# **BUREAU OF INDIAN STANDARDS**

## **Program of Work**

# ETD 18 : Industrial Process Measurement And Control

**Published Standards** 

Scope: To prepare standards for systems and elements used for industrial process measurement and control concerning continuous and batch processes To coordinate the standardization of those features of related elements which affect suitability for integration into such systems operating with electrical, pneumatic, hydraulics mechanical or other systems of measurements and/or control

Liaison: IEC TC-27 (P): Industrial electroheating and electromagnetic processing IEC TC-65 (P): Industrial-process measurement, control and automation IEC TC-65 SC-65A (P): System aspects IEC TC-65 SC-65B (P): Measurement and control devices

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S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10098 : 1982	General requirements for electric	March, 2016	-	Modified/Technically
	Reviewed In : 2016	infra - Red emitters for heating			Equivalent
	IEC 60240 : 1967	purposes			
2	IS 10122 : 1982	Methods of tests for crucible	March, 2021	-	Modified/Technically
	Reviewed In : 2021	induction furnaces			Equivalent
	IEC 60646 : 1979				
3	IS 10189 (Part 1) :	Industrial - Process control valves:	October, 2021	-	Identical under dual
	2017	Part 1 control valve terminology			numbering
	IEC 60534-1 : 2005	and general considerations (First			
	Reviewed In: 2021	Revision)			
	IEC 60534-1 : 2005				
4	IS 10189 (Part 2/Sec	Industrial-Process Control Valves		-	Identical under dual
	1):2024	Part 2 Flow Capacity Section 1			numbering
	IEC 60534-2-1:	Sizing Equations for Fluid Flow			
	2011	Under Installed Conditions (First			
	IEC 60534-2-1:	Revision)			
	2011				
5	IS 10189 (Part 2/Sec	Industrial process control valves		-	Modified/Technically
	2):1993	Part 2 flow capacity Section 2			Equivalent
	Reviewed In: 2013	sizing equations for compressible			
	<b>IEC</b> Publication	fluid flow under Installed			
	534-2-2 (1980)	conditions			
6	IS 10189 (Part 4) :	Industrial - Process control valves	October, 2021	-	Identical under dual
	2016	Part 4 inspection and routine			numbering
	IEC 60534-4 : 2006				
	Reviewed In : 2021	č			
	IEC 60534-4 : 2006				
7	IS 10215 : 2024	Submerged-Arc Furnaces -		-	Identical under dual
	IEC IEC 60683:	Methods of Test (First Revision)			numbering
	2011	``´´			C
	IEC IEC 60683:				
	2011				
L				1	

8	IS 10639 : 1983	Specification for disappearing	October, 2021	1	Modified/Technically
0	Reviewed In : 2021	Specification for disappearing filament type, optical pyrometer	October, 2021	-	Modified/Technically Equivalent
	IEC 60181 - 1964	manient type, optical pyrometer			Equivalent
9	IS 11222 : 1985	Specification for dial, scales and	September, 2015	-	Indigenous
	Reviewed In : 2015	indexes for indicating analogue	1 /		C
	Reaffirmed but not	measuring instruments			
	taken up for revision				
10	X0.44.600 400.6		<b>D</b> 1 0010		<b>X</b> 11
10	IS 11692 : 1986	Methods of tests for electro - slag	February, 2018	-	Indigenous
11	Reviewed In : 2018 IS 12188 : 1987	remelting furnaces Specification for electric direct arc	February, 2018		Indigenous
11	Reviewed In : 2018	melting furnaces	rebluary, 2018	-	margenous
12	IS 12306 : 2024	Direct Arc Furnaces - Methods of		_	Identical under dual
	IEC 60676: 2011	Test (First Revision)			numbering
	IEC 60676: 2011	<b>``</b>			C
13	IS 12434 : 1988	Specification for coating/plating		-	Indigenous
	Reviewed In : 2013	thickness tester, destructive type			
14	IS 12554 (Part 1) :	Specification for non - destructive		-	Indigenous
	1988	coating thickness testing			
	Reviewed In : 2013	instruments Part 1 eddy current			
15	IS 12554 (Part 2) :	instruments Specification for non - destructive			Indigenous
15	13 12334 (Part 2) : 1999	coating thickness testing		-	murgenous
	Reviewed In : 2013	instruments - Part 2 magnetic			
		instruments			
16	IS 12555 : 1988	Guide for signal conditioning		-	Indigenous
	Reviewed In : 2013	devices for process control systems			
17	IS 12556 : 1988	Specification for binary direct	October, 2024	-	Indigenous
	Reviewed In : 2024	voltage signals for process			
10	XG 40550 4000	measurement and control systems			x 11
18	IS 12579 : 1988	Specification for base metal		-	Indigenous
	Reviewed In : 2013	mineral insulated thermocouple cables and thermocouples			
19	IS 13122 (Part 1) :	Transmitters for use in industrial	May, 2021		Indigenous
17	1993	process control systems -	111uy, 2021		margenous
	Reviewed In : 2021	Specification: Part 1 methods for			
	Reaffirmed but not	evaluating the performance			
	taken up for revision				
20	IS 13122 (Part 2) :	Transmitters for use in industrial	May, 2016	-	Indigenous
	1991 Deviewed In 2016	process control systems -			
		Specification: Part 2 guidance for installation, inspection and routine			
	taken up for revision	-			
	unten up for fevision	usung			
21	IS 13211 : 1991	Vapour pressure dial - Type	May, 2016	-	Indigenous
	Reviewed In : 2016	thermometer - Specification			
22	IS 13263 : 2024	Plasma Equipment for Electroheat		-	Identical under dual
		Applications â€" Methods of Test			numbering
	IEC/TS 60680:	(First Revision)			
00	2008				T.d
23	IS 13673 (Part 1) :	Expression of Performance of		-	Identical under dual
	2021 IEC 60746-1 : 2003	Electrochemical Analyzers : Part 1 General			numbering
	IEC 60746-1 : 2003				
24	IS 13673 (Part 2) :	Expression of Performance of		-	Identical under dual
- '	2021	Electrochemical Analyzers Part 2			numbering
	IEC 60746-2 : 2003	-			
	IEC 60746-2 : 2003				
1		IT		I	I

25	10 12(72 (D (2)			1	1
25	IS 13673 (Part 3) :	Expression of Performance of		-	Identical under dual
	2021	Electrochemical Analyzers Part 3			numbering
	IEC 60746-3 : 2002	Electrolytic Conductivity (First			
	IEC 60746-3:2002	Revision )			
26	IS 13673 (Part 4) :	Expression of Performance of		-	Identical under dual
	2024	Electrochemical Analyzers Part 4			numbering
	IEC 60746-4: 2018	Standard for Measuring Oxygen			
	IEC 60746-4: 2018	Dissolved in Water (First Revision)			
27	IS 13673 (Part 5) :	Expression of performance of		-	Identical under dual
	1999	electrochemical analyzers: Part 5			numbering
	Reviewed In : 2019	oxidation - Reduction potential or			6
	IEC 60746-5 : 1992	redox potential			
28		Programmable controllers: Part 1 -	August, 2024		Identical under dual
20	2006	General information (First	August, 2024	-	
					numbering
	IEC 61131-1	Revision)			
	Reviewed In : 2024				
	IEC 61131-1 (2003)				
29	14254 : 2021	Industrial-Process Measurement		-	Identical under dual
		and Control - Programmable			numbering
	IEC 61131-2 : 2017	-			_
		Requirements and Tests (Second			
		Revision )			
30	IS 16923 (Part 1) :	Thermocouples Part 1 EMF	May, 2023	-	Identical under dual
	2018	Specifications and Tolerances (			numbering
	IEC 60584-1 : 2013	First Revision )			numbering
		Flist Revision )			
	Reviewed In : 2023				
	IEC 60584-1 : 2013				
31	IS 16923 (Part 3) :	THERMOCOUPLES - PART 3:		-	Identical under dual
	2023	EXTENSION AND			numbering
	IEC 60584-3: 2021	COMPENSATING CABLES -			
	IEC 60584-3: 2021	TOLERANCES AND			
		IDENTIFICATION SYSTEM			
32	IS 2053 : 1974	Specification for thermocouple		-	Indigenous
	Reviewed In : 2019	pyrometers (First Revision)			
33		Specification for direct reading pH		1	Indigenous
55	Reviewed In : 2018	meters (Second Revision)		1	margenous
34	IS 2806 : 1992		A muil 2018		Indianaus
54		Thermometry electrical resistance	April, 2018	-	Indigenous
	Reviewed In : 2018	guide (First Revision)			
	Reaffirmed but not				
	taken up for revision				
35	IS 2848 : 2023	INDUSTRIAL PLATINUM		-	Identical under dual
	IEC 60751: 2022	RESISTANCE			numbering
	IEC 60751: 2022	THERMOMETERS AND			
		PLATINUM TEMPERATURE			
		SENSORS			
36	IS 3624 : 1987	Specification for pressure and	April, 2018		Indigenous
50			April, 2010		murgenous
27		vacuum gauges (Second Revision)	Cantanal an 2017		T 11
37	IS 3944 : 1982	Method for determination of flow	September, 2015	-	Indigenous
	Reviewed In : 2015	time by use of flow cups (First			
		Revision)		ļ	
38		Methods of measurement on direct	September, 2013	-	Indigenous
	Reviewed In: 2013	reading PH meters (First Revision)			
39	IS/IEC 60519-1 :	SAFETY IN INSTALLATIONS		-	Identical under single
	2020	FOR ELECTROHEATING AND			numbering
	IEC 60519-1: 2020	ELECTROMAGNETIC			
	TEC 60519-1-2020	1  INVELODITIO = 1  ANT  1.		1	
	IEC 60519-1: 2020				
40	IEC 60519-1: 2020 IS/IEC 60519-3 :	GENERAL REQUIREMENTS SAFETY IN ELECTROHEAT		-	Identical under single

	2005 IEC 60519-3: 2005 IEC 60519-3: 2005	INSTALLATIONS - PART 3: PARTICULAR REQUIREMENTS FOR INDUCTION AND CONDUCTION HEATING AND INDUCTION MELTING INSTALLATIONS			numbering
41	IS/IEC 60519-6 : 2022 IEC 60519-6:2022 IEC 60519-6:2022	SAFETY IN INSTALLATIONS FOR ELECTROHEATING AND ELECTROMAGNETIC PROCESSING - PART 6: PARTICULAR REQUIREMENTS FOR HIGH FREQUENCY DIELECTRIC AND MICROWAVE HEATING AND PROCESSING EQUIPMENT		-	Identical under single numbering
42	IS/IEC 60519-8 : 2020 IEC 60519-8:2020 IEC 60519-8:2020	Safety in installations for electroheating and electromagnetic processing - Part 8: Particular requirements for electroslag remelting furnaces		-	Identical under single numbering
43	IS/IEC 60534-2-1) : 2011 NULL IEC 60534-2-1 : 2011	Industrial-Process Control Valves Part 2-1 Flow Capacity — Sizing Equations for Fluid Flow under Installed Conditions (First Revision)		-	Identical under dual numbering
44	IS/IEC 60534-2-3 : 2015 NULL Reviewed In : 2021 IEC 60534-2-3 : 2015	Industrial-Process Control Valves Part 2-3 Flow Capacity — Test Procedures (First Revision)	January, 2021	-	Identical under dual numbering
45	IS/IEC 61308 : 2005 IEC 61308: 2005 IEC 61308: 2005	HIGH-FREQUENCY DIELECTRIC HEATING INSTALLATIONS - TEST METHODS FOR THE DETERMINATION OF POWER OUTPUT		-	Identical under single numbering
46	IS/IEC 61508-0 : 2005 Reviewed In : 2024 IEC 61508-0:2005	Functional safety of electrical electronic/programmable electronic safety - Related systems: Part 0 functional safety and IEC 61508	October, 2024	-	Identical under single numbering
47	IS/IEC 61508-1 : 2010	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-Related Systems Part 1 General Requirements ( First Revision )	October, 2024	-	Identical under dual numbering
48	IS/IEC 61508-2 : 2010 IEC 61508-2 : 2010 Reviewed In : 2024	Functional safety of electrical/ electronic/programmable electronic safety - Related systems: Part 2 requirements for electrical/electronic/ programmable electronic safety related systems (First Revision)	October, 2024	-	Identical under single numbering
49	IS/IEC 61508-3 : 2010 IEC 61508-3 : 2010 Reviewed In : 2024	Functional safety of electrical/electronic/programmable electronic safety-related systems : Part 3 Software requirements	October, 2024	-	Identical under single numbering

50	IS/IEC 61508-4 :	Functional safety of	October, 2024		The street and see she also
1		I unetional safety of	000001, 2024	-	Identical under single
	2010	electrical/electronic/programmable			numbering
		electronic safety-related systems :			_
	Reviewed In : 2024	Part 4 Definitions and			
	IEC 61508-4:2010	abbreviations			
51	IS/IEC 61508-5 :	Functional safety of	October, 2024	_	Identical under single
,1		electrical/electronic/programmable	000001, 2024		numbering
		electronic safety - related systems :			numbering
		Part 5 Examples of methods for the			
	IEC 61508-5:2010	determination of safety integrity			
		levels	0.1.0004		
52	IS/IEC 61508-6 :	Functional safety of	October, 2024	-	Identical under single
		electrical/electronic/programmable			numbering
		electronic safety-related systems :			
	Reviewed In : 2024	Part 6 Guidelines on the			
	IEC 61508-6:2010	applications			
53	IS/IEC 61508-7 :	Functional safety of electgrical/ele	October, 2024	-	Identical under single
	2010	ctronic/programmable electgronic			numbering
	IEC 61508-7 : 2010	safety-related systems : Part 7			
	Reviewed In : 2024	Overview of techniques and			
	IEC 61508-7:2010	measures			
54	IS/IEC 61511-1 :	Functional safety - Safety	October, 2024	-	Identical under single
	2017	instrumented systems for the			numbering
	IEC 61511-1 : 2016	process industry sector : Part 1			numbering
	+ AMD1 : 2017	Frameworks, definitions, system,			
	Reviewed In : 2024	hardware and software			
	IEC 61511-1:2017	requirements	0 / 1 2024		
55	IS/IEC 61511-2 :	Functional safety - Safety	October, 2024	-	Identical under single
	2016	instrumented systems for the			numbering
	IEC 61511-2 : 2016	process industry sector : Part 2			
	Reviewed In : 2024	Guidelines for the application			
	IEC 61511-2:2016				
56	IS/IEC 61511-3 :	Functional safety - Safety	October, 2024	-	Identical under single
	2016	instrumented systems for the			numbering
	IEC 61511-3 : 2016	process industry sector: Part 3			
	Reviewed In: 2024	guidance for the determination of			
	IEC 61511-3:2016	the required safety integrity levels			
		(First Revision)			
57	IS/IEC 62264-1 :	Enterprise - Control system	January, 2021	-	Identical under single
	2003	integration: Part 1 models and	<b>v</b> *		numbering
	Reviewed In : 2021	terminology			- 0
	IEC 62264-1:2003				
58	IS/IEC 62264-2 :	Enterprise - Control system	October, 2024	-	Identical under single
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2004	integration: Part 2 object model	000001, 202T		numbering
	Reviewed In : 2024	attributes			numbering
	IEC 62264-2:2004	attributes			
59		Industrial Communication			Identical under size
צי	IS/IEC 62443-1-1) :			-	Identical under single
	2009	Networks Part 1 Network and			numbering
	IEC/TS 62443-1-1 :	System Security Section 1			
	2009	Terminology, concepts and models			
	IEC62443-1-1:2009				
50		Security for Industrial Automation		-	Identical under single
	2017	and Control Systems Part 2:			numbering
	IEC 62443-2-4 :	Section 4: Security Program			
	2017	Requirements for IACS Service			
	IEC62443-2-4:2017	-			
51	IS/IEC 62443-3-3):	Industrial Communication		-	Identical under single

	IEC 62443-3-3 : 2013	System Security Section 3 System security requirements and security			
62	· · · · · · · · · · · · · · · · · · ·	Security for Industrial Automation		-	Identical under single
	2018 IEC 62443-4-1 :	and Control Systems Part 4 Section 1 Secure Product Development			numbering
	2018	Lifecycle Requirements			
	IEC 62443-4-1:2018				
63	IS/IEC 62443-4-2) : 2019	Security for Industrial Automation and Control Systems Part 4 Sec 2		-	Identical under single
	IEC 62443-4-2 :	Technical Security Requirements			numbering
	2019	for IACS Components			
64	IEC62443-4-2:2019 IS 6804 : 1972	Specification for glass electrodes		_	Indigenous
0.	Reviewed In : 2013	for direct reading pH meter			
65	IS 7358 : 1984	Specification for thermocouples	September, 2015	-	Indigenous
	Reviewed In : 2015 Reaffirmed but not	(First Revision)			
	taken up for revision				
66	IS 7722 : 2024	Analogue Pneumatic Signals for		-	Identical under dual
	IEC 60382: 1991	Process Control Systems (First			numbering
67	IEC 60382: 1991 IS 7728 : 1984	Revision) Specification for analogue dc	September, 2015	_	Indigenous
07	Reviewed In : 2015	current signals for process control systems (First Revision)	September, 2013		indigenous
68	IS 8018 : 1976	Specification for platinum and		-	Indigenous
	Reviewed In : 2013 Reaffirmed but not	platinum alloy wires for thermocouple elements			
	taken up for revision	-			
69	IS 8493 : 1977	Analogue DC voltage signals for	September, 2015	-	Indigenous
	Reviewed In : 2015	industrial process measurement and control systems			
70	IS 8495 (Part 1) :	Specification for ceramic		-	Indigenous
	1977 Reviewed In : 2013	components for thermocouples and resistance thermometers: Part 1			
	Reaffirmed but not	terminal blocks			
	taken up for revision				
71	IS 8784 : 1987	Specification for thermocouple	April, 2018	-	Indigenous
	Reviewed In : 2018 Reaffirmed but not	compensating cables (Second Revision)			
	taken up for revision	·			
72	IS 8824 (Part 2) : 1988	Specification for electrical moisture meters	September, 2015	-	Indigenous
	Reviewed In : 2015				
73	IS 8935 : 1985	Specification for electric solenoid	September, 2015	-	Indigenous
74	Reviewed In : 2015 IS 8992 : 1978	operated actuators (First Revision) Test methods for induction	March, 2016	_	Modified/Technically
	IEC 60396	furnaces with submerged channels			Equivalent
	Reviewed In : 2016 IEC 60396:1972				
75	IS 9021 : 1978	General test conditions for	March, 2016	-	Modified/Technically
	IEC 60398 Reviewed In : 2016	industrial electro - Heating equipment			Equivalent
	IEC 60398:1972	equipment		1	

76	IS 9029 : 1978 IEC 60397 Reviewed In : 2016 IEC 60397:1972	Methods of tests for batch furnaces with metallic heating resistors	March, 2016	1	Modified/Technically Equivalent
77	IS 9050 : 1979 IEC 60239 Reviewed In : 2016 IEC 60239:1967	Nominal dimensions of cylindrical machined graphite electrodes with threaded sockets and connecting pins for use in electric arc furnaces	March, 2016	-	Modified/Technically Equivalent
78	IS 9080 (Part 2/Sec 1) : 1979 Reviewed In : 2016 IEC 60239:1967	Safety requirements in electro - Heat installations: Part 2 particular requirements for resistance heating equipment: Sec 1 protection - In direct resistance heating installations	March, 2016	_	Modified/Technically Equivalent
79	IS 9080 (Part 2/Sec 2) : 1980 Reviewed In : 2016	Safety requirements in electro - Heat installations: Part 2 particular requirements for resistance heating equipment: Sec 2 protection in indirect resistance heating installations	March, 2016	-	Indigenous
80	IS 9080 (Part 2/Sec 3) : 1981 IEC 60519-2 Reviewed In : 2016	Safety requirements in electro - Heat installations: Part 2 particular requirements for resistance heating equipment: Sec 3 protection in potassium and sodium nitrate nitrite bath furnaces	March, 2016	-	Indigenous
81	IS 9080 (Part 2/Sec 4) : 1981 Reviewed In : 2016	Safety requirements in electro - Heat installations: Part 2 particular requirements for resistance heating equipment: Sec 4 protection in installations used for drying varnishes and other similar products	March, 2016	-	Indigenous
82	IS 9080 (Part 4) : 1981 IEC 60519-4 Reviewed In : 2016	Safety requirements in electro - Heat installations: Part 4 particular requirements for arc furnace installations	March, 2016	-	Indigenous
83	IS 9334 : 1986 Reviewed In : 2016	Specification for electric motor operated actuators (First Revision)	May, 2016	-	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.	Drafts Standards in WC Stage Title		

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SI. No.	Doc No.	Title
1	ETD 18 (22820)	Methods of tests for electro - Slag remelting furnaces
2	ETD 18 (24118)	Safety in installations for electroheating and electromagnetic processing - Part 4 Particular
		requirements for arc furnace installations
3	ETD 18 (24119)	Characteristics of electric infra-red emitters for industrial heating - Part 1 Short wave infra-red
		emitters
4	ETD 18 (24120)	Specification for binary direct voltage signals for process measurement and control systems
5	ETD 18 (24122)	Graphite electrodes for electric arc furnaces - Dimensions and designation

# **Finalized Draft Indian Standard**

Title

No Records Found

	Finalized Draft Indian Standards under Print				
SI. No.	Doc No.	Title			
1	ETD 18 (22557)	Safety Requirements for Electrical Equipment for Measurement Control and Laboratory Use Part			
		2 Particular Requirements Section 202 Electrically Operated Valve Actuators			
2	ETD 18 (22817) Revision	Analogue DC voltage signals for Industrial Process Measurement and Control Systems First			
	of: IS 8493:1977	Revision			

Total Published Standards:82 Total Standards Under development:7

Doc No.

SI. No.

SI. No.

1

2

3

Asp	ect V	Wise	Report
-			

- Product : 23 Code of Practices : 7
  - Methods of Test : 13
  - Terminology : 3
    - Dimensions : 1
- System Standard : 0
- Safety Standard : 13
  - Others: 23
- Service Specification : 0
- Process Specification : 0
  - Unclassified : 0

# Annexure-I :List of Indian Standards Withdrawn/SupersededIS No. & YearTitleIS 10144 : 1982Specification for electronic speed limiters for diesel vehiclesReviewed In : 2013Reference tables for nickel chromium-copper nickel chromel-constantan thermocouplesReviewed In : 2015Programmable controllers Part 2 equipment requirements and testsReviewed In : 2011 IECProgrammable controllers Part 2 equipment requirements and testsReviewed In : 2011 IECSafety requirements for electro - Slag remelting furnaces

	Reviewed In : 2011 IEC	
	1131-2:1992	
4	IS 11712 : 1986	Safety requirements for electro - Slag remelting furnaces
	IEC 27(CO)	
	Reviewed In : 2018	
5	IS 12051 : 1987	Reference Tables for Nickel-chromium-silicon nicrosil nisil Type N Thermocouples
	Reviewed In : 2013	
6	IS/IEC 1308 : 1994	High frequency dielectric heating installations - Test methods for the determination of power
	IEC 61308 : 1994	output
	Reviewed In : 2020 IEC	
	61308 : 1994	

7	IS 2054 : 1962	Referance tables for nickel chromium-nickel aluminium thermocouples
	Reviewed In : 2015 B.S.	
	1827: 1952	
8	IS 2055 : 1962	Reference tables for platinum rhodium-platinum thermocouples
	Reviewed In : 2015	
9	IS 2056 : 1962	Reference tables for copper-constantan thermocouples
	Reviewed In : 2015	
10	IS 2057 : 1962	Reference Tables for Iron-constantan Thermocouples
	Reviewed In : 2015	
11	IS/IEC 519-1 : 1984	Safety in electroheat installation Part 1 general requirements
	Reviewed In : 2020 IEC	
	60519-1:1984	
12	IS/IEC 519-3 : 1988	Safety in electroheat installations Part 3 particular requirements for induction and conduction
	Reviewed In : 2020 IEC	heating and induction melting installations
	60519-3:1988	
13	IS/IEC 519-5 : 1980	Safety in electroheat installation Part 5 specification for safety in plasma installation
	Reviewed In : 2020 IEC	
	60519-5:1980	
14	IS/IEC 519-9 : 1987	Safety in electroheat installations Part 9 particular requirements for high - Frequency dielectric
	Reviewed In : 2020 IEC	heating installations
	60519-9:1987	
15	IS 5883 : 1970	Specification for nickel resistance thermometer elements
	Reviewed In : 2013	
16	IS 6720 : 1972	Reference tables for platinum 30 percent rhodium - Platinum 6 percent rhodium thermocouples
	Reviewed In : 2013	
17	IS 7988 : 1976	Referance tables for chromel-kopel thermocouples
	Reviewed In : 2013	
18	IS 9319 : 1979	Specification for electronic self - Balancing potentiometric indicators and recorders
	Reviewed In : 2013	
19	IS 9347 : 1979	Specification for charts for recording instruments
	Reviewed In : 2016	
20	IS 9463 : 1980	Specification for electronic self - Balancing bridge indicators and recorders
	Reviewed In : 2013	

Annexure-II :List of Indian Product Standards				
SI. No.	IS No. & Year	Title		
1	IS 10098 : 1982	General requirements for electric infra - Red emitters for heating purposes		
	Reviewed In : 2016 IEC			
	60240 : 1967			
2	IS 10189 (Part 2/Sec 2) :	Industrial process control valves Part 2 flow capacity Section 2 sizing equations for compressible		
	1993	fluid flow under Installed conditions		
	Reviewed In : 2013 IEC			
	Publication 534-2-2 (1980			
	)			
3	IS 10639 : 1983	Specification for disappearing filament type optical pyrometer		
	Reviewed In : 2021 IEC			
	60181 - 1964			
4	IS 12188 : 1987	Specification for electric direct arc melting furnaces		
	Reviewed In : 2018			
5	IS 12434 : 1988	Specification for coating plating thickness tester destructive type		
	Reviewed In : 2013			
6	IS 12554 (Part 1) : 1988	Specification for non - destructive coating thickness testing instruments Part 1 eddy current		
	Reviewed In : 2013	instruments		
7	IS 12554 (Part 2) : 1999	Specification for non - destructive coating thickness testing instruments - Part 2 magnetic		
	Reviewed In : 2013	instruments		
8	IS 13211 : 1991	Vapour pressure dial - Type thermometer - Specification		
	Reviewed In : 2016			
9	14254 : 2021	Industrial-Process Measurement and Control - Programmable Controllers Part 2 Equipment		

	ISO 6560:1983	Requirements and Tests Second Revision
10	IS 16923 (Part 1) : 2018 IEC 60584-1 : 2013 Reviewed In : 2023 IEC	Thermocouples Part 1 EMF Specifications and Tolerances First Revision
	60584-1 : 2013	
11	IS 16923 (Part 3) : 2023 IEC 60584-3: 2021	THERMOCOUPLES - PART 3 EXTENSION AND COMPENSATING CABLES - TOLERANCES AND IDENTIFICATION SYSTEM
12	IS 2053 : 1974 Reviewed In : 2019	Specification for thermocouple pyrometers First Revision
13	IS 2711 : 1979 Reviewed In : 2018	Specification for direct reading pH meters Second Revision
14	IS 2848 : 2023 IEC 60751: 2022	INDUSTRIAL PLATINUM RESISTANCE THERMOMETERS AND PLATINUM TEMPERATURE SENSORS
15	IS 3624 : 1987 Reviewed In : 2018	Specification for pressure and vacuum gauges Second Revision
16	IS 6804 : 1972 Reviewed In : 2013	Specification for glass electrodes for direct reading pH meter
17	IS 7358 : 1984 Reviewed In : 2015 Reaffirmed but not taken up for revision	Specification for thermocouples First Revision
18	IS 8018 : 1976 Reviewed In : 2013 Reaffirmed but not taken up for revision	Specification for platinum and platinum alloy wires for thermocouple elements
19	IS 8495 (Part 1) : 1977 Reviewed In : 2013 Reaffirmed but not taken up for revision	Specification for ceramic components for thermocouples and resistance thermometers Part 1 terminal blocks
20	IS 8784 : 1987 Reviewed In : 2018 Reaffirmed but not taken up for revision	Specification for thermocouple compensating cables Second Revision
21	IS 8824 (Part 2) : 1988 Reviewed In : 2015	Specification for electrical moisture meters
22	IS 8935 : 1985 Reviewed In : 2015	Specification for electric solenoid operated actuators First Revision
23	IS 9334 : 1986 Reviewed In : 2016	Specification for electric motor operated actuators First Revision