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		-	Indigenous
		Relevant to Irrigation - Guide (first			
		revision)			
2	IS 10799 : 1999	Irrigation Equipment - Design,	March, 2021	-	Indigenous
	Reviewed In: 2021	Installation and Field Evaluation of			
		Micro Irrigation Systems - Code of			
		Practice (First Revision)			
3	IS 10907 : 1984	Code for Design of Farm Drainage	March, 2021	-	Indigenous
	Reviewed In: 2021	Tile or Pipe System			
4	IS 11077 : 1984	Glossary of Terms on Soil and	March, 2021	-	Indigenous
	Reviewed In: 2021	Water			
5	IS 11493 : 1986	Glossary of Terms Relating to	March, 2021	-	Indigenous
	Reviewed In: 2021	Farm Drainage			
6	IS 11494 : 1986	Code for Construction and	March, 2021	-	Indigenous
	Reviewed In: 2021	Maintenance of Surface Farm			
		Drainage Systems			
7	IS 11495 : 1986	Code for Design of Surface Farm	March, 2021	-	Indigenous
	Reviewed In: 2021	Drainage System			
8	IS 11538 : 1986	Code of Practice for Design and	December, 2019	-	Indigenous
	Reviewed In: 2019	Installation of Farm Drainage			
		Pumping Plants			
9	IS 11624 : 2019	Quality of Irrigation Water -	December, 2023	-	Indigenous
		Guidelines (First Revision)			
	Reviewed In: 2023				
10	IS 11711 : 1986	Recommended Criteria for	March, 2021	-	Indigenous
	Reviewed In: 2021	Adoptability of Different Irrigation			
		Methods			
11	IS 12232 (Part 1):	Irrigation Equipment - Rotating	March, 2021	1	Identical under dual

ı	1006	Conindan Don't 1 design and		ı	
	1996 ISO 7749-1	Sprinkler: Part 1 design and Operational Requirements (First			numbering
	Reviewed In : 2021	Revision)			
	ISO 7749-1	KCVISIOII)			
12	IS 12232 (Part 2):	Irrigation Equipment - Rotating	March, 2021	1	Modified/Technically
	1995	Sprinkler: Part 2 Test Method for			Equivalent
	Reviewed In: 2021	Uniformity of Distribution (First			1
	ISO 7749-2:1990	Revision)			
13	IS 12785 : 1994	Irrigation Equipment - Strainer -	March, 2021	4	Indigenous
	Reviewed In: 2021	Type Filters - Specification (First			
		Revision)			
14	IS 12786 : 2024	Irrigation equipment - Polyethylene		-	Indigenous
		pipes for irrigation laterals -			
		Specification (first revision)			
15	IS 13062 : 1991	Irrigation Equipment and Systems -	March, 2021	-	Indigenous
	Reviewed In: 2021	Evaluation of Field Irrigation			
		Efficiencies - Guidelines			
16	IS 13479 : 1992	Assembled Joints Between Fittings	March, 2021	-	Identical under dual
	ISO 3501	and Polyethylene (PE) Pressure			numbering
	Reviewed In : 2021	Pipes - Test of Resistance to Pull			
17	ISO 3501 : 1976 IS 13487 : 1992	Out Irrigation Equipment Emitters	March 2021	6	Indiana
17	Reviewed In : 2021	Irrigation Equipment - Emitters - Specification	March, 2021	6	Indigenous
18	IS 13488 : 2008	Irrigation Equipment - Emitting	March, 2021	_	Indigenous
10	Reviewed In : 2021	Pipe Systems - Specification (First	Maich, 2021	_	margenous
	Reviewed III . 2021	Revision)			
19	IS 13939 : 1994	Farm Drainage - Interceptor Drains	March, 2021	_	Indigenous
"	Reviewed In: 2021	for Steep Hill Slopes Under	1/101/011, 2021		mangenous
		Plantation Crops - Guidelines for			
		Laying			
20	IS 14178 : 1994	Pressurized Irrigation Equipment	March, 2021	-	Indigenous
	Reviewed In: 2021	Terminology			
21	IS 14482 : 1997	Irrigation Equipment -	March, 2021	1	Indigenous
	Reviewed In: 2021	Polyethylene Micro Tubes for Drip			
<u></u>	70.1110.0	Irrigation - Specification			
22	IS 14483 (Part 1):	Fertilizer and chemical injection		-	Indigenous
	2024	system Part 1 Venturi injector -			
23	IS 14483 (Part 1):	Specification (First Revision) Fertilizer and Chemical Injection	March, 2021	2	To di con coc
23	1997	system : Part 1 Venturi Injector	March, 2021	2	Indigenous
	Reviewed In: 2021	system . Fart I venturi injector			
24	IS 14483 (Part 2):	Fertilizer and Chemical Injection	September, 2022	_	Indigenous
-	2002	System : Part 2 Water - Driven	September, 2022		margonous
	Reviewed In: 2022	Chemical Injector Pump			
25	IS 14483 (Part 3):	Fertilizer and Chemical Injector	December, 2023	-	Indigenous
	2018	System : Part 3 Fertilizer Tank -	,		
		Specification			
	Reviewed In: 2023	-			
26	IS 14605 : 1998	Irrigation Equipment - Micro	March, 2021	1	Indigenous
	Reviewed In: 2021	Sprayers - Specification			
27	IS 14606 : 2022	Irrigation Equipment —		1	Indigenous
		Granulated Media Filters —			
20	TO 14606 1000	Specification (First Revision)	M 1 2021		T "
28	IS 14606 : 1998	Irrigation Equipment - Media	March, 2021	3	Indigenous
20	Reviewed In : 2021	Filters - Specification	Man-1- 2001		T., 4!
29	IS 14632 : 1999 Reviewed In : 2021	Farm Drainage System - Performance Evaluation of	March, 2021	-	Indigenous
	Kevieweu III : 2021	Horizontal Subsurface Drainage -			
		Guidelines			
		Suldennes		+	+

30	IS 14743 : 2024	Irrigation equipment - Hydrocyclone filters - Specification (First Revision)		-	Indigenous
31	IS 14791 : 2000 Reviewed In : 2021	Prevention and Treatment of Blockage Problem in Drip Irrigation System - Code of Practice	March, 2021	-	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 : 2019	Pressurized Irrigation Systems - Graphic Symbols	December, 2019	-	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		-	Indigenous
37	IS 8968 : 1978 Reviewed In : 2022 Reaffirmed but not taken up for revision	Specification for Farm Drainage Concrete Tiles	September, 2022	-	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 : 2022 Reaffirmed but not taken up for revision	Code for Design and Laying of Mineral Filters for Tile Drain System	September, 2022	-	Indigenous

Standards under Development

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

	Preliminary Draft Standards			
SI. No.	Doc No.	Title		
1	FAD 17 (24278)	IRRIGATION TECHNIQUES LOCALISED AND REMOTE MONITORING AND CONTROL		
		SYSTEM FOR IRRIGATION TESTS		

	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

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

Recommendation criteria for adoptability of different irrigation methods first revision

	Finalized Draft Indian Standards under Print				
SI. No.	Doc No.	Title			
1	FAD 17 (24341) Revision	Prevention and treatment of blockage problem in drip irrigation system - Code of practice First			
	of: IS 14791:2000	Revision			
2	FAD 17 (24374) Revision	Fertilizer and chemical injection system part 2 water driven chemical injector pump -			
	of: IS 14483:2002	Specification first revision			
3	FAD 17 (24389) Revision	Design and installation of farm drainage pumping plants - Code of practice First Revision			
	of: IS 11538:1986				
4	FAD 17 (25120) Revision	Irrigation equipment - Emitters - Specification First Revision			
	of: IS 13487:1992				
5	FAD 17 (26555)	Agricultural irrigation equipment - Manually operated serviceable plastics valves - Specification			
		Amendment No 1			

Total Published Standards:37 Total Standards Under development:7

FAD 17 (24327)

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

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 12232 (Part 1): 1996	Irrigation Equipment - Rotating Sprinkler Part 1 design and Operational Requirements First
	ISO 7749-1	Revision
	Reviewed In: 2021 ISO	
	7749-1	
2	IS 12785 : 1994	Irrigation Equipment - Strainer - Type Filters - Specification First Revision
	Reviewed In: 2021	
3	IS 12786 : 2024	Irrigation equipment - Polyethylene pipes for irrigation laterals - Specification first revision
4	IS 13487 : 1992	Irrigation Equipment - Emitters - Specification
	Reviewed In: 2021	
5	IS 13488 : 2008	Irrigation Equipment - Emitting Pipe Systems - Specification First Revision
	Reviewed In: 2021	
6	IS 14482 : 1997	Irrigation Equipment - Polyethylene Micro Tubes for Drip Irrigation - Specification
	Reviewed In: 2021	
7	IS 14483 (Part 1): 2024	Fertilizer and chemical injection system Part 1 Venturi injector - Specification First Revision
8	IS 14483 (Part 2): 2002	Fertilizer and Chemical Injection System Part 2 Water - Driven Chemical Injector Pump
	Reviewed In: 2022	
9	IS 14483 (Part 3): 2018	Fertilizer and Chemical Injector System Part 3 Fertilizer Tank - Specification
	D : 11 2000	
10	Reviewed In : 2023	
10	IS 14605 : 1998	Irrigation Equipment - Micro Sprayers - Specification
11	Reviewed In : 2021 IS 14606 : 2022	Irrigation Equipment Granulated Media Filters Specification First Revision
11	15 14606 : 2022	irrigation Equipment Granulated Media Filters Specification First Revision
12	IS 14743 : 2024	Irrigation equipment - Hydrocyclone filters - Specification First Revision
12	13 14/43 . 2024	irrigation equipment - rrydrocyclone riners - specification rinst Revision
13	IS 17411 (Part 2) : 2020	Agricultural Irrigation Equipment - Filters for Micro-Irrigation Part 2 Strainer - Type Filters and
15	ISO 9912-2 : 2013	Disc Filters
	ISO 9912-2 : 2013	Dige I liters
14	IS 17425 : 2020	Irrigation Equipment - Quick Coupled Polyethylene Pipes and Fittings for Sprinkler Irrigation
	15 17 123 : 2020	Systems - Specification
		Systems speciment
15	IS 18286 : 2023	Agricultural irrigation equipment - Manually operated serviceable plastics valves - Specification
16	IS 8968 : 1978	Specification for Farm Drainage Concrete Tiles
	Reviewed In: 2022	
	Reaffirmed but not taken up	
	for revision	