

BUREAU OF INDIAN STANDARDS

Program of Work

FAD 17 : Farm Irrigation And Drainage Systems

Scope: Standardisation in the field of A. Methods of evaluation and adoption of quality of irrigation water, efficiency of irrigation, water requirement of crops and guidelines for various soil and water management practices associated with irrigation and drainage as well as various equipment, systems (excluding centrifugal and hand pumps) associated with irrigation and fertigation. B. All types of farm drainage practices, design and material requirement for surface and sub surface drainage systems and equipment, all types of on farm water management practices including construction and improvement of water distribution systems and land levelling practices. C. All types of remote monitoring and controlling systems for Irrigation & Drainage.

Liaison: **ISO TC-23 SC-18 (P):** *Irrigation and drainage equipment and systems* **ISO TC-23 SC-18 (Convenorship):** *Organic Fertigation System*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10317:2024	Evaluation of Soil Properties Relevant to Irrigation - Guide (first revision)		-	Indigenous
2	IS 10799:1999 <i>Reviewed In : 2021</i>	Irrigation Equipment - Design, Installation and Field Evaluation of Micro Irrigation Systems - Code of Practice (First Revision)	March, 2021	-	Indigenous
3	IS 10907:1984 <i>Reviewed In : 2021</i>	Code for Design of Farm Drainage Tile or Pipe System	March, 2021	-	Indigenous
4	IS 11077:1984 <i>Reviewed In : 2021</i>	Glossary of Terms on Soil and Water	March, 2021	-	Indigenous
5	IS 11493:1986 <i>Reviewed In : 2021</i>	Glossary of Terms Relating to Farm Drainage	March, 2021	-	Indigenous
6	IS 11494:1986 <i>Reviewed In : 2021</i>	Code for Construction and Maintenance of Surface Farm Drainage Systems	March, 2021	-	Indigenous
7	IS 11495:1986 <i>Reviewed In : 2021</i>	Code for Design of Surface Farm Drainage System	March, 2021	-	Indigenous
8	IS 11538:2024	Design and installation of farm drainage pumping plants - Code of practice (First Revision)		-	Indigenous
9	IS 11624:2019 <i>Reviewed In : 2023</i>	Quality of Irrigation Water - Guidelines (First Revision)	December, 2023	-	Indigenous
10	IS 11711:2025	Criteria for adoptability of different irrigation methods - Recommendations (first revision)		-	Indigenous
11	IS 11711:1986	Recommended Criteria for	March, 2021	-	Indigenous

	Reviewed In : 2021	Adoptability of Different Irrigation Methods			
12	IS 12232 (Part 1):1996 ISO 7749-1 Reviewed In : 2021 ISO 7749-1	Irrigation Equipment - Rotating Sprinkler : Part 1 design and Operational Requirements (First Revision)	March, 2021	1	Identical under dual numbering
13	IS 12232 (Part 2):1995 Reviewed In : 2021 ISO 7749-2:1990	Irrigation Equipment - Rotating Sprinkler : Part 2 Test Method for Uniformity of Distribution (First Revision)	March, 2021	1	Modified/Technically Equivalent
14	IS 12785:1994 Reviewed In : 2021	Irrigation Equipment - Strainer - Type Filters - Specification (First Revision)	March, 2021	4	Indigenous
15	IS 12786:2024	Irrigation equipment - Polyethylene pipes for irrigation laterals - Specification (first revision)		-	Indigenous
16	IS 13062:1991 Reviewed In : 2021	Irrigation Equipment and Systems - Evaluation of Field Irrigation Efficiencies - Guidelines	March, 2021	-	Indigenous
17	IS 13479:1992 ISO 3501 Reviewed In : 2021 ISO 3501 : 1976	Assembled Joints Between Fittings and Polyethylene (PE) Pressure Pipes - Test of Resistance to Pull Out	March, 2021	-	Identical under dual numbering
18	IS 13487:2024	Irrigation equipment - Emitters - Specification (First Revision)		-	Indigenous
19	IS 13488:2008 Reviewed In : 2021	Irrigation Equipment - Emitting Pipe Systems - Specification (First Revision)	March, 2021	-	Indigenous
20	IS 13939:1994 Reviewed In : 2021	Farm Drainage - Interceptor Drains for Steep Hill Slopes Under Plantation Crops - Guidelines for Laying	March, 2021	-	Indigenous
21	IS 14178:1994 Reviewed In : 2021	Pressurized Irrigation Equipment Terminology	March, 2021	-	Indigenous
22	IS 14482:1997 Reviewed In : 2021	Irrigation Equipment - Polyethylene Micro Tubes for Drip Irrigation - Specification	March, 2021	1	Indigenous
23	IS 14483 (Part 1):2024	Fertilizer and chemical injection system Part 1 Venturi injector - Specification (First Revision)		-	Indigenous
24	IS 14483 (Part 2):2025	Fertilizer and chemical injection system part 2 water driven chemical injector pump - Specification (first revision)		-	Indigenous
25	IS 14483 (Part 3):2018 Reviewed In : 2023	Fertilizer and Chemical Injector System : Part 3 Fertilizer Tank - Specification	December, 2023	-	Indigenous
26	IS 14605:1998 Reviewed In : 2021	Irrigation Equipment - Micro Sprayers - Specification	March, 2021	1	Indigenous
27	IS 14606:2022	Irrigation Equipment — Granulated Media Filters — Specification (First Revision)		1	Indigenous
28	IS 14606:1998 Reviewed In : 2021	Irrigation Equipment - Media Filters - Specification	March, 2021	3	Indigenous
29	IS 14632:1999 Reviewed In : 2021	Farm Drainage System - Performance Evaluation of Horizontal Subsurface Drainage -	March, 2021	-	Indigenous

		Guidelines			
30	IS 14743:2024	Irrigation equipment - Hydrocyclone filters - Specification (First Revision)		-	Indigenous
31	IS 14791:2024	Prevention and treatment of blockage problem in drip irrigation system - Code of practice (First Revision)		-	Indigenous
32	IS 14792:2000 Reviewed In : 2021	Irrigation Equipment - Design, Installation and Operation of Sprinkler Irrigation Systems - Code of Practice	March, 2021	-	Indigenous
33	IS 15386:2003 Reviewed In : 2025	Pressurized Irrigation Systems - Graphic Symbols	January, 2025	-	Indigenous
34	IS 17411 (Part 2):2020 ISO 9912-2 : 2013 ISO 9912-2 : 2013	Agricultural Irrigation Equipment - Filters for Micro-Irrigation : Part 2 Strainer - Type Filters and Disc Filters		-	Identical under dual numbering
35	IS 17425:2020	Irrigation Equipment - Quick Coupled Polyethylene Pipes and Fittings for Sprinkler Irrigation Systems - Specification		-	Indigenous
36	IS 18286:2023	Agricultural irrigation equipment - Manually operated serviceable plastics valves - Specification		1	Indigenous
37	IS 8968:1978 Reviewed In : 2023 Reaffirmed but not taken up for revision	Specification for Farm Drainage Concrete Tiles	August, 2023	-	Indigenous
38	IS 9696:1980 Reviewed In : 2022	Code of Practice for Installation of Farm Drainage Tile or Pipe System	September, 2022	-	Indigenous
39	IS 9979:1981 Reviewed In : 2023 Reaffirmed but not taken up for revision	Code for Design and Laying of Mineral Filters for Tile Drain System	August, 2023	-	Indigenous

Standards under Development

Projects Approved

Sl. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

Sl. No.	Doc No.	Title
1	FAD 17 (27880) Revision of: IS 11495:1986	DESIGN OF SURFACE FARM DRAINAGE SYSTEM - CODE OF PRACTICE

Drafts Standards in WC Stage

Sl. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	FAD 17 (24278)	Irrigation techniques - localised and remote monitoring and control system for irrigation - Tests
2	FAD 17 (27076)	Irrigation equipment - Quick coupled polyethylene pipes and fittings for sprinkler irrigation systems - Specification first revision of IS 17425
3	FAD 17 (27193)	IRRIGATION EQUIPMENT - POLYETHYLENE MICRO TUBES FOR DRIP IRRIGATION - SPECIFICATION First Revision of IS 14482
4	FAD 17 (28113)	Irrigation equipment - Polyethylene pipes for irrigation laterals - Specification first revision Amendment - 1
5	FAD 17 (28117)	IRRIGATION EQUIPMENT AND SYSTEMS EVALUATION OF FIELD IRRIGATION EFFICIENCIES GUIDELINES First Revision of IS 13062

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	FAD 17 (27053) Revision of: IS 12785:1994	Irrigation equipment - Strainer-type filters - Specification Second Revision of IS 12785

Total Published Standards:37 Total Standards Under development:7

Aspect Wise Report

Product : 16
 Code of Practices : 14
 Methods of Test : 3
 Terminology : 4
 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
1	IS 10808:1984 Reviewed In : 2021	Code of Practice for Installation Operation and Maintenance of Hydraulic Rams
2	IS 10809:1984 Reviewed In : 2021	Specification for Hydraulic Rams
3	IS 11390:1985 Reviewed In : 2021	Test code for Hydraulic Rams
4	IS 14151 (Part 1):1999 Reviewed In : 2021	Irrigation Equipment - Sprinkler Pipes - Specification Part 1 Polyethylene Pipes First Revision
5	IS 14151 (Part 2):2008 Reviewed In : 2021	Irrigation Equipment - Sprinkler Pipes - Specification Part 2 Quick Coupled Polyethylene Pipes and Fittings Second Revision
6	IS 8967 (Part 1):1992 Reviewed In : 2022	Farm Drainage Equipment - Drainage Clay Tiles - Specification Part 1 Tiles With Open Joints First Revision
7	IS 8967 (Part 2):1983 Reviewed In : 2022	Specification for Farm Drainage Clay Tiles Part 2 Perforated Tiles With Collar Joints
8	IS 9633:1980 Reviewed In : 2022	Specification for Farm Drainage Asbestos Cement Pipes

Annexure-II :List of Indian Product Standards

Sl. No.	IS No. & Year	Title
1	IS 12232 (Part 1):1996 ISO 7749-1 Reviewed In : 2021 ISO 7749-1	Irrigation Equipment - Rotating Sprinkler Part 1 design and Operational Requirements First Revision
2	IS 12785:1994 Reviewed In : 2021	Irrigation Equipment - Strainer - Type Filters - Specification First Revision
3	IS 12786:2024	Irrigation equipment - Polyethylene pipes for irrigation laterals - Specification first revision
4	IS 13487:2024	Irrigation equipment - Emitters - Specification First Revision
5	IS 13488:2008 Reviewed In : 2021	Irrigation Equipment - Emitting Pipe Systems - Specification First Revision
6	IS 14482:1997 Reviewed In : 2021	Irrigation Equipment - Polyethylene Micro Tubes for Drip Irrigation - Specification
7	IS 14483 (Part 1):2024	Fertilizer and chemical injection system Part 1 Venturi injector - Specification First Revision
8	IS 14483 (Part 2):2025	Fertilizer and chemical injection system part 2 water driven chemical injector pump - Specification first revision
9	IS 14483 (Part 3):2018 Reviewed In : 2023	Fertilizer and Chemical Injector System Part 3 Fertilizer Tank - Specification
10	IS 14605:1998 Reviewed In : 2021	Irrigation Equipment - Micro Sprayers - Specification
11	IS 14606:2022	Irrigation Equipment Granulated Media Filters Specification First Revision
12	IS 14743:2024	Irrigation equipment - Hydrocyclone filters - Specification First Revision
13	IS 17411 (Part 2):2020 ISO 9912-2 : 2013 ISO 9912-2 : 2013	Agricultural Irrigation Equipment - Filters for Micro-Irrigation Part 2 Strainer - Type Filters and Disc Filters
14	IS 17425:2020	Irrigation Equipment - Quick Coupled Polyethylene Pipes and Fittings for Sprinkler Irrigation Systems - Specification
15	IS 18286:2023 ISO 12869 : 2019	Agricultural irrigation equipment - Manually operated serviceable plastics valves - Specification
16	IS 8968:1978 Reviewed In : 2023 Reaffirmed but not taken up for revision	Specification for Farm Drainage Concrete Tiles