Part 16) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 16 mechanical and physical properties of 35mn6mo3 grade steel
22	IS 9175 (Part 17) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 17 mechanical and physical properties of 35mn6mo4 grade steel
23	IS 9175 (Part 18) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 18 mechanical and physical properties of 15cr3 grade steel
24	IS 9175 (Part 19) : 1986 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 19 mechanical and physical properties of 16mn5cr4 grade steel
25	IS 9175 (Part 20) : 1986 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 20 mechanical and physical properties of 20mnCr5 grade steel
26	IS 9175 (Part 21) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 21 mechanical and physical properties of 40cr4 grade steel
27	IS 9175 (Part 22) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 22 mechanical and physical properties of 40cr4mo3 grade steel
28	IS 9175 (Part 23) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 23 mechanical and physical properties of 25cr13mo6 grade steel
29	IS 9175 (Part 24) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 24 mechanical and physical properties of 35ni5cr2 grade steel
30	IS 9175 (Part 25) : 1987 Reviewed In : 2019	Secification for rationalized steels for the automobile and ancillary industry Part 25 mechanical and physical properties of 15ni5cr4mol grade steel
31	IS 9175 (Part 26) : 1986 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 26 mechanical and physical properties of 16ni3cr2 grade steel
32	IS 9175 (Part 27) : 1987 Reviewed In : 2019	Specifcation for rationalized steels for the automobile and ancillary industry Part 27 mechanical and physical properties of 15ni7cr4mo2 grade steel
33	IS 9175 (Part 28) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 28 mechanical and physical properties of 40ni6cr4mo3 grade steel
34	IS 9175 (Part 29) : 1987 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 29 mechanical and physicl properties of of 40ni10cr3mo6 grade steel
35	IS 9175 (Part 30) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 30 mechanical and physical properties of 20ni7crMo2 grade steel
36	IS 9175 (Part 31) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 31 mechanical and physical properties of 20ni7mo2 grade steel
37	IS 9175 (Part 32) : 1987 Reviewed In : 2019	Specification for rationalized steels for the automobile and ancillary industry Part 32 mechanical and physical properties of 2onicrmo2 grade steel
38	IS 9175 (Part 33) : 1988 Reviewed In : 2019	Specification for rationalized - steels for the automobile and ancillary industry Part 33 mechanical and physical properties of 42cr6v10 grade steel
39	IS 9175 (Part 34) : 1986 Reviewed In : 2019	Rationalized steels for the automobile and ancillary industry Part 34 mechanical and physical properties of 14crNi6 grade steel

### Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 10631 : 1983 Reviewed In : 2024	Specification for stainless steel for welding electrode core wire



2	IS 10632 (Part 1) : 1983 Reviewed In : 2024	Specification for non magnetic stainless steels for electrical applications Part 1 general requirements
3	IS 10632 (Part 2) : 1983 Reviewed In : 2024	Specification for non magnetic stainless steels for electrical applications Part 2 specific requirements for binding wires
4	IS 10632 (Part 3) : 1983 Reviewed In : 2024	Specification for non magnetic stainless steels for electrical applications Part 3 specific requirements for sheets strips and plates
5	IS 11169 (Part 1) : 2022 1833-13:2019	Specification for steels for cold heading cold extrusion applications Part 1 wrought carbon and low alloy steels
6	IS 11169 (Part 2) : 2023	STEELS FOR COLD HEADING COLD EXTRUSION APPLICATIONS part 2 stainless steels- SPECIFICATION first revision
7	IS 11946 : 1987 Reviewed In : 2023	Specification for soft magnetic iron strips
8	IS 11947 : 1987 Reviewed In : 2023	Specification for soft magnetic iron rods bars flats and sections
9	IS 11952 : 1986 Reviewed In : 2024	Specification for steels for piston pins Gudgeon Pins
10	IS 12045 : 1987 Reviewed In : 2023	Specification for alloys used in electrical resistance metallic heating elements
11	IS 12145 : 1987 Reviewed In : 2024	Specification for quenched and tempered alloy steel forgings for pressure vessels
12	IS 12146 : 1987 Reviewed In : 2023	Specification for carbon manganese steel forgings for pressure vessels
13	IS 12390 : 1988 Reviewed In : 2024	Specification for iron nickel alloy 36 for ceramic sealing
14	IS 12391 : 1988 Reviewed In : 2024	Specification for iron nickel controlled expansion sealing alloys
15	IS 12549 : 1988 Reviewed In : 2024	Specification for iron nickel cobalt sealing alloy
16	IS 12658 : 2024	Grinding media rolled forged carbon and Carbon - Chromium steels - Specification First Revision
17	IS 12836 : 1989 Reviewed In : 2019	36 - Nickel iron soft magnetic rods - Specification
18	IS 12881 : 1990 Reviewed In : 2019	36 - Nickel iron soft magnetic strips - Specification
19	IS 12882 : 1990 Reviewed In : 2024	48 - Nickel iron soft magnetic strip - Specification
20	IS 13352 : 1992 Reviewed In : 2024	Stock for forgings produced from continuously cast blooms billets and slabs - Specification
21	IS 13387 : 1992 Reviewed In : 2024	Tool steel forgings for metal forming - Specification
22	IS 14331 : 1995 Reviewed In : 2023	Steels for high temperature bolting applications - Specification
23	IS 14652 : 1999 Reviewed In : 2023	18 percent nickel maraging steel bars and rods - Specification
24	IS 14698 : 1999 Reviewed In : 2023	Carbon and low alloy steel billets blooms slabs and bars for manufacture of shell bodies and proof shots used in defence services - Specification
25	IS 15997 : 2012 Reviewed In : 2022	Low nickel austenitic stainless steel plate sheet and strip for utensils and kitchen appliances - Specification
26	IS 16733 : 2018 ISO 11692 : 1994 Reviewed In : 2024 ISO 11692:1994	Ferritic-Pearlitic Engineering Steels for Precipitation Hardening from Hot-Working Temperatures
27	IS 17111 : 2019 ISO 683-17 : 2014 Reviewed In : 2024 ISO 683-17	Heat - Treated steels alloy steels and free - Cutting steels - Ball and roller bearing steels
28	IS 18755 : 2024	Tri-ply SS-AL-SS material used for manufacture of utensils and kitchen appliances Specification
29	IS 2004 : 1991	Carbon steel forgings for general engineering purposes - Specification Third Revision

	Reviewed In : 2023	
30	IS 2611 : 1964 Reviewed In : 2023	Specification for carbon chromium molybdenum steel forgings for high temperature service
31	IS 3261 : 1980 Reviewed In : 2023	Specification for carbon steel forgings for shipbuilding industry First Revision
32	IS 3431 : 1982 Reviewed In : 2022	Specification for steel for the manufacture of volute helical and laminated springs for automotive suspension Second Revision
33	IS 3445 : 1992 Reviewed In : 2024	Forged steel rolls - Specification First Revision
34	IS 3748 : 2022 4957:2018	Tool Steels - Specification
35	IS 3930 : 1994 Reviewed In : 2024	Flame and induction hardening steels - Specification Second Revision
36	IS 4367 : 1991 Reviewed In : 2024	Alloy steel forgings for general industrial use - Specification First Revision
37	IS 4368 : 1967 Reviewed In : 2024	Specification for alloy steel billets blooms and slabs for forging for general engineering purposes
38	IS 4398 : 1994 Reviewed In : 2024	Carbon - Chromium steel for the manufacture of balls rollers and bearing races - Specification Second Revision
39	IS 4431 : 1978 Reviewed In : 2024 ISO 683-4	Specification for carbon and carbon manganese free cutting steels First Revision
40	IS 4432 : 1988 Reviewed In : 2024 ISO 683-3	Specification for case hardening steels First Revision
41	IS 4454 (Part 4) : 2001 Reviewed In : 2022 ISO 6931-1	Steel wires for mechanical springs Part 4 stainless steel wire Second Revision
42	IS 5517 : 1993 Reviewed In : 2024 ISO 683-1 & 2	Steels for hardening and tempering - Specification Second Revision
43	IS 5518 : 1996 Reviewed In : 2024	Steels for die blocks for drop forging - Specification Second Revision
44	IS 5522 : 2014 Reviewed In : 2024	Stainless steel sheets and strips for utensils - Specification Third Revision
45	IS 5651 : 1987 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Specification for steels for pneumatic tools First Revision
46	IS 6528 : 1995 Reviewed In : 2023 ISO I6143-3	Stainless steel wire - Specification First Revision
47	IS 6529 : 1996 Reviewed In : 2023	Stainless steel blooms billets and slabs for forging - Specification First Revision
48	IS 6603 : 2024	Stainless Steel Semi-Finished Products Bars Wire Rods and Bright Bars Specification Second Revision
49	IS 6911 : 2017  Reviewed In : 2022 ISO 9444-1 &2, 9445-1 &2,15510,	Stainless steel plate sheet and strip - Specification Second Revision
50	IS 7494 : 2023	ALLOYS FOR INTERNAL COMBUSTION ENGINE VALVE APPLICATIONS SPECIFICATION Second Revision
51	IS 8748 : 2023	FORGED ROLLED CTC SEGMENTS -SPECIFICATION First Revision
52	IS 9294 : 2023	COLD-ROLLED STAINLESS STEEL STRIPS FOR RAZOR BLADES - Specification First Revision
53	IS 9516 : 1980	Specification for heat resisting steels

	Reviewed In : 2024 ISO 4955	
54	IS 963 : 1958 Reviewed In : 2021	Specification for chrome molybdenum steel bars and rods for aircraft purposes
55	IS 9683 : 1980 Reviewed In : 2023	Specification for carbon and low alloy steel forgings for fired and unfired pressure vessels