### **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	Dimensions and tolerances for hot	January, 2021	-	Indigenous
	1):1982	rolled track shoe sections: Part 1:			
	Reviewed In: 2021	Sec TS - L1			
2	IS 10182 (Part	Dimensions and tolerances for hot	January, 2021	-	Indigenous
	2):1985	rolled track shoe sections: Part 2:			
	Reviewed In: 2021	Sec TS - H1			
3	IS 10987:1992	Code of Practice for Design,	December, 2022	-	Indigenous
	Reviewed In: 2022	Fabrication, Testing and			
		Installation of Under -			
		Ground/Above - Ground			
		Horizontal CylindricalSteel Storage			
		Tanks for Petroleum Products			
		(First Revision)			
4	IS 1173:2025	Hot Rolled and Slit Steel Tee Bars		-	
		Dimensions and Properties			
5	IS 1252:2025	Hot Rolled Steel Sections for		-	Indigenous
		Shipbuilding � Dimensions and			
		Tolerances			
6	IS 12778:2004	Hot rolled parallel flange steel		-	Indigenous
	Reviewed In: 2019	sections for beams, columns and			
		bearing piles - Dimensions and			
		section properties			
7	IS 12779:1989	Rolling and cutting tolerances for	March, 2024	-	Indigenous
	Reviewed In: 2024	hot rolled parallel flange beam and			
		column sections - Specification			
8	IS 12843:1989	Tolerances for erection of steel	January, 2021	-	
	Reviewed In: 2021	structures			
9	IS 15663 (Part	Design and installation of natural	July, 2021	-	Indigenous
	1):2006	gas pipelines - Code of Practice :			
	Reviewed In: 2021	Part 1 Laying of pipelines			
10	IS 15663 (Part	Design and installation of natural	July, 2021	-	Indigenous
	2):2006	gas pipelines - Code of Practice :			
	Reviewed In: 2021	Part 2 Laying of pipelines in			
1		l l		1	

I		crossings			
11	IS 15663 (Part	Design and installation of natural	July, 2021	-	Indigenous
	3):2006	gas pipelines - Code of Practice :	<b>3</b> /		
	Reviewed In: 2021	Part 3 Pre-commissioning and			
		commissioning of pipelines			
12	IS 1730:1989	Steel Plates, Sheets Strips and		-	Modified/Technically
	Reviewed In: 2019	Flats for Structural and General			Equivalent
	Reaffirmed but not	Engineering Purposes - Dimensions			•
	taken up for revision				
	ISO 1035-3:1980	, ,			
13	IS 1732:1989	Steel Bars, Round and Square for		-	
	Reviewed In: 2019	Structural and General Engineering			
	Reaffirmed but not	Purposes - Dimensions (Second			
	taken up for revision	- ·			
	1	ŕ			
14	IS 17740:2022	Isolated Towers, Masts and Poles		-	Indigenous
		using Structural Steel - Code of			
		Practice			
15	IS 2314 (Part	Steel Sheet Piling Section â€"		-	Indigenous
	1):2023	Specification Part 1 Hot Rolled			
	<u> </u>	Sheet Pile (Second Revision)			
16	IS 2314 (Part	Steel Sheet Piling Section â€"		-	Indigenous
	2):2023	Specification Part 2 Cold Formed			
L		Sheet Pile (Second Revision)			
17	IS 2713 (Part 1 to	Tubular Steel Poles for Overhead	December, 2022	2	
	3):1980	Power Lines			
	Reviewed In: 2022				
18	IS 2750:1964	Specification for steel scaffoldings	January, 2021	3	Indigenous
	Reviewed In: 2021				
19	IS 3443:1980	SPecification for Crane Rail		1	
	Reviewed In: 2019	Sections (First Revision)			
	Reaffirmed but not				
	taken up for revision				
20	IS 3908:2025	Aluminium Beam, Channel and		-	
		Angle Sections � Dimensions			
		and Properties			
21	IS 3954:1991	Hot Rolled Steel Channel Sections	January, 2021	-	
		for General Engineering Purposes -			
	Reaffirmed but not	Dimensions (First Revision)			
	taken up for revision				
	70.2	a 10 - 1 - 1		<u> </u>	
22	IS 3964:1980	Specifiacation for Light Rails	January, 2021	1	
	Reviewed In: 2021	(First Revision)			
	Reaffirmed but not				
	taken up for revision				
L	IC 4000 1000	TTU-L-con- d 1 to 1 to 1	D. 1 2022	4	Τ 1'
23	IS 4000:1992	High strength bolts in steel	December, 2022	1	Indigenous
	Reviewed In: 2022	structures - Code of practice (First			
	IC 4014 (D- ::4	Revision)	Iomuse 2021	+	T., J
24	IS 4014 (Part	Code of practice for steel tubular	January, 2021	-	Indigenous
	1):1967	scaffolding: Part 1 definitions and			
	Reviewed In: 2021	materials			
	Reaffirmed but not				
	taken up for revision				
25	IS 5488:1987	Dimensions and Dimensional	January 2021		Not Equivalent
25	18 5488:1987 Reviewed In : 2021	Dimensions and Dimensional	January, 2021	_	Not Equivalent
1		Tolerances for Hot Rolled Steel			
1	Reaffirmed but not	Plates for Ship's Hull Structure			
		·			

	taken up for revision ISO 657-10	(First Revision)			
26	SP 6-4:1969	Isi handbook for structural engineers: Part 4 use of high strength friction grip bolts		-	Indigenous
27	SP 6-5:1980	Handbook for structural engineers: Part 5 cold - Formed, light gauge steel structures		1	Indigenous
28	SP 6-6:1972	Isi handbook for structural engineers: Part 6 application of plastic theory in design of steel structures: sec A		-	Indigenous
29	IS 6445:1985 Reviewed In : 2021	Specification for Aluminium Tee - Sections (First Revision)	January, 2021	-	Indigenous
30	IS 6449:1987 Reviewed In : 2024	Specification for Aluminium Bulb Angles for Marine Application (First Revision)	March, 2024	-	Indigenous
31	IS 6475:1987 Reviewed In : 2024	Specification for Aluminium Tee bars for Marine Application (First Revision)	March, 2024	-	Indigenous
32	IS 6476:1987 Reviewed In : 2024	Specification for Aluminium Bulb Plates for Marine Application (First Revision)	March, 2024	-	Indigenous
33	IS 7205:1974 Reviewed In : 2021	Safety Code for Erection of Structural Steel Work	January, 2021	-	Indigenous
34	IS 7215:1974 Reviewed In : 2021	Tolerances for fabrication of steel structures	January, 2021	1	Indigenous
35	IS 800:2007 Reviewed In : 2022	General construction in steel - Code of practice (Third Revision)	December, 2022	2	Indigenous
36	IS 801:1975 Reviewed In : 2021	Code of practice for use of cold - Formed light gauge steel structural members in general building construction (First Revision)	January, 2021	1	Indigenous
37	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
38	2):2016	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	1	Indigenous
39	IS 802 (Part 2):1978 Reviewed In : 2022		December, 2022	1	Indigenous
40	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	-	
41	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
42	IS 802 (Part 6):2022	Use of Structural Steel in Overhead Transmission Line Towers â€" Code of Practice Part 6 Tower		-	Indigenous

I		Erection		1 1	
43	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	December, 2022	1	
44	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
45	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
46	IS 806:1968 Reviewed In : 2022	Code of Practice for Use of Steel Tubes in General Building Construction (First Revision)	December, 2022	1	Indigenous
47	IS 808:2021	Hot Rolled Steel Beam, Column, Channel and Angle Sections - Dimensions and Properties (Fourth Revision)		-	Indigenous
48	IS 8081:1976 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specification for slotted sections	January, 2021	1	Indigenous
49	IS 811:1987 Reviewed In : 2024	Specification for cold formed light gauge structural steel sections (Second Revision)	March, 2024	1	Indigenous
50	IS 8147:1976 Reviewed In : 2021	Code of practice for use of aluminium alloys in structures	January, 2021	-	Indigenous
51		Recommendations for dimensional parameters for industrial buildings	January, 2021	-	Indigenous
52	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
53	`	Recommendations for maintenance and operation of petroleum storage tanks: Part 2 inspection	January, 2021	-	Indigenous

# Standards under Development

Projects Approved				
SI. No.	SI. No. Doc No. Title			
No Records Found				

	Preliminary Draft Standards			
SI. No.	Doc No.	Title		
	No Records Found			

	Drafts Standards in WC Stage				
SI. No.	SI. No. Doc No. Title				
	No Records Found				

Draft Standards Completed WC Stage				
SI. No.	Doc No.	Title		
1	CED 7 (26976)	Isolated Towers Masts and Poles using Structural Steel - Code of Practice Amendment - 1		
2	CED 7 (27869)	General Construction in Steel Code of Practice Fourth Revision of IS 800		

		Finalized Draft Indian Standard		
SI. No.	SI. No. Doc No. Title			
No Records Found				

Finalized Draft Indian Standards under Print					
SI. No.	SI. No. Doc No. Title				
	No Records Found				

Total Published Standards:51 Total Standards Under development:2

## **Aspect Wise Report**

Product: 13
Code of Practices: 19
Methods of Test: 0
Terminology: 0
Dimensions: 14
System Standard: 0
Safety Standard: 1
Others: 6

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	IS 1863:1979 Reviewed In : 2024 ISO	Specification for Rolled Steel Bulb Flats First Revision
3	657-19 IS 1864:1979 Reviewed In : 2024 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	SP 38:1987	Handbook of Typified Designs for Structures With Steel Roof Trusses With and Without Cranes Based on IS Codes
6	IS 3909:1986 Reviewed In : 2022	Specification for Aluminium Unequal Leg Angles First Revision
7	IS 3921:1985 Reviewed In : 2021	Specification for Aluminium Channels First Revision
8	SP 40:1987	Handbook on Structures With Steel Portal Frames Without Cranes
	1	Handbook on Structures with Steel Lattice Portal Frames Without Cranes

9	SP 47:1988	
10	IS 5384:1985 Reviewed In : 2021	Specification for Aluminium I-Beam First Revision
11	SP 6-1:1964	Handbook for Structural Engineers - Part-1 Structural Steel Sections
12	SP 6-2:1962	Handbook for Structural Engineers -Part-2 Steel Beams and Plate Girders
13	SP 6-3:1962	Handbook on Structural Engineers - Part-3 Steel Columns and Struts
14	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 2314 (Part 1):2023	Steel Sheet Piling Section Specification Part 1 Hot Rolled Sheet Pile Second Revision
2	IS 2314 (Part 2):2023	Steel Sheet Piling Section Specification Part 2 Cold Formed Sheet Pile Second Revision
3	IS 2713 (Part 1 to 3):1980 Reviewed In : 2022	Tubular Steel Poles for Overhead Power Lines
4	IS 2750:1964 Reviewed In : 2021	Specification for steel scaffoldings
5	IS 3964:1980 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specifiacation for Light Rails First Revision
6	IS 6445:1985 Reviewed In : 2021	Specification for Aluminium Tee - Sections First Revision
7	IS 6449:1987 Reviewed In : 2024	Specification for Aluminium Bulb Angles for Marine Application First Revision
8	IS 6475:1987 Reviewed In : 2024	Specification for Aluminium Tee bars for Marine Application First Revision
9	IS 6476:1987 Reviewed In : 2024	Specification for Aluminium Bulb Plates for Marine Application First Revision
10	IS 804:1967 Reviewed In: 2022 Reaffirmed but not taken up for revision	Specification for Rectangular Pressed Steel Tanks First Revision
11	IS 8081:1976 Reviewed In : 2021 Reaffirmed but not taken up for revision	Specification for slotted sections
12	IS 811:1987 Reviewed In : 2024	Specification for cold formed light gauge structural steel sections Second Revision