# 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* **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 2):1985 | Dimensions and tolerances for hot rolled track shoe sections: Part 2: Sec TS - H1 | January, 2021 | - | Indigenous |
| 2 | IS 10182 (Part 1):1982 | Dimensions and tolerances for hot rolled track shoe sections: Part 1: Sec TS - L1 | January, 2021 | - | Indigenous |
| 3 | IS 10987:1992 | Code of Practice for Design, Fabrication, Testing and Installation of Under - Ground/Above - Ground Horizontal CylindricalSteel Storage Tanks for Petroleum Products (First Revision) | December, 2022 | - | Indigenous |
| 4 | IS 1173:2025 | Hot Rolled and Slit Steel Tee Bars Dimensions and Properties | | - | |
| 5 | IS 1252:2025 | Hot Rolled Steel Sections for Shipbuilding ï¿½ Dimensions and Tolerances | | - | Indigenous |
| 6 | IS 12779:1989 | Rolling and cutting tolerances for hot rolled parallel flange beam and column sections - Specification | March, 2024 | - | Indigenous |
| 7 | IS 12843:1989 | Tolerances for erection of steel structures | January, 2021 | - | |
| 8 | IS 15663 (Part 1):2006 | Design and installation of natural gas pipelines - Code of Practice : Part 1 Laying of pipelines | July, 2021 | - | Indigenous |
| 9 | IS 15663 (Part 2):2006 | Design and installation of natural gas pipelines - Code of Practice : Part 2 Laying of pipelines in crossings | July, 2021 | - | Indigenous |
| 10 | IS 15663 (Part 3):2006 | Design and installation of natural gas pipelines - Code of Practice : | July, 2021 | - | Indigenous |

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|---|---|---|---|---|---|
| | | Part 3 Pre-commissioning and commissioning of pipelines | | | |
| 11 | IS 1730:1989<br><br>Reaffirmed but not taken up for revision<br>ISO 1035-3:1980 | Steel Plates, Sheets Strips and Flats for Structural and General Engineering Purposes - Dimensions (Second Revision) | | - | Modified/Technically Equivalent |
| 12 | IS 1732:1989<br><br>Reaffirmed but not taken up for revision | Steel Bars, Round and Square for Structural and General Engineering Purposes - Dimensions (Second Revision) | | - | |
| 13 | IS 17740:2022 | Amendment No. 1 to IS 17740 : 2022 Isolated Towers, Masts and Poles Using Structural Steel — Code Of Practice | | 1 | Indigenous |
| 14 | IS 2314 (Part 1):2023 | Steel Sheet Piling Section â€" Specification Part 1 Hot Rolled Sheet Pile (Second Revision) | | - | Indigenous |
| 15 | IS 2314 (Part 2):2023 | Steel Sheet Piling Section â€" Specification Part 2 Cold Formed Sheet Pile (Second Revision) | | - | Indigenous |
| 16 | IS 2713 (Part 1 to 3):1980 | Tubular Steel Poles for Overhead Power Lines | December, 2022 | 2 | |
| 17 | IS 2750:1964 | Specification for steel scaffoldings | January, 2021 | 2 | Indigenous |
| 18 | IS 3443:1980<br><br>Reaffirmed but not taken up for revision | SPecification for Crane Rail Sections (First Revision) | | 1 | |
| 19 | IS 3908:2025 | Aluminium Beam, Channel and Angle Sections ï¿½ Dimensions and Properties | | - | |
| 20 | IS 3954:1991<br><br>Reaffirmed but not taken up for revision | Hot Rolled Steel Channel Sections for General Engineering Purposes - Dimensions (First Revision) | January, 2021 | - | |
| 21 | IS 3964:1980<br><br>Reaffirmed but not taken up for revision | Specifiacation for Light Rails (First Revision) | January, 2021 | 1 | |
| 22 | IS 4000:1992 | High strength bolts in steel structures - Code of practice (First Revision) | December, 2022 | 1 | Indigenous |
| 23 | IS 4014 (Part 1):1967<br><br>Reaffirmed but not taken up for revision | Code of practice for steel tubular scaffolding: Part 1 definitions and materials | January, 2021 | - | Indigenous |
| 24 | IS 5488:1987<br><br>Reaffirmed but not taken up for revision<br>ISO 657-10 | Dimensions and Dimensional Tolerances for Hot Rolled Steel Plates for Ship's Hull Structure (First Revision) | January, 2021 | - | Not Equivalent |

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|---|---|---|---|---|---|
| 25 | SP 6-4:1969 | Isi handbook for structural engineers: Part 4 use of high strength friction grip bolts | | - | Indigenous |
| 26 | SP 6-5:1980 | Handbook for structural engineers: Part 5 cold - Formed, light gauge steel structures | | 1 | Indigenous |
| 27 | SP 6-6:1972 | Isi handbook for structural engineers: Part 6 application of plastic theory in design of steel structures: sec A | | - | Indigenous |
| 28 | IS 6445:1985 | Specification for Aluminium Tee - Sections (First Revision) | January, 2021 | - | Indigenous |
| 29 | IS 6449:1987 | Specification for Aluminium Bulb Angles for Marine Application (First Revision) | March, 2024 | - | Indigenous |
| 30 | IS 6475:1987 | Specification for Aluminium Tee bars for Marine Application (First Revision) | March, 2024 | - | Indigenous |
| 31 | IS 6476:1987 | Specification for Aluminium Bulb Plates for Marine Application (First Revision) | March, 2024 | - | Indigenous |
| 32 | IS 7205:1974 | Safety Code for Erection of Structural Steel Work | January, 2021 | - | Indigenous |
| 33 | IS 7215:1974 | Tolerances for fabrication of steel structures | January, 2021 | 1 | Indigenous |
| 34 | IS 800:2026 | General Construction in Steel — Code of Practice (Fourth Revision of IS 800) | | - | Indigenous |
| 35 | IS 800:2007 | General construction in steel - Code of practice (Third Revision) | December, 2022 | 2 | Indigenous |
| 36 | IS 801:1975 | Code of practice for use of cold - Formed light gauge steel structural members in general building construction (First Revision) | January, 2021 | - | Indigenous |
| 37 | 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 |
| 38 | IS 802 (Part 2):1978 | Code of practice for use of structural steel in overhead transmission line towers: Part 2 fabrication galvanizing, inspection and packing | December, 2022 | 1 | Indigenous |
| 39 | IS 802 (Part 1/Sec 1):2015 | 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 |
| 40 | IS 802 (Part 1/Sec 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 |
| 41 | IS 802 (Part 3):1978 | Code of Practice for Use of Structural Steel In Overhead Transmission Line Towers, Part 3 Testing | December, 2022 | - | |
| 42 | IS 802 (Part 6):2022 | Use of Structural Steel in Overhead Transmission Line Towers â€” | | - | Indigenous |

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|---|---|---|---|---|---|
| | | Code of Practice Part 6 Tower Erection | | | |
| 43 | IS 803:1976<br><br>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 | |
| 44 | IS 804:1967<br><br>Reaffirmed but not taken up for revision | Specification for Rectangular Pressed Steel Tanks (First Revision) | December, 2022 | 2 | Indigenous |
| 45 | IS 805:1968<br>Reviewed In : 2022<br>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 | Code of Practice for Use of Steel Tubes in General Building Construction (First Revision) | December, 2022 | - | Indigenous |
| 47 | IS 808:2021 | Hot Rolled Steel Beam, Column, Channel and Angle Sections - Dimensions and Properties (Fourth Revision) | | - | Indigenous |
| 48 | IS 8081:1976<br><br>Reaffirmed but not taken up for revision | Specification for slotted sections | January, 2021 | 1 | Indigenous |
| 49 | IS 811:1987 | Specification for cold formed light gauge structural steel sections (Second Revision) | March, 2024 | 1 | Indigenous |
| 50 | IS 8147:1976 | Code of practice for use of aluminium alloys in structures | January, 2021 | - | Indigenous |
| 51 | IS 8640:1977<br><br>Reaffirmed but not taken up for revision | Recommendations for dimensional parameters for industrial buildings | January, 2021 | - | Indigenous |
| 52 | IS 9964 (Part 1):1981 | Recommendations for maintenance and operation of petroleum storage tanks: Part 1 preparation of tank for safe entry and work | January, 2021 | - | Indigenous |
| 53 | IS 9964 (Part 2):1981 | 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 |
|---|---|---|
| *No Records Found* | | |

### Preliminary Draft Standards

| SI. No. | Doc No. | Title |
|---|---|---|
| *No Records Found* | | |

## Drafts Standards in WC Stage

| SI. No. | Doc No. | Title |
|---|---|---|
| *No Records Found* | | |

## Draft Standards Completed WC Stage

| SI. No. | Doc No. | Title |
|---|---|---|
| *No Records Found* | | |

## Finalized Draft Indian Standard

| SI. No. | Doc No. | Title |
|---|---|---|
| *No Records Found* | | |

## Finalized Draft Indian Standards under Print

| SI. No. | Doc No. | Title |
|---|---|---|
| 1 | CED 7 (07850) Revision of: IS 802:2015 | Code of Practice for Use of Structural Steel In Overhead Transmission Line Towers Part 1 Materials Loads and Permissible Stresses Section 1 Materials and Loads |
| 2 | CED 7 (07851) Revision of: IS 802:2016 | Code of Practice for Use of Structural Steel In Overhead Transmission Line Towers Part 1 Material Loads and Permissible Stress Section 2 Design Strengths |
| 3 | CED 7 (10425) | Steel Sheet Piling Sections Amendment - 1 |
| 4 | CED 7 (12288) | Tubular Steel Poles for Overhead Power Lines Amendment - 2 |
| 5 | CED 7 (14899) Revision of: IS 12778:2004 | Hot Rolled Steel Beam Column Channel and Angle Sections - Dimensions and Properties |
| 6 | CED 7 (15603) | CODE OF PRACTICE FOR USE OF STRUCTURAL STEEL IN OVERHEAD TRANSMISSION LINE TOWERS PART 6 TOWER ERECTION |
| 7 | CED 7 (16789) | High strength bolts in steel structures - Code of practice First Revision Amendment - 1 |
| 8 | CED 7 (16865) | Isolated Towers Masts and Poles using Structural Steel - Code of Practice |
| 9 | CED 7 (17600) | Use of Structural Steel In Overhead Transmission Line Towers Code Of Practice Part 4 Requirements For Latticed Switchyard Structures |
| 10 | CED 7 (18972) Revision of: IS 2314:1986 | Steel Sheet Piling Section Specification Part 1 Hot Rolled Sheet Pile |
| 11 | CED 7 (18973) Revision of: IS 2314:1986 | Steel Sheet Piling Section Specification Part 2 Cold Formed Sheet Pile |
| 12 | CED 7 (22216) Revision of: IS 1173:1978 | Hot Rolled and Slit Steel Tee Bars Dimensions and Properties |
| 13 | CED 7 (22217) Revision of: IS 1252:1991 | Hot Rolled Steel Sections for Shipbuilding Dimensions and Tolerances |
| 14 | CED 7 (22225) Revision of: IS 3908:1986 | Aluminium Beam Channel and Angle Sections Dimensions and Properties |
| 15 | CED 7 (23584) | General construction in steel - Code of practice Third Revision Amendment - 2 |
| 16 | CED 7 (23626) | 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 Amendment - 1 |
| 17 | CED 7 (24910) | 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 Amendment - 1 |
| 18 | CED 7 (26976) | Amendment No 1 to IS 17740 2022 Isolated Towers Masts and Poles Using Structural Steel Code Of Practice |
| 19 | CED 7 (27869) Revision of: IS 800:2007 | General Construction in Steel Code of Practice Fourth Revision of IS 800 |

**Total Published Standards:52 Total Standards Under development:19**

## Aspect Wise Report

Product : 13

Code of Practices : 19
Methods of Test : 0
Terminology : 0
Dimensions : 13
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 12778:2004 | Hot Rolled Parallel Flange Steel Sections for Beams Columns and Bearing Piles - Dimensions and Section Properties First Revision |
| 2 | IS 1731:1971 | Dimensions for steel flats for structural and general engineering purposes |
| 3 | IS 1863:1979 ISO 657-19 | Specification for Rolled Steel Bulb Flats First Revision |
| 4 | IS 1864:1979 ISO 657-18 | Specification for Hot Rolled Steel 39 L 39 Sections for Ship Building First Revision |
| 5 | IS 2314:1986 | Steel Sheet Piling Sections |
| 6 | SP 38:1987 | Handbook of Typified Designs for Structures With Steel Roof Trusses With and Without Cranes Based on IS Codes |
| 7 | IS 3909:1986 | Specification for Aluminium Unequal Leg Angles First Revision |
| 8 | IS 3921:1985 | Specification for Aluminium Channels First Revision |
| 9 | SP 40:1987 | Handbook on Structures With Steel Portal Frames Without Cranes |
| 10 | SP 47:1988 | Handbook on Structures with Steel Lattice Portal Frames Without Cranes |
| 11 | IS 5384:1985 | Specification for Aluminium I-Beam First Revision |
| 12 | SP 6-1:1964 | Handbook for Structural Engineers - Part-1 Structural Steel Sections |
| 13 | SP 6-2:1962 | Handbook for Structural Engineers -Part-2 Steel Beams and Plate Girders |
| 14 | SP 6-3:1962 | Handbook on Structural Engineers - Part-3 Steel Columns and Struts |
| 15 | SP 6-7:1972 | 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 | Tubular Steel Poles for Overhead Power Lines |
| 4 | IS 2750:1964 | Specification for steel scaffoldings |
| 5 | IS 3964:1980 | Specifiacation for Light Rails First Revision |

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|---|---|---|
| | Reaffirmed but not taken up for revision | |
| 6 | IS 6445:1985 | Specification for Aluminium Tee - Sections First Revision |
| 7 | IS 6449:1987 | Specification for Aluminium Bulb Angles for Marine Application First Revision |
| 8 | IS 6475:1987 | Specification for Aluminium Tee bars for Marine Application First Revision |
| 9 | IS 6476:1987 | Specification for Aluminium Bulb Plates for Marine Application First Revision |
| 10 | IS 804:1967<br><br>Reaffirmed but not taken up for revision | Specification for Rectangular Pressed Steel Tanks First Revision |
| 11 | IS 8081:1976<br><br>Reaffirmed but not taken up for revision | Specification for slotted sections |
| 12 | IS 811:1987 | Specification for cold formed light gauge structural steel sections Second Revision |