

BUREAU OF INDIAN STANDARDS

Program of Work

WRD 14 : Water Conductor Systems

Scope: Standardization of criteria for planning, design, construction, maintenance and related aspects of all components of water conductor systems.

Liaison:

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 11105:2004 <i>Reviewed In : 2025</i>	Design and Construction of Tunnel Plugs - Code of Practice	March, 2025	-	Indigenous
2	IS 11388:2012 <i>Reviewed In : 2022</i>	Recommendations for design of trash racks for intakes (Second Revision)	September, 2022	-	Indigenous
3	IS 11625:1986 <i>Reviewed In : 2025</i>	Criteria for hydraulic design of penstocks	March, 2025	-	Indigenous
4	IS 11639 (Part 1):1986 <i>Reviewed In : 2025</i>	Criteria for struc design of penstocks: Part 1 surface penstocks	March, 2025	1	Indigenous
5	IS 11639 (Part 2):1995 <i>Reviewed In : 2025</i>	Structural desgn of penstocks - Criteria: Part 2 buried/embedded penstocks in rock	March, 2025	-	Indigenous
6	IS 11639 (Part 3):1996 <i>Reviewed In : 2023</i>	Structural design of penstock - Criteria: Part 3 specials for penstocks	March, 2023	4	Indigenous
7	IS 12633:1989 <i>Reviewed In : 2023</i>	First filling and emptying of pressure tunnels - Guidelines	March, 2023	2	Indigenous
8	IS 12967 (Part 1):1990 <i>Reviewed In : 2025</i>	Analysis of hydraulic transients in hydro - Electric and pumping plants - Code of practice: Part 1 criteria for analysis	March, 2025	-	Indigenous
9	IS 13495:1992 <i>Reviewed In : 2023</i>	Design of sediment excluders - Guidelines	March, 2023	-	Indigenous
10	IS 15310:2003 <i>Reviewed In : 2023</i>	Eiydraulic design of pump sumps and intakes - Guidelines	March, 2023	-	Indigenous
11	IS 16173:2014 <i>Reviewed In : 2025</i>	Criteria for hydraulic design of sediment removal devices for hydro power projects (First Revision)	March, 2025	-	Indigenous
12	IS 4410 (Part 20):1983 <i>Reviewed In : 2025</i>	Glossary of terms relating to river valley projects: Part 20 tunnels	March, 2025	-	Indigenous
13	IS 4880 (Part 1):2025	DESIGN OF TUNNELS CONVEYING WATER PART 1 GENERAL REQUIREMENTS - CODE OF PRACTICE Second Revision of IS 4880 Part 1		-	Indigenous

14	IS 4880 (Part 2):1976 Reviewed In : 2025	Code of practice for design of tunnels conveying water: Part 2 geometric design (First .revision)	March, 2025	-	Indigenous
15	IS 4880 (Part 3):1976 Reviewed In : 2025	Code of practice for design of tunnels conveying water: Part 3 hydraulic design (First Revision)	March, 2025	-	Indigenous
16	IS 4880 (Part 4):1971 Reviewed In : 2025	Code of practice for design in tunnels conveying water: Part 4 structural design of concrete lining in rock	March, 2025	2	Indigenous
17	IS 4880 (Part 5):1972 Reviewed In : 2025	Code of practice for design of tunnels conveying water: Part 5 structural design of concrete lining in soft strata and soils	March, 2025	2	Indigenous
18	IS 4880 (Part 6):1971 Reviewed In : 2025	Code of practice for design of tunnels conveying water: Part 6 tunnel supports	March, 2025	-	Indigenous
19	IS 4880 (Part 7):2014 Reviewed In : 2025	Code of practice for design of tunnels conveying water: Part 7 structural design of steel lining (First Revision)	March, 2025	-	Indigenous
20	IS 5330:1984 Reviewed In : 2025	Criteria for design of anchor blocks for penstocks with expansion joints (First Revision)	March, 2025	-	Indigenous
21	IS 5878 (Part 1):1971 Reviewed In : 2023	Code of practice for construction of tunnels conveying water: Part 1 precision survey and setting out	March, 2023	2	Indigenous
22	IS 5878 (Part 2/Sec 1):1970 Reviewed In : 2025	Code of practice for construction of tunnels: Part 2 underground excavation in rock: Sec 1 drilling and blasting	March, 2025	1	Indigenous
23	IS 5878 (Part 2/Sec 2):1971 Reviewed In : 2025	Code of practice for construction of tunnels: Part 2 underground excavation in rock: Sec 2 ventilation, lighting, mucking and dewatering	March, 2025	1	Indigenous
24	IS 5878 (Part 2/Sec 3):1971 Reviewed In : 2025	Code of practice for construction of tunnels conveying water: Part 2 underground excavation in rock section:1 tunnelling method for steeply inclined tunnels. shafts and und...round power houses	March, 2025	2	Indigenous
25	IS 5878 (Part 3):1972 Reviewed In : 2025	Code of practice for construction of tunnels: Part 3 underground excavation in soft strata	March, 2025	1	Indigenous
26	IS 5878 (Part 4):1971 Reviewed In : 2025	Code of practice for construction of tunnels conveying water: Part iv tunnel supports	March, 2025	2	Indigenous
27	IS 5878 (Part 5):1976 Reviewed In : 2025	Code of practice for construction of tunnels conveying water: Part 5 concrete lining (First Revision)	March, 2025	1	Indigenous
28	IS 5878 (Part 6):1975 Reviewed In : 2025	Code of practice for construction of tunnels: Part 6 steel lining	March, 2025	1	Indigenous
29	IS 5878 (Part 7):1972 Reviewed In : 2025	Code of practice for construction of tunnels conveying water: Part 7 grouting	March, 2025	2	Indigenous
30	IS 7357:1974 Reviewed In : 2025	Code of practice for structural design of surge tanks	March, 2025	-	Indigenous

31	IS 7396 (Part 1):1985 Reviewed In : 2025	Criteria for hydraulic design of surge tanks: Part 1 simple, restricted orifice and differential surge tanks (First Revision)	March, 2025	-	Indigenous
32	IS 7396 (Part 2):1985 Reviewed In : 2025	Criteria for hydraulic design of surge tanks: Part 2 tail race surge tanks (First Revision)	March, 2025	-	Indigenous
33	IS 7396 (Part 3):1990 Reviewed In : 2025	Criteria for hydraulic design of surge tanks: Part 3 special surge tanks	March, 2025	-	Indigenous
34	IS 7396 (Part 4):1983 Reviewed In : 2025	Criteria for hydraulic design of surge tanks: Part 4 multiple surge tanks	March, 2025	-	Indigenous
35	IS 7563:1986 Reviewed In : 2025	Code of practice for structural design of cut and cover concrete conduits (First Revision)	March, 2025	1	Indigenous
36	IS 7916:1992 Reviewed In : 2023	Open power channels - Code of practice (First Revision)	March, 2023	-	Indigenous
37	IS 9761:1995 Reviewed In : 2025	Hydropower intakes - Criteria for hydraulic design (First Revision)	March, 2025	-	Indigenous

Standards under Development

Projects Approved

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

Preliminary Draft Standards

SI. No.	Doc No.	Title
1	WRD 14 (27048) Revision of: IS 9761:1995	CRITERIA FOR HYDRAULIC DESIGN OF HYDROPOWER INTAKES GUIDELINES Second Revision of IS 9761

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
1	WRD 14 (27491)	CONSTRUCTION OF TUNNELS CONVEYING WATER PART 1 PRECISION SURVEY AND SETTING OUT CODE OF PRACTICE First Revision of IS 5878 Part 1
2	WRD 14 (27494)	FIRST FILLING AND EMPTYING OF PRESSURE TUNNELS GUIDELINES First Revision of IS 12633
3	WRD 14 (27641)	HYDRAULIC DESIGN OF PUMP SUMPS AND INTAKES GUIDELINES First Revision of IS 15310
4	WRD 14 (27793)	CRITERIA FOR STRUCTURAL DESIGN OF PENSTOCK GUIDELINES PART 3 SPECIALS FOR PENSTOCKS First Revision of IS 11639 Part 3

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
<i>No Records Found</i>		

Total Published Standards:37 Total Standards Under development:5

Aspect Wise Report

Product : 0
 Code of Practices : 36
 Methods of Test : 0
 Terminology : 1
 Dimensions : 0
 System Standard : 0
 Safety Standard : 0
 Others : 0
 Service Specification : 0
 Process Specification : 0
 Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		