

BUREAU OF INDIAN STANDARDS

Program of Work

CED 7 : Structural Engineering And Structural Sections

Scope: STANDARDIZATION IN THE FIELD OF STRUCTURAL ENGINEERING USING STEEL/ALUMINIUM STRUCTURAL SECTIONS INCLUDING PIPELINES FOR GAS AND FORMULATION OF INDIAN STANDARDS ON DIMENSIONS/TOLERANCES OF VARIOUS HOT ROLLED/COLD FORMED SECTIONS, BARS AND FLAT PRODUCTS IN STEEL AND ALUMINIUM FOR STRUCTURAL AND GENERAL ENGINEERING APPLICATIONS.

Liaison: **ISO TC-167 (P):** *Steel and aluminium structures*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10182 (Part 1) : 1982 <i>Reviewed In : 2021</i>	Dimensions and tolerances for hot rolled track shoe sections: Part 1: Sec TS - L1	January, 2021	-	Indigenous
2	IS 10182 (Part 2) : 1985 <i>Reviewed In : 2021</i>	Dimensions and tolerances for hot rolled track shoe sections: Part 2: Sec TS - H1	January, 2021	-	Indigenous
3	IS 10987 : 1992 <i>Reviewed In : 2022</i>	Code of Practice for Design, Fabrication, Testing and Installation of Under - Ground/Above - Ground Horizontal Cylindrical Steel Storage Tanks for Petroleum Products (First Revision)	December, 2022	-	Indigenous
4	IS 1173 : 1978 <i>Reviewed In : 2019</i>	Specification for Hot Rolled and Slit Steel Tee Bars (Second Revision)		-	
5	IS 1252 : 1991 <i>Reviewed In : 2022</i>	Hot Rolled Steel Bulb Angles - Dimensions (First Revision)	December, 2022	-	Indigenous
6	IS 12778 : 2004 <i>Reviewed In : 2019</i>	Hot rolled parallel flange steel sections for beams, columns and bearing piles - Dimensions and section properties		-	Indigenous
7	IS 12779 : 1989 <i>Reviewed In : 2019</i>	Rolling and cutting tolerances for hot rolled parallel flange beam and column sections - Specification		-	Indigenous
8	IS 12843 : 1989 <i>Reviewed In : 2021</i>	Tolerances for erection of steel structures	January, 2021	-	
9	IS 15663 (Part 1) : 2006 <i>Reviewed In : 2021</i>	Design and installation of natural gas pipelines - Code of Practice : Part 1 Laying of pipelines	July, 2021	-	Indigenous
10	IS 15663 (Part 2) : 2006 <i>Reviewed In : 2021</i>	Design and installation of natural gas pipelines - Code of Practice : Part 2 Laying of pipelines in	July, 2021	-	Indigenous

		crossings			
11	IS 15663 (Part 3) : 2006 Reviewed In : 2021	Design and installation of natural gas pipelines - Code of Practice : Part 3 Pre-commissioning and commissioning of pipelines	July, 2021	-	Indigenous
12	IS 1730 : 1989 Reviewed In : 2019 Reaffirmed but not taken up for revision ISO 1035-3:1980	Steel Plates, Sheets Strips and Flats for Structural and General Engineering Purposes - Dimensions (Second Revision)		-	Modified/Technically Equivalent
13	IS 1732 : 1989 Reviewed In : 2019 Reaffirmed but not taken up for revision	Steel Bars, Round and Square for Structural and General Engineering Purposes - Dimensions (Second Revision)		-	
14	IS 17740 : 2022	Isolated Towers, Masts and Poles using Structural Steel - Code of Practice		-	Indigenous
15	IS 1863 : 1979 ISO 657-19 Reviewed In : 2019 ISO 657-19	Specification for Rolled Steel Bulb Flats (First Revision)		-	Identical under dual numbering
16	IS 1864 : 1979 ISO 657-18 Reviewed In : 2019 ISO 657-18	Specification for Hot Rolled Steel 'L' Sections for Ship Building (First Revision)		-	Not Equivalent
17	IS 2314 : 1986 Reviewed In : 2017	Steel Sheet Piling Sections	December, 2017	1	
18	IS 2314 (Part 1) : 2023	Steel Sheet Piling Section " Specification Part 1 Hot Rolled Sheet Pile (Second Revision)		-	Indigenous
19	IS 2314 (Part 2) : 2023	Steel Sheet Piling Section " Specification Part 2 Cold Formed Sheet Pile (Second Revision)		-	Indigenous
20	IS 2713 (Part 1 to 3) : 1980 Reviewed In : 2022	Tubular Steel Poles for Overhead Power Lines	December, 2022	2	
21	IS 2750 : 1964 Reviewed In : 2021	Specification for steel scaffoldings	January, 2021	3	Indigenous
22	IS 3443 : 1980 Reviewed In : 2019 Reaffirmed but not taken up for revision	Specification for Crane Rail Sections (First Revision)		1	
23	IS 3908 : 1986 Reviewed In : 2022	Specification for Aluminium Equal Leg Angles (First Revision)	December, 2022	-	
24	IS 3909 : 1986 Reviewed In : 2022	Specification for Aluminium Unequal Leg Angles (First Revision)	December, 2022	-	
25	IS 3921 : 1985 Reviewed In : 2021	Specification for Aluminium Channels (First Revision)	January, 2021	-	
26	IS 3954 : 1991 Reviewed In : 2021 Reaffirmed but not taken up for revision	Hot Rolled Steel Channel Sections for General Engineering Purposes - Dimensions (First Revision)	January, 2021	-	
27	IS 3964 : 1980 Reviewed In : 2021 Reaffirmed but not	Specification for Light Rails (First Revision)	January, 2021	1	

	taken up for revision				
28	IS 4000 : 1992 Reviewed In : 2022	High strength bolts in steel structures - Code of practice (First Revision)	December, 2022	1	Indigenous
29	IS 4014 (Part 1) : 1967 Reviewed In : 2021 Reaffirmed but not taken up for revision	Code of practice for steel tubular scaffolding: Part 1 definitions and materials	January, 2021	-	Indigenous
30	IS 5384 : 1985 Reviewed In : 2021	Specification for Aluminium I-Beam (First Revision)	January, 2021	-	
31	IS 5488 : 1987 Reviewed In : 2021 Reaffirmed but not taken up for revision ISO 657-10	Dimensions and Dimensional Tolerances for Hot Rolled Steel Plates for Ship's Hull Structure (First Revision)	January, 2021	-	Not Equivalent
32	SP 6-4 : 1969	Isi handbook for structural engineers: Part 4 use of high strength friction grip bolts		-	Indigenous
33	SP 6-5 : 1980	Handbook for structural engineers: Part 5 cold - Formed, light gauge steel structures		1	Indigenous
34	SP 6-6 : 1972	Isi handbook for structural engineers: Part 6 application of plastic theory in design of steel structures: sec A		-	Indigenous
35	IS 6445 : 1985 Reviewed In : 2021	Specification for Aluminium Tee - Sections (First Revision)	January, 2021	-	Indigenous
36	IS 6449 : 1987 Reviewed In : 2019	Specification for Aluminium Bulb Angles for Marine Application (First Revision)		-	Indigenous
37	IS 6475 : 1987 Reviewed In : 2019	Specification for Aluminium Tee bars for Marine Application (First Revision)		-	Indigenous
38	IS 6476 : 1987 Reviewed In : 2019	Specification for Aluminium Bulb Plates for Marine Application (First Revision)		-	Indigenous
39	IS 6533 (Part 1) : 1989 Reviewed In : 2021	Design and Construction of Steel Chimneys - Code of Practice: Part 1 Mechanical Aspects (First Revision)	January, 2021	1	
40	IS 6533 (Part 2) : 1989 Reviewed In : 2022	Code of Practice for Design and Construction of Steel Chimneys: Part 2 Structural Aspects (First Revision)	December, 2022	1	
41	IS 7205 : 1974 Reviewed In : 2021	Safety Code for Erection of Structural Steel Work	January, 2021	-	Indigenous
42	IS 7215 : 1974 Reviewed In : 2021	Tolerances for fabrication of steel structures	January, 2021	1	Indigenous
43	IS 7452 : 1990 Reviewed In : 2022	Hot Rolled Steel Sections for Doors, Windows and Ventilators - Specification (Second Revision)	December, 2022	-	Indigenous
44	IS 800 : 2007 Reviewed In : 2022	General construction in steel - Code of practice (Third Revision)	December, 2022	2	Indigenous
45	IS 801 : 1975 Reviewed In : 2021	Code of practice for use of cold - Formed light gauge steel structural members in general building	January, 2021	1	Indigenous

		construction (First Revision)			
46	IS 802 (Part 1/Sec 1) : 2015 Reviewed In : 2020	Use of structural steel in overhead transmission line towers - Code of practice: Part 1 materials, loads and design strengths: sec 1 materials and loads (Fourth Revision)	August, 2020	1	Indigenous
47	IS 802 (Part 1/Sec 2) : 2016 Reviewed In : 2021	Use of Structural Steel in Overhead Transmission Line Towers - Code of Practice: Part 1 Material, Loads and Design Strengths: Sec 2 Design Strengths (Fourth Revision)	October, 2021	-	Indigenous
48	IS 802 (Part 2) : 1978 Reviewed In : 2022	Code of practice for use of structural steel in overhead transmission line towers: Part 2 fabrication galvanizing, inspection and packing	December, 2022	1	Indigenous
49	IS 802 (Part 3) : 1978 Reviewed In : 2022	Code of Practice for Use of Structural Steel In Overhead Transmission Line Towers, Part 3 Testing	December, 2022	-	
50	IS 802 (Part 4) : 2023	Use of Structural Steel in Overhead Transmission Line Towers - Code of Practice Part 4 Requirements for Latticed Switchyard Structures		-	Indigenous
51	IS 802 (Part 6) : 2022	Use of Structural Steel in Overhead Transmission Line Towers “ Code of Practice Part 6 Tower Erection		-	Indigenous
52	IS 803 : 1976 Reviewed In : 2022 Reaffirmed but not taken up for revision	Code of Practice for Design, Fabrication and Erection of Vertical Mild Steel Cylindrical Welded Oil Storage Tanks (First Revision)	December, 2022	1	
53	IS 804 : 1967 Reviewed In : 2022 Reaffirmed but not taken up for revision	Specification for Rectangular Pressed Steel Tanks (First Revision)	December, 2022	2	Indigenous
54	IS 805 : 1968 Reviewed In : 2022 Reaffirmed but not taken up for revision	Code of practice for use of steel in gravity water tanks	December, 2022	-	Indigenous
55	IS 806 : 1968 Reviewed In : 2022	Code of Practice for Use of Steel Tubes in General Building Construction (First Revision)	December, 2022	1	Indigenous
56	IS 808 : 2021	Hot Rolled Steel Beam, Column, Channel and Angle Sections “ Dimensions and Properties (Fourth Revision)		-	Indigenous
57	IS 8081 : 1976 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specification for slotted sections	January, 2021	1	Indigenous
58	IS 811 : 1987 Reviewed In : 2019	Specification for cold formed light gauge structural steel sections (Second Revision)		1	Indigenous
59	IS 8147 : 1976	Code of practice for use of	January, 2021	-	Indigenous

	Reviewed In : 2021	aluminium alloys in structures			
60	IS 8640 : 1977 Reviewed In : 2021 Reaffirmed but not taken up for revision	Recommendations for dimensional parameters for industrial buildings	January, 2021	-	Indigenous
61	IS 9178 (Part 1) : 1979 Reviewed In : 2021	Criteria for design of steel bins for storage of bulk materials: Part 1 general requirements and assessment of loads	January, 2021	2	Indigenous
62	IS 9178 (Part 2) : 1979 Reviewed In : 2021	Criteria for design of steel bins for storage of bulk materials: Part 2 design criteria	January, 2021	-	Indigenous
63	IS 9178 (Part 3) : 1980 Reviewed In : 2021	Criteria for Design of Steel Bins for Storage of Bulk Materials - Part 3 : Bins Designed for Mass Flow and Funnel Flow	January, 2021	1	
64	IS 9964 (Part 1) : 1981 Reviewed In : 2021	Recommendations for maintenance and operation of petroleum storage tanks: Part 1 preparation of tank for safe entry and work	January, 2021	-	Indigenous
65	IS 9964 (Part 2) : 1981 Reviewed In : 2021	Recommendations for maintenance and operation of petroleum storage tanks: Part 2 inspection	January, 2021	-	Indigenous

Standards under Development

Projects Approved

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

Preliminary Draft Standards

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

Drafts Standards in WC Stage

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

Draft Standards Completed WC Stage

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

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
1	CED 7 (24910)	Use of structural steel in overhead transmission line towers - Code of practice Part 1 material loads and permissible stresses sec 2 permissible stresses Fourth Revision Amendment - 1

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	CED 7 (22216) Revision of:	Hot Rolled and Slit Steel Tee Bars Dimensions and Properties

	IS 1173:1978	
2	CED 7 (22217) Revision of: IS 1252:1991	Hot Rolled Steel Sections for Shipbuilding Dimensions and Tolerances
3	CED 7 (22225) Revision of: IS 3908:1986	Aluminium Beam Channel and Angle Sections Dimensions and Properties

Total Published Standards:63 Total Standards Under development:4

Aspect Wise Report

Product : 22
 Code of Practices : 21
 Methods of Test : 0
 Terminology : 0
 Dimensions : 12
 System Standard : 0
 Safety Standard : 1
 Others : 9
 Service Specification : 0
 Process Specification : 0
 Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 1731 : 1971	Dimensions for steel flats for structural and general engineering purposes
2	SP 38 : 1987	Handbook of Typified Designs for Structures With Steel Roof Trusses With and Without Cranes Based on IS Codes
3	SP 40 : 1987	Handbook on Structures With Steel Portal Frames Without Cranes
4	SP 47 : 1988	Handbook on Structures with Steel Lattice Portal Frames Without Cranes
5	SP 6-1 : 1964	Handbook for Structural Engineers - Part-1 Structural Steel Sections
6	SP 6-2 : 1962	Handbook for Structural Engineers -Part-2 Steel Beams and Plate Girders
7	SP 6-3 : 1962	Handbook on Structural Engineers - Part-3 Steel Columns and Struts
8	SP 6-7 : 1972 Reviewed In : 2010	ISI Handbook for Structural Engineers - Part 7 Simple Welded Girders

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 1173 : 1978 Reviewed In : 2019	Specfication for Hot Rolled and Slit Steel Tee Bars Second Revision
2	IS 1863 : 1979 ISO 657-19 Reviewed In : 2019 ISO 657-19	Specification for Rolled Steel Bulb Flats First Revision
3	IS 1864 : 1979 ISO 657-18 Reviewed In : 2019 ISO 657-18	Specification for Hot Rolled Steel 39 L 39 Sections for Ship Building First Revision
4	IS 2314 : 1986 Reviewed In : 2017	Steel Sheet Piling Sections
5	IS 2314 (Part 1) : 2023	Steel Sheet Piling Section Specification Part 1 Hot Rolled Sheet Pile Second Revision

6	IS 2314 (Part 2) : 2023	Steel Sheet Piling Section Specification Part 2 Cold Formed Sheet Pile Second Revision
7	IS 2713 (Part 1 to 3) : 1980 Reviewed In : 2022	Tubular Steel Poles for Overhead Power Lines
8	IS 2750 : 1964 Reviewed In : 2021	Specification for steel scaffoldings
9	IS 3908 : 1986 Reviewed In : 2022	Specification for Aluminium Equal Leg Angles First Revision
10	IS 3909 : 1986 Reviewed In : 2022	Specification for Aluminium Unequal Leg Angles First Revision
11	IS 3921 : 1985 Reviewed In : 2021	Specification for Aluminium Channels First Revision
12	IS 3964 : 1980 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specifiacation for Light Rails First Revision
13	IS 5384 : 1985 Reviewed In : 2021	Specification for Aluminium I-Beam First Revision
14	IS 6445 : 1985 Reviewed In : 2021	Specification for Aluminium Tee - Sections First Revision
15	IS 6449 : 1987 Reviewed In : 2019	Specification for Aluminium Bulb Angles for Marine Application First Revision
16	IS 6475 : 1987 Reviewed In : 2019	Specification for Aluminium Tee bars for Marine Application First Revision
17	IS 6476 : 1987 Reviewed In : 2019	Specification for Aluminium Bulb Plates for Marine Application First Revision
18	IS 7452 : 1990 Reviewed In : 2022	Hot Rolled Steel Sections for Doors Windows and Ventilators - Specification Second Revision
19	IS 804 : 1967 Reviewed In : 2022 Reaffirmed but not taken up for revision	Specification for Rectangular Pressed Steel Tanks First Revision
20	IS 8081 : 1976 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specification for slotted sections
21	IS 811 : 1987 Reviewed In : 2019	Specification for cold formed light gauge structural steel sections Second Revision