### **BUREAU OF INDIAN STANDARDS**

### **Program of Work**

### WRD 1: Hydrometry

Scope: Standardization of methods, procedures, instruments and equipment relating to techniques for

hydrometric determination of water level, velocity, discharge and sediment transport in open channels and fluid flow in closed conduits, hydrological and meterological investigations.

Liaison: ISO TC-30 (O): Measurement of fluid flow in closed conduits ISO TC-30 SC-2 (O): Pressure

differential devices ISO TC-30 SC-5 (O): Velocity and mass methods ISO TC-30

SC-7 (O): Volume methods including water meters ISO TC-113 (P): Hydrometry ISO TC-113 SC-1 (P): Velocity area methods ISO TC-113 SC-2 (P): Flow measurement structures ISO

TC-113 SC-5 (P): Instruments, equipment and data management ISO TC-113

SC-6 (P): Sediment transport ISO TC-113 SC-8 (P): Ground water

### **Published Standards**

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 1191 : 2016	Hydrometry - Vocabulary and	March, 2021	-	Identical under dual
		symbols(Third Revision)			numbering
	Reviewed In: 2021				
	ISO 4006:1991				
2	IS 1192 : 2013	Hydrometry - Measurement of	January, 2023	-	Identical under dual
	ISO 748:2007	liquid flow in open channels using			numbering
	Reviewed In: 2023	current - Meters or floats (Second			
	ISO 748:2007	Revision)			
3	IS 1194 : 1960	Forms for recording measurement	August, 2020	-	Indigenous
	Reviewed In: 2020	of flow of water in open channels			
4		Hydrometric determinations - Flow	January, 2023	-	Identical under dual
	ISO 8368: 1999	measurements in open channels			numbering
	Reviewed In: 2023	using structures - Guidelines for			
	ISO 8368:1999	selection of structure (First			
		Revision)			
5	IS 13083 : 2017	Liquid flow measurement in open	April, 2022	-	Identical under dual
		channels ? flat - V weirs			numbering
	Reviewed In: 2022				
	ISO 4377:1990				
6	IS 13084 : 1991	Liquid flow measurement in open	September, 2022	-	Identical under dual
	ISO 4374:1990	channels - Round - Nose horizontal			numbering
	Reviewed In: 2022	broad - Crested weirs			
	ISO 4374:1990				
7	IS 13371 : 2014	Hydrometry - Calibration of	December, 2023	-	Identical under dual
	ISO 3455 : 2007	current - Meters in straight open			numbering
	Reviewed In: 2023	tanks (First Revision)			
8	IS 14359 : 2014	Hydrometry - Echo sounders for	January, 2020	-	Identical under dual
	ISO 4366 : 2007	water depth measurements (First			numbering
	Reviewed In: 2020	Revision)			
	ISO 4366:2007				*
9	IS 14371 : 2016	Measurement of liquid flow in	March, 2021	-	Identical under dual

1	ISO 9826 : 1992	open channels - Parshall and saniiri		1	numbering
	Reviewed In : 2021	flumes (First Revision)			numbering
	ISO 9826:1992	rumes (1 mst revision)			
10	IS 14573 : 2014	Hydrometry - Velocity - Area	January, 2020	-	Identical under dual
	ISO 1088	methods using current - Meters -	•		numbering
	Reviewed In: 2020	Collection and processing of data			
	ISO 1088:2007	for determination of uncertainties			
		in flow measurement (First			
		Revision)			
11	IS 14615 (Part 1):	Measurement of fluid flow by	March, 2023	-	Identical under dual
	2018	means of pressure differential			numbering
	ISO 5167-1 : 2003	devices inserted in circular			
	Reviewed In: 2023	crossSection conduits running full:			
	ISO 5167-1:2003	Part 1 : general principles and			
		requirements (First Revision)			
12	IS 14615 (Part 2):	Measurement of fluid flow by	March, 2023	-	Identical under dual
	2018	means of pressure differential			numbering
	ISO 5167-2 : 2003	devices inserted in circular cross -:			
	Reviewed In: 2023	Sec conduits running full: Part 2			
	ISO 5167(Part	orifice plates			
13	1):2003 IS 14615 (Part 3):	Measurement of Fluid Flow by		_	Identical under dual
13	2024	Means of Pressure Differential		_	numbering
	Identical	Devices Inserted In Circular Cross-			numbering
		Section Conduits Running Full Part			
	identical	3 Nozzles and Venturi Nozzles			
14	IS 14615 (Part 4):	Measurement of fluid flow by	March, 2023	_	Identical under dual
	2018	means of pressure differential	1/141011, 2020		numbering
	ISO 5167-4 : 2003	devices inserted in circular			
	Reviewed In: 2023	crossSection conduits running full:			
	ISO 5167(Part	Part 4 venturi tubes			
	4):2003				
15	IS 14615 (Part 5):	Measurement of Fluid Flow by	March, 2024	-	Identical under dual
	2019	Means of Pressure Differential			numbering
	ISO 5167–5 :	Devices Inserted in Circular Cross-			
		Section Conduits Running Full Part			
	Reviewed In: 2024	5 Cone Meters			
	Decision taken to				
	Reaffirm and				
	Archive ISO				
1.6	5167-5:2016 IS 14673 : 2022	Hydromatry, Open changel floor		-	Identical under dual
16	4360	Hydrometry - Open channel flow measurement using triangular		_	numbering
	4360	profile weirs			numbering
17	IS 14869 : 2016	Flow measurement structures -	March, 2021	1	Identical under dual
''	ISO 4359 : 2013	Rectangular, trapezoidal and u -	141011, 2021	1	numbering
	ISO 4359:2013	Shaped flumes (First Revision)			
18	IS 14973 : 2019	Measurement of fluid flow in	-	-	Identical under dual
-	ISO 3966:2008	closed conduits - Velocity area			numbering
		method using pitot static tube (First			
	ISO 3966: 1997	Revision)			
19	IS 14974 : 2018	Hydrometry - Open channel flow	September, 2023	-	Identical under dual
	ISO 3846:2008	measurement using rectangular	-		numbering
	Reviewed In: 2023	broad crested weirs (First			
	ISO 3846: 2008	Revision)		<u> </u>	
20	IS 14975 : 2001	Measurement of liquid flow in	March, 2022	-	Identical under dual
	ISO 9827:1994	open channels - Streamlined			numbering
	Reviewed In: 2022	triangular profile weirs			
	ISO 9827:1994				
I		·		1	I

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21	IS 15117 : 2018	Hydrometry - Cableway systems	November, 2023	-	Identical under dual
	ISO 4375 : 2014	for stream gauging (First Revision)			numbering
	Reviewed In: 2023				
	ISO 4375:2014				
22	IS 15118 : 2014	Hydrometry - Water level	January, 2020	-	Identical under dual
	ISO 4373 : 2008	measuring devices (First Revision)			numbering
	Reviewed In: 2020				
	ISO 4373:2008				
23	IS 15119 (Part 2):	Hydrometry - Measurement of	December, 2023	-	Identical under dual
		liquid flow in open channels: Part 2			numbering
	ISO 1100-2 : 2010	determination of the stage -			
	Reviewed In: 2023	Discharge relationship (First			
2.4	ISO 1100-2:2010	Revision)	D 1 2022		71 2 1 1 1 1
24	IS 15122 : 2014	Measurement of liquid flow in	December, 2023	-	Identical under dual
	ISO 2425 : 2010	open channels under tidal			numbering
	Reviewed In : 2023	conditions			
25	ISO 2425:2010		C . 1 2022		71 2 1 1 1 1
25		Hydrometric determinations - Flow	September, 2022	-	Identical under dual
	ISO 4362:1999	measurement in open channels			numbering
	Reviewed In : 2022	using structures - Trapezoidal		1	
26	ISO 4362:1999 IS 15124 : 2002	broad - Crested weirs	Santambar 2022	1	Identical under dual
20	IS 15124 : 2002 ISO 9195:1992	Liquid flow measurement in open channels - Sampling and analysis of	September, 2022	_	numbering
	Reviewed In : 2022	gravel - Bed material			numbering
	ISO 9195:1992	graver - Bed material			
27	IS 15352 : 2018	Hydrometry - Position fixing	September, 2023		Identical under dual
21	ISO 6420:2016	equipment for hydrometric boats	September, 2023	_	numbering
	Reviewed In : 2023	(First Revision)			numbering
	ISO 6420:2016	(1 list Revision)			
28	IS 15353 : 2003	Liquid flow measurement in open	March, 2023	_	Identical under dual
20	ISO 8333:1985	channels by weirs and flumes - V -	March, 2023		numbering
	Reviewed In: 2023	Shped broad - Crested weirs			numbering
	ISO 8333:1985	Shiped broad Crested Wells			
29	IS 15358 : 2003	Liquid flow measurement in open	March, 2023	_	Identical under dual
	ISO 9196:92	channels - Flow measurements	,		numbering
	Reviewed In: 2023	under ice conditions			
	ISO 9196:1992				
30	IS 15359 : 2003	Hydrometric determinations -	March, 2023	-	Identical under dual
	ISO 11329:01	Measurement of suspended			numbering
	Reviewed In: 2023	sediment transport in tidal channels			
L	ISO 11329:2001			<u>                                     </u>	
31	IS 15360 : 2003	Measurement of liquid flow in	March, 2023	-	Not Equivalent
	Reviewed In: 2023	open channels - Bed material			
	ISO 4364:1997	sampling			
32		Hydrometric determinations - Flow	March, 2023	-	Identical under dual
	ISO 14139:00	measurements in open channels			numbering
	Reviewed In: 2023	using structures - Compound			
	ISO 14139:2000	gauging structures		1	
33	IS 15454 : 2004	Liquid flow measurement in open	January, 2020	-	Modified/Technically
	Reviewed In: 2020	channels - Velocity - Area method			Equivalent
	ISO/TR 9823:90	using a restricted number of			
	YO 4 # = = = = = = =	verticals			**
34	IS 15527 : 2020	Hydrometry - Measurement in	-	-	Identical under dual
	ISO/TR 9210 : 2017	Meandering River and in Streams			numbering
	Reviewed In : 2020	with Unstable Boundaries (First			
25	ISO 9210:2017	Revision )	Dags 1 2002		Td-m4: -1 1 1 1
35		Hydrometry - Measurement of free	December, 2022	-	Identical under dual
	ISO/TR 9824 : 2007				numbering
	Reviewed In: 2022	(First Revision)			
		-			

36 IS ISC Revi ISC 37 IS Revi ISC 38 IS Revi Revi	O 9824:2007 15772: 2014 O 9825: 2005 iewed In: 2023 O 9825:2005 15822: 2008 iewed In: 2022 O/TR 11328: 1994 15823: 2009	Hydrometry - Field measurement of discharge in large rivers and rivers in flood (First Revision)  Measurement of liquid flow in open channels - Equipment for the measurement of discharge under	December, 2023 September, 2022	-	Not Equivalent
Revi ISO 37 IS Revi ISO 38 IS Revi	iewed In : 2023 O 9825 :2005 15822 : 2008 iewed In : 2022 O/TR 11328 : 1994	rivers in flood (First Revision)  Measurement of liquid flow in open channels - Equipment for the	September, 2022		
37 IS Revi ISO 38 IS Revi	O 9825 :2005 15822 : 2008 iewed In : 2022 O/TR 11328 : 1994	Measurement of liquid flow in open channels - Equipment for the	September, 2022		
37 IS Revi ISO 38 IS Revi	15822 : 2008 iewed In : 2022 O/TR 11328 : 1994	open channels - Equipment for the	September, 2022		
Revi ISO 38 IS Revi	iewed In : 2022 O/TR 11328 : 1994	open channels - Equipment for the	September, 2022		
38 IS Revi	O/TR 11328 : 1994			-	Not Equivalent
38 IS Revi	1994	mangurament of discharge under			
Revi		ineasurement of discharge under			
Revi	15823 : 2009	ice conditions			
		Hydrometry - Computing stream	March, 2023	-	Modified/Technically
ISO/		flow using an unsteady flow model			Equivalent
150/	TR 11627:1998				
39 IS	15847 : 2020	Hydrometry - Stage-fall-discharge	=	-	Identical under dual
ISC	O 9123 : 2017	Relationship (First Revision)			numbering
Revi	iewed In: 2020				
IS	O 9123:2017				
	15873 : 2010	Hydrometric determination -	January, 2020	-	Modified/Technically
	iewed In: 2020	Unstable channels and ephemeral			Equivalent
	TR 11332:1998	streams			
41 IS 1	5898 (Part 1):	Measurement of liquid flow in	March, 2022	1	Identical under dual
	2012	open channels - Tracer dilution			numbering
	9555 _1: 1994	methods for the measurement of			
	iewed In: 2022	steady flow: Part 1 general			
	O 9555-1:1994				
42 IS 1	5898 (Part 3):	Measurement of liquid flow in	March, 2021	-	Identical under dual
	2011	open channels - Tracer dilution			numbering
ISC	O 9555-3:1992	methods for the measurement of			
	iewed In: 2021	steady flow: Part 3 chemical			
	0 9555-3:1992	tracers			
43 IS 1	5898 (Part 4) :	Measurement of liquid flow in	March, 2022	-	Identical under dual
	2012	open channels - Tracer dilution			numbering
	9555_4 : 1992	methods for the measurement of			
	iewed In: 2022	steady flow: Part 4 fluorescent			
	0 9555-4:1992	tracers			
	16091 : 2013	Measurement of liquid flow in	December, 2023	-	Modified/Technically
	iewed In: 2023	open channels - Method of			Equivalent
ISC	O 11655:1995	specifying performance of			
		hydrometric equipment			
	16138 : 2013	Measurement of liquid velocity in	December, 2023	-	Identical under dual
	TS 15768:2000	open channels - Design, selection			numbering
		and use of electromagnetic current			
	/TS 15768:2000	meters	Y 2022	1	
	16222 : 2018	Hydrometry - Methods of	June, 2023	-	Identical under dual
		measurement of bedload discharge			numbering
	iewed In : 2023	(First Revision)			
	O 9212 :2015	Hadrometer C. 11 P. C. 2	D 1 2022		T.1
	16223 : 2014	Hydrometry - Guidelines for the	December, 2023	-	Identical under dual
	) 15769 : 2010	application of acoustic velocity			numbering
	iewed In : 2023	meters using the doppler and echo			
	0 15769:2010	correlation methods	Cambo 1 0000		Tdont 1 1 1 1
	16274 : 2018	Hydrometry - Hydrometric data	September, 2023	_	Identical under dual
150	O/TS 24155 :	transmission systems -			numbering
n	2016	Specification of system			
	iewed In : 2023	requirements (First Revision)			
	0 24155:2016	Hydromothic among the let	March 2022		Modified/Tester1
49 IS	16364 : 2017	Hydrometric uncertainity -	March, 2022	_	Modified/Technically
n	iowad In 1 2000	Guidance (Hug)			Equivalent
	iewed In : 2022				
150	O/TS 25377 :				

	2007	l l			
50	IS 16571 : 2017	Measurement of liquid flow in	December, 2022	-	Identical under dual
	ISO 4369 : 1979	open channels - Moving - Boat	•		numbering
	Reviewed In: 2022	method			
	ISO 4369: 1979				
51	IS 16696 : 2018	Hydrometry - Suspended sediment	January, 2023	-	Identical under dual
	ISO 11657: 2014	in streams and canals -			numbering
	Reviewed In: 2023	Determination of concentration by			
	ISO 11657: 2014	surrogate techniques			
52	IS 16697 : 2018	Hydrometric determinations - Flow	March, 2023	-	Identical under dual
	ISO 13550 : 2002	measurements in open channels			numbering
	Reviewed In: 2023	using structures - Use of vertical			
	ISO 13550:2002	underflow gates			
53	IS 16698 : 2019	Hydrometry - Selection,	March, 2024	-	Identical under dual
	ISO 18365 : 2013	establishment and operation of a			numbering
	Reviewed In: 2024	gauging station			
	Decision taken to				
	Reaffirm and				
	Archive ISO				
	18365:2013				
54		Hydrometry â€" Acoustic Doppler	September, 2019	-	
	2014	Profiler â€" Method and			
		Application for Measurement of			
	Reviewed In: 2019	Flow in Open Channels			
55	IS 16804 : 2018	Hydrometry - Fish passes at flow	November, 2023	-	Identical under dual
	ISO 26906 : 2015	measurement structures			numbering
	Reviewed In: 2023				
	ISO 26906:2015				
56	IS 16849 : 2018	Estimation of sediment deposition	November, 2023	-	Identical under dual
	ISO/TR 11651:	in reservoir deposition using one			numbering
	2015	dimensional simulation models			
	Reviewed In: 2023				
	ISO/TR 11651:2015				
57	IS 17271 : 2020	Hydrometry â€" Measurement of	-	-	Identical under dual
	ISO 6416 : 2017	Discharge by Ultrasonic Transit			numbering
	Reviewed In: 2020	Time ( Time of Flight ) Method			
50	ISO 6416:2017	III I C D C			X1 2 1 1 1 1
58	IS 17272 : 2021	Hydrometry - Low Cost Baffle		-	Identical under dual
	ISO/TR 19234 :	Solution to Aid Fish Passage at			numbering
	2016	Triangular Profile Weirs that			
50	ISO 19234:2016 IS 17273 : 2021	Conform to ISO 4360  Measurement of Fluid Flow in			
59	IS 1/2/3 : 2021 ISO 4006 : 1991			_	
	130 4000 : 1991	Closed Conduits - Vocabulary and			
60	IS 17287 : 2021	Symbols  Measurement of Fluid Flow in			Identical under dual
00	ISO 4185 : 1980	Closed Conduits - Weighing		-	numbering
	ISO 4185:1980	Method			numbering
61	IS 17288 : 2021	Measurement of Fluid Flow -		_	Identical under dual
01	ISO 5168 : 2005	Procedures for Evaluation of		_	numbering
	ISO 5168:2005	Uncertainties			numbering
62	IS 17289 : 2021	Measurement of Liquid Flow in		_	Identical under dual
02	ISO 8316 : 1987	Closed Conduits - Method by			numbering
	ISO 8316:1987	Collection of the Liquid in a			numbering
	150 0510.1707	Volumetric Tank			
63	IS 17290 (Part 1):	Measurement of Liquid Flow in		_	Identical under dual
03	2021	Closed Conduits by Weighing		_	numbering
	ISO 9368-1 : 1990	Method - Procedures for Checking			numbering
	ISO 9368:1990	Installations Part 1 Static Weighing			
	150 7500.1770	Systems			
$\vdash$		Systems		+	

IS 17484 : 2020   Hydrometry - Liquid Flow   Measurement Using End Depth   Method in Channels with a Free   Overfall	-	Identical under dual numbering  Identical under dual numbering  Identical under dual numbering
ISO 18481:2017 Method in Channels with a Free Overfall  65 IS 17485 : 2020 Measurement of Water Flow in ISO 2975-1 : 1974 Closed Conduits - Tracer Method Part 1 General  197  66 IS 17485 (Part 2) : Measurement of water flow in closed conduits- Tracer Method Part 2 : Constant rate injection method using non-radioactive tracers Adoption of ISO 2975-2:1975  67 IS 17485 (Part 3) : Measurement of water flow in	-	Identical under dual numbering  Identical under dual
Overfall  65 IS 17485 : 2020 Measurement of Water Flow in Closed Conduits - Tracer Method Part 1 General  66 IS 17485 (Part 2) : Measurement of water flow in closed conduits- Tracer Method Part 2: Constant rate injection method using non-radioactive tracers Adoption of ISO 2975-2:1975  67 IS 17485 (Part 3) : Measurement of water flow in	-	numbering  Identical under dual
65 IS 17485 : 2020 Measurement of Water Flow in Closed Conduits - Tracer Method Part 1 General  66 IS 17485 (Part 2) : Measurement of water flow in closed conduits- Tracer Method Part 2: 2021 closed conduits- Tracer Method Part 2 : Constant rate injection method using non-radioactive tracers Adoption of ISO 2975-2:1975  67 IS 17485 (Part 3) : Measurement of water flow in	-	numbering  Identical under dual
ISO 2975-1: 1974 ISO 2975 Part 1: 197  66 IS 17485 (Part 2): 2021	-	numbering  Identical under dual
ISO 2975 Part 1: 197  66 IS 17485 (Part 2): 2021	-	Identical under dual
197  66 IS 17485 (Part 2): Measurement of water flow in closed conduits- Tracer Method Part 2: Constant rate injection method using non-radioactive tracers Adoption of ISO 2975-2:1975  67 IS 17485 (Part 3): Measurement of water flow in	-	
66 IS 17485 (Part 2): 2021 Closed conduits- Tracer Method ISO 2975 Part 2: 197 ISO 2975 Part 2: 197 method using non-radioactive tracers Adoption of ISO 2975-2:1975 67 IS 17485 (Part 3): Measurement of water flow in	-	
2021 closed conduits- Tracer Method ISO 2975 Part 2: 197 ISO 2975 Part 2: method using non-radioactive tracers Adoption of ISO 2975-2:1975  67 IS 17485 (Part 3): Measurement of water flow in		
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2975-2:1975  67 IS 17485 (Part 3): Measurement of water flow in	i	
67 IS 17485 (Part 3): Measurement of water flow in		
		Identical under dual
2021 Closed conduits- Hacel McHed	-	numbering
ISO 2975 -3:1976 Part 3: Constant rate injection		numbering
ISO 2975 -3 :1976 method using radioactive tracers		
Adoption of ISO 2971-3:1976		
68 IS 17485 (Part 6): Measurement of water flow in		Identical under dual
2021 closed conduits- Tracer Method		numbering
ISO 2975 Part 6: 197 Part 6 : Transit time method using		namooning
ISO 2975 Part 6: non-radioactive tracers Adoption		
197 of ISO 2971-6:1977		
69 IS 17485 (Part 7): Measurement of water flow in	_	Identical under dual
2021 closed conduits- Tracer Method		numbering
ISO 2975 Part 7: 197 Part 7: Transit time method using		namoering
ISO 2975 Part 7: radioactive tracers Adoption of		
197 ISO 2971-7:1977		
70 IS 2912 : 2022 Liquid flow measurement in open	_	Identical under dual
1070 channels-slope-area method		numbering
1070		S
71 IS 2951 (Part 1): Recommendation for estimation of Septem	nber, 2022 -	Indigenous
flow of liquids in closed conduits:		
Reviewed In: 2022 Part i head loss in straight pipes		
due to frictional resistance		
72 IS 2951 (Part 2): Recommendation for estimation of Septem	nber, 2022 1	Indigenous
flow of liquids in closed conduits:		_
Reviewed In: 2022 Part 2 head loss in valves and		
fittings		
73 IS 3910 : 2013 Hydrometry - Rotating - Element Janua	ry, 2023 -	Identical under dual
ISO 2537:2007 current - Meters (Second Revision)		numbering
Reviewed In: 2023		
ISO 2537:2007		
	ry, 2020 -	Indigenous
Reviewed In: 2020 requirements (First Revision)		
	ry, 2023 -	Identical under dual
ISO 3454: 2008 sounding and suspension		numbering
Reviewed In: 2023 equipment (Second Revision)		
ISO 3454:2008		
	ch, 2020 -	Modified/Technically
Reviewed In: 2020 requirements and characteristics of		Equivalent
ISO/TS 3716:2006 suspended - Sediment samplers		
(Second Revision)		
	ch, 2023 -	Identical under dual
ISO 4364 Specification (First Revision)		numbering
Reviewed In: 2023		
ISO 4364	. 2020	T "
78 IS 3918 : 1966 Code of practice for use of current Augu	ıst, 2020 1	Indigenous

	Reviewed In: 2020	meter (Cup Type) for water flow measurement			
79	IS 4073 : 1967 Reviewed In : 2020	Specification for fish weights	August, 2020	-	Indigenous
80	IS 4080 : 1994 Reviewed In : 2020	Vertical staff gauges - Functional requirements (First Revision)	January, 2020	-	Indigenous
81	IS 4477 (Part 2): 1975 Reviewed In: 2020	Method of measurement of fluid flow by means of venturi meters:	August, 2020	ugust, 2020 - Indigenous	
82	IS 4858 : 1968 Reviewed In : 2020	Part ii compressible fluids Specification for velocity rods	August, 2020	-	Indigenous
83	IS 4890 : 1968 Reviewed In : 2020 ISO 4363:2002	Methods for measurement of suspended sediment in open channels	August, 2020	1	Not Equivalent
84	IS 4986 : 2002	Installation of raingauge (Non - Recording Type) and measurement of rain - Code of practice (Second Revision)	September, 2022	-	Indigenous
85	IS 4987 : 1994 Reviewed In : 2020	Recommendations for establishing network of raingauge stations (First Revision)	January, 2020	-	Indigenous
86	IS 5542 : 2003 Reviewed In : 2020	Guide for storm analysis (First Revision)	January, 2020	-	Indigenous
87	IS 6062 : 1971 Reviewed In : 2020	Method of measurement of flow of water in open channels using standing wave flume - Fall	January, 2020	-	Indigenous
88	IS 6063 : 1971 Reviewed In : 2020	Method of measurement of flow of water in open channels using standing wave flume	January, 2020	-	Indigenous
89	IS 6064 : 1971 Reviewed In : 2020	Specification for sounding and suspension equipment	August, 2020	-	Indigenous
90	IS 6330 : 2012 ISO 3847 : 1977 Reviewed In : 2022 ISO 3847:1977	Liquid flow measurement in open channels by weirs and flumes - End - Depth method for estimation of flow in rectangular channels with a free overfall (First Revision)	March, 2022	-	Identical under dual numbering
91	IS 6339 : 2013 Reviewed In : 2023 ISO 4365:2005	Hydrometry - Sediment in streams and canals - Determination of concentration, particle size distribution and relative density (First Revision)	January, 2023	-	Not Equivalent
92	IS 8389 : 2003 Reviewed In : 2023	Installation and use of raingauges, recording - Code of practice (Second Revision)	March, 2023	-	Indigenous
93	IS 9108 : 2020 ISO 1438 : 2017 Reviewed In : 2020 ISO 1438:2017	Hydrometry — Open Channel Flow Measurement Using Thin- Plate Weirs ( Second Revision )	-	-	Identical under dual numbering
94	IS 9115 : 2002 Reviewed In : 2022	Method for estimation of incompressible fluid flow in closed conduits by bend meters (first Revision)	September, 2022	-	Indigenous
95	IS 9116 : 2002 Reviewed In : 2022	Water stage recorder (Float Type) - Specification (First Revision)	September, 2022	-	Indigenous
96	IS 9118 : 1979 Reviewed In : 2020	Method for measurement of pressure by means of manometers	August, 2020	1	Indigenous
97	IS 9119 : 1979 Reviewed In : 2021	Method of flow estimation by jet characteristics (Approximate Method)	March, 2021	-	Indigenous

# **Standards under Development**

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

	Preliminary Draft Standards			
SI. No.	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	WRD 1 (20332)	HHydrometry - Calibration of current - Meters in straight open tanks
2	WRD 1 (20347)	Measurement of Fluid Flow in Closed Conduits Velocity Area Method Using Pitot Static Tube
3	WRD 1 (20496)	HYDROMETRY VOCABULARY AND SYMBOLS
4	WRD 1 (20512)	HYDROMETRY FUNCTIONAL REQUIREMENTS AND CHARACTERISTICS OF
		SUSPENDED- SEDIMENT SAMPLERS
5	WRD 1 (21458)	HYDROMETRIC DETERMINATIONS FLOW MEASUREMENTS IN OPEN CHANNELS
		USING STRUCTURES GUIDELINES FOR SELECTION OF STRUCTURE
6	WRD 1 (22021)	VERTICAL STAFF GAUGES-FUNCTIONAL REQUIREMENTS
7	WRD 1 (22063)	Measurement of Fluid Flow by Means of Pressure Differential Devices Inserted In Circular Cross
		Section Conduits Running Full Part 1 General Principles And Requirements
8	WRD 1 (22064)	Measurement of Fluid Flow by Means of Pressure Differential Devices Inserted In Circular Cross
		Section Conduits Running Full Part 4 Venturi Tubes
9	WRD 1 (22080)	Measurement of fluid flow by means of pressure differential devices inserted in circular cross -
		Sec conduits running full Part 2 orifice plates
10	WRD 1 (23721)	FLOW MEASUREMENT STRUCTURES RECTANGULAR TRAPEZOIDAL AND U-
		SHAPED FLUMES
11	WRD 1 (23843)	Methods for Measurement of Suspended Sediment in Open Channels
12	WRD 1 (23881)	HYDROMETRY ACOUSTIC DOPPLER PROFILER METHOD AND APPLICATION FOR
		MEASUREMENT OF FLOW IN OPEN CHANNELS

	Finalized Draft Indian Standard				
SI. No.	Doc No.	Title			
1	WRD 1 (19429) Revision	METHOD OF FLOW ESTIMATION BY JET CHARACTERISTICS APPROXIMATE			
	of: IS 9119:1979	METHODS			

Finalized Draft Indian Standards under Print				
SI. No.	Doc No.	Title		
1	WRD 1 (20086) Revision	Hydrometry Measurement of Liquid Flow in Open Channels Velocity Area Methods Using Point		
	of: IS 1192:2013	Velocity Measurements		

Total Published Standards:97 Total Standards Under development:14

# **Aspect Wise Report**

Product: 6
Code of Practices: 88
Methods of Test: 0
Terminology: 0
Dimensions: 0
System Standard: 0
Safety Standard: 0
Others: 0

Service Specification: 0 Process Specification: 0 Unclassified: 3

### Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 1193 : 1959	Methods for Measurements of Flow of Water in Open Channels Using Notches Weirs and Flumes
2	IS 14574 : 1998 ISO 4371:1984 Reviewed In : 2020 ISO 4371:1984	Measurement of liquid flow in open channels by weirs and flumes - End depth method for estlMation of flow in non - Rectangular channels with a free overfall Approximate Method
3	IS 15119 (Part 1) : 2002 ISO 1100-1:1996 Reviewed In : 2017	Measurement of Liquid Flow in Open Channels - Part 1 Establishment and Operation of a Gauging Station
4	IS 15646 (Part 1) : 2006 Reviewed In : 2016	Measurements of free surface flow in closed conduits Part 1 Methods
5	IS 15646 (Part 2) : 2006 Reviewed In : 2016	Measurements of free surface flow in closed conduits Part 2 Equipment
6	IS 2913 : 1964 Reviewed In : 1995	Recommendation for determination of flow in tidal channels
7	IS 2914 : 1964 Reviewed In : 1998	Recommendations for Estimation of Discharges by Establishing Stage-discharge Relation in Open Channels
8	IS 2915 : 1965	Instructions for Collection of Data for the Determination fof Error in Measurement of Flow by Velocity Area Methods
9	IS 2952 (Part 1): 1964	Recommendation for Methods of Measurement of Fluid Flow by Means of Orifice Plates and Nozzles - Part I Incompressible Fluids
10	IS 2952 (Part 2): 1975	Recommendations for methods of measurement of liquid flow by means of orifice plates and nozzles Part 2 Compressible fluids
11	IS/ISO 4362 : 1992	Measurement of Liquid flow in Open Channels - Trapezoidal Profile Weirs
12	IS 4477 (Part 1): 1967 Reviewed In: 2000	Method of Measurement of Fluid Flow by Means of Venturi Meters - Part I Liquids
13	IS 6059 : 1971 Reviewed In : 1998	Recommendations for liquid flow measurement in open channels by weirs and flumes - weirs of finite crest width for free discharge
14	IS 9117 : 1979 Reviewed In : 1990	Reccomendation for Liquid Flow Measurement in Open Channels by Weirs and Flumes - End Depth Method for Eastimation of Flow in non Rectangulars Channels with a Free Overall Approximate Method
15	IS 9163 (Part 1): 1979 ISO 9555-1 Reviewed In: 2011	Dilution Methods for Measurement of Steady Flow - Part I Constant Rate Injection Method
16	IS 9922 : 2010 Reviewed In : 2015	Measurement of Liquid Flow in Open Channels - General Guidelines for Selection of Method

### **Annexure-II :List of Indian Product Standards**

SI. No.	IS No. & Year	Title
1	IS 3917 : 2003 ISO 4364	Scoop type bed material samplers - Specification First Revision

	Reviewed In : 2023 ISO 4364	
2	IS 4073 : 1967	Specification for fish weights
	Reviewed In: 2020	
3	IS 4477 (Part 2): 1975	Method of measurement of fluid flow by means of venturi meters Part ii compressible fluids
	Reviewed In: 2020	
4	IS 4858 : 1968	Specification for velocity rods
	Reviewed In: 2020	
5	IS 6064 : 1971	Specification for sounding and suspension equipment
	Reviewed In: 2020	
6	IS 9116 : 2002	Water stage recorder Float Type - Specification First Revision
	Reviewed In: 2022	