### **BUREAU OF INDIAN STANDARDS**

### **Program of Work**

#### **ETD 18: Industrial Process Measurement And Control**

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

### **Published Standards**

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	Industrial - Process control valves:	October, 2021	-	Identical under dual
	1):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			-	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			
	IEC Publication	fluid flow under Installed			
	534-2-2 ( 1980 )	conditions			
6	IS 10189 (Part	Industrial - Process control valves	October, 2021	-	Identical under dual
	4):2016	Part 4 inspection and routine			numbering
	IEC 60534-4 : 2006	testing			
	Reviewed In: 2021				
<u> </u>	IEC 60534-4 : 2006				
7	IS 10215:2024	Submerged-Arc Furnaces -		-	Identical under dual
	IEC IEC 60683:	Methods of Test (First Revision)			numbering
	2011				
	IEC IEC 60683:				
<u> </u>	2011				

8	IS 10639:1983	Specification for disappearing	October, 2021	-	Modified/Technically
	Reviewed In: 2021	filament type, optical pyrometer			Equivalent
	IEC 60181 - 1964				_
9	IS 11222:1985	Specification for dial, scales and	September, 2015	-	Indigenous
	Reviewed In: 2015	indexes for indicating analogue			
	Reaffirmed but not	measuring instruments			
	taken up for revision				
1.0	70 11 50 100 5				
10	IS 11692:1986	Methods of tests for electro - slag	February, 2018	-	Identical under dual
	Reviewed In: 2018	remelting furnaces			numbering
1.1	IEC 60779: 2020	T (11 C) C El (1 C)			T1 2 1 1 1 1
11		Installations for Electroheating and		-	Identical under dual
	IEC 60779: 2020	Electromagnetic Processing - Test			numbering
	IEC 60779: 2020	Methods for Electroslag Remelting			
12	IC 12100.1007	Furnaces (First Revision)	Falamana 2010		Indianna.
12	IS 12188:1987 Reviewed In : 2018	Specification for electric direct arc	February, 2018	-	Indigenous
12		melting furnaces  Direct Arc Furnaces - Methods of			Identical and and deal
13	IS 12306:2024 IEC 60676: 2011			-	Identical under dual
	IEC 60676: 2011	Test (First Revision)			numbering
14	IS 12434:1988	Specification for coating/plating		_	Indigenous
14	Reviewed In : 2013	thickness tester, destructive type		_	murgenous
15	IS 12554 (Part	Specification for non - destructive		_	Indigenous
	1):1988	coating thickness testing			margenous
	Reviewed In: 2013	instruments Part 1 eddy current			
	Reviewed III . 2013	instruments			
16	IS 12554 (Part	Specification for non - destructive		_	Indigenous
	2):1999	coating thickness testing			
	Reviewed In: 2013	instruments - Part 2 magnetic			
		instruments			
17	IS 12555:1988	Guide for signal conditioning		-	Indigenous
	Reviewed In: 2013	devices for process control systems			
18	IS 12556:1988	Specification for binary direct	October, 2024	-	Indigenous
	Reviewed In: 2024	voltage signals for process			
		measurement and control systems			
19	IS 12579:1988	Specification for base metal		-	Indigenous
	Reviewed In: 2013	mineral insulated thermocouple			
		cables and thermocouples			
20	IS 13122 (Part	Transmitters for use in industrial	May, 2021	-	Indigenous
	1):1993	process control systems -			
	Reviewed In: 2021	Specification: Part 1 methods for			
	Reaffirmed but not	evaluating the performance			
	taken up for revision				
21	IS 12122 (Domt	Transmitters for use in industrial	Mov. 2014		Indianava
21	IS 13122 (Part 2):1991	process control systems -	May, 2016	-	Indigenous
	Reviewed In : 2016	- ·			
		installation, inspection and routine			
	taken up for revision	_			
	laken up 101 fevision	testing			
22	IS 13211:1991	Vapour pressure dial - Type	May, 2016	_	Indigenous
	Reviewed In : 2016	thermometer - Specification	141ay, 2010		muigenous
	Reaffirmed but not	mermometer opecification			
	taken up for revision				
	mich up 101 10 vision				
23	IS 13263:2024	Plasma Equipment for Electroheat		-	Identical under dual
1		Applications â€" Methods of Test			numbering
	IEC/TS 60680:	(First Revision)			8
L	2008	·		<u>                                     </u>	
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ا م	IG 10.570 (D. )	l n i en e e l		1	1
24	IS 13673 (Part	Expression of Performance of		-	Identical under dual
	1):2021 IEC 60746-1 : 2003	Electrochemical Analyzers : Part 1 General			numbering
	IEC 60746-1 : 2003				
25	IS 13673 (Part	Expression of Performance of		_	Identical under dual
	2):2021	Electrochemical Analyzers Part 2			numbering
	IEC 60746-2 : 2003	pH Value (First Revision)			
	IEC 60746-2:2003	,			
26	IS 13673 (Part	Expression of Performance of		-	Identical under dual
	3):2021	Electrochemical Analyzers Part 3			numbering
	IEC 60746-3 : 2002	Electrolytic Conductivity ( First			
	IEC 60746-3:2002	Revision )			
27	IS 13673 (Part	Expression of Performance of		-	Identical under dual
	4):2024	Electrochemical Analyzers Part 4			numbering
	IEC 60746-4: 2018	Standard for Measuring Oxygen			
20		Dissolved in Water (First Revision)			) ( 1/C: 1/T) 1 : 11
28	IS 13673 (Part	Expression of performance of		-	Modified/Technically
	5):1999 Reviewed In : 2019	electrochemical analyzers: Part 5			Equivalent
	Reviewed in : 2019 Reaffirmed but not	oxidation - Reduction potential or redox potential			
	taken up for revision	-			
	IEC 60746-5 : 1992				
29	IS 14254 (Part	Programmable controllers: Part 1 -	August, 2024	-	Identical under dual
	1):2006	General information (First			numbering
	IEC 61131-1	Revision)			
	Reviewed In: 2024	Ź			
	IEC 61131-1 (2003)				
30	IS 14254 (Part	Industrial-Process Measurement		-	Identical under dual
	2):2021	and Control - Programmable			numbering
		Controllers Part 2 Equipment			
	IEC 61131-2:2017	Requirements and Tests (Second			
2.1	YG 4 6022 (D	Revision )	2022		*
31	IS 16923 (Part	Thermocouples Part 1 EMF	May, 2023	-	Identical under dual
	1):2018	Specifications and Tolerances (			numbering
	IEC 60584-1 : 2013 Reviewed In : 2023	First Revision )			
	IEC 60584-1 : 2013				
32	IS 16923 (Part	THERMOCOUPLES - PART 3:		_	Identical under dual
52	3):2023	EXTENSION AND			numbering
	IEC 60584-3: 2021	COMPENSATING CABLES -			
	IEC 60584-3: 2021	TOLERANCES AND			
		IDENTIFICATION SYSTEM		<u> </u>	
33		Safety Requirements for Electrical		-	Identical under dual
	202):2024	Equipment for Measurement,			numbering
	IEC	Control and Laboratory Use Part 2			
	61010-2-202:2020	Particular Requirements Section			
	IEC	202 Electrically Operated Valve			
	61010-2-202:2020	Actuators		1	T1
34	IS 19283:2025	Graphite Electrodes for Electric		-	Identical under dual
	IEC 60239:2005 IEC 60239:2005	Arc Furnaces - Dimensions and Designation			numbering
35	IS 19284 (Part	Characteristics of Electric Infra-		<del> </del>	Identical under dual
	· ·	Red Emitters for Industrial Heating		_	numbering
	IEC 60240-1:1992	Part 1 Short Wave Infra-Red			numbering
	IEC 60240-1:1992	Emitters			
36	IS 2053:1974	Specification for thermocouple		-	Indigenous
	Reviewed In: 2019	pyrometers (First Revision)			- G- 7
	Reaffirmed but not	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
	taken up for revision				
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37	IS 2711:1979	Specification for direct reading pH	December, 2025	1	Indigenous
"	Reviewed In: 2025	meters (Second Revision)	December, 2023	1	margenous
38	IS 2806:1992	Thermometry electrical resistance	April, 2018	_	Indigenous
	Reviewed In: 2018	guide (First Revision)	1 ipin, 2010		indigenous
	Reaffirmed but not	g (= 130 - 13 - 13 - 13 - 13 - 13 - 13 - 13			
	taken up for revision				
39	IS 2848:2023	INDUSTRIAL PLATINUM		-	Identical under dual
	IEC 60751: 2022	RESISTANCE			numbering
	IEC 60751: 2022	THERMOMETERS AND			
		PLATINUM TEMPERATURE			
		SENSORS			
40	IS 3624:1987	Specification for pressure and	April, 2018	-	Indigenous
		vacuum gauges (Second Revision)			
41	IS 4309:1979	Methods of measurement on direct	December, 2025	-	Indigenous
	Reviewed In: 2025	reading PH meters (First Revision)			
42	IS/IEC	SAFETY IN INSTALLATIONS		-	Identical under single
	60519-1:2020	FOR ELECTROHEATING AND			numbering
	IEC 60519-1: 2020	ELECTROMAGNETIC			
	IEC 60519-1: 2020	PROCESSING - PART 1:			
		GENERAL REQUIREMENTS			
43	IS/IEC	SAFETY IN ELECTROHEAT		-	Identical under single
	60519-3:2005	INSTALLATIONS - PART 3:			numbering
	IEC 60519-3: 2005	PARTICULAR			
	IEC 60519-3: 2005	REQUIREMENTS FOR			
		INDUCTION AND			
		CONDUCTION HEATING AND			
		INDUCTION MELTING			
	10.770	INSTALLATIONS			
44	IS/IEC	Safety in Installations for		-	Identical under single
	60519-4:2021	Electroheating and			numbering
	IEC 60519-4: 2021	Electromagnetic Processing Part 4			
	IEC 60519-4: 2021	Particular Requirements for ARC Furnace Installations			
15	IS/IEC	SAFETY IN INSTALLATIONS		-	Identical under single
45	60519-6:2022	FOR ELECTROHEATING AND		_	Identical under single numbering
	IEC 60519-6:2022	ELECTROMAGNETIC			numbering
	IEC 60519-6:2022	PROCESSING - PART 6:			
	1120 00319-0,2022	PARTICULAR			
		REQUIREMENTS FOR HIGH			
		FREQUENCY DIELECTRIC			
		AND MICROWAVE HEATING			
		AND PROCESSING			
		EQUIPMENT			
46	IS/IEC	Safety in installations for		-	Identical under single
	60519-8:2020	electroheating and electromagnetic			numbering
	IEC 60519-8:2020	processing - Part 8: Particular			
	IEC 60519-8:2020	requirements for electroslag			
		remelting furnaces			
47	IS/IEC	Industrial-Process Control Valves		-	Identical under dual
	60534-2-1):2011	Part 2-1 Flow Capacity — Sizing			numbering
	NULL	Equations for Fluid Flow under			
	IEC 60534-2-1:	Installed Conditions ( First			
	2011	Revision )			
48	IS/IEC	Industrial-Process Control Valves	January, 2021	-	Identical under dual
	60534-2-3:2015	Part 2-3 Flow Capacity — Test			numbering
	NULL	Procedures (First Revision)			
	Reviewed In: 2021				
l	I	l l		I	1

1	IEC 60534-2-3 :			I	1
	2015				
49	IS/IEC 61308:2005	HIGH-FREQUENCY		-	Identical under single
	IEC 61308: 2005	DIELECTRIC HEATING			numbering
	IEC 61308: 2005	INSTALLATIONS - TEST			
		METHODS FOR THE			
		DETERMINATION OF POWER			
-50	10,450	OUTPUT	0 1 2024		X1 1 1 1 1
50	IS/IEC	Functional safety of electrical	October, 2024	-	Identical under single
	61508-0:2005 Reviewed In : 2024	electronic/programmable electronic safety - Related systems: Part 0			numbering
	IEC 61508-0:2005	functional safety and IEC 61508			
51	IS/IEC	Functional Safety of Electrical /	October, 2024	_	Identical under dual
	61508-1:2010	Electronic / Programmable			numbering
	IEC 61508-1:2010	Electronic Safety-Related Systems			
	Reviewed In: 2024	Part 1 General Requirements (			
	IEC 61508-1:2010	First Revision)			
52	IS/IEC	Functional safety of electrical/	October, 2024	-	Identical under single
		electronic/programmable electronic			numbering
	IEC 61508-2 : 2010 Reviewed In : 2024	safety - Related systems: Part 2 requirements for			
		electrical/electronic/ programmable			
	IEC 01308-2.2010	electronic safety related systems			
		(First Revision)			
53	IS/IEC	Functional safety of	October, 2024	-	Identical under single
	61508-3:2010	electrical/electronic/programmable			numbering
	IEC 61508-3 : 2010	electronic safety-related systems :			
	Reviewed In: 2024	Part 3 Software requirements			
<u></u>	IEC 61508-3:2010		0 1 2024		T1 (' 1 1 ' 1
54	IS/IEC 61508-4:2010	Functional safety of electrical/electronic/programmable	October, 2024	-	Identical under single numbering
	IEC 61508-4 : 2010	electronic safety-related systems:			numbering
	Reviewed In : 2024	Part 4 Definitions and			
	IEC 61508-4:2010	abbreviations			
55	IS/IEC	Functional safety of	October, 2024	-	Identical under single
		electrical/electronic/programmable			numbering
		electronic safety - related systems:			
		Part 5 Examples of methods for the			
	IEC 61508-5:2010	determination of safety integrity			
56	IS/IEC	levels Functional safety of	October, 2024		Identical under single
50		electrical/electronic/programmable	0010001, 2024	]	numbering
	IEC 61508-6 : 2010	electronic safety-related systems:			numbering
	Reviewed In: 2024	Part 6 Guidelines on the			
	IEC 61508-6:2010	applications			
57	IS/IEC	Functional safety of electgrical/ele	October, 2024	-	Identical under single
	61508-7:2010	ctronic/programmable electgronic			numbering
	IEC 61508-7 : 2010	safety-related systems: Part 7			
	Reviewed In: 2024 IEC 61508-7:2010	Overview of techniques and			
58	IS/IEC 61508-7:2010	measures Functional safety - Safety	October, 2024	_	Identical under single
	61511-1:2017	instrumented systems for the	G00001, 2027		numbering
	IEC 61511-1 : 2016	process industry sector : Part 1			
	+ AMD1 : 2017	Frameworks, definitions, system,			
	Reviewed In: 2024	hardware and software			
	IEC 61511-1:2017	requirements			
59	IS/IEC	Functional safety - Safety	October, 2024	-	Identical under single
	61511-2:2016	instrumented systems for the			numbering
	IEC 61511-2 : 2016	process industry sector : Part 2			

1	Reviewed In: 2024	Guidelines for the application		1	
	IEC 61511-2:2016	curatines for the appreasion			
60	IS/IEC	Functional safety - Safety	October, 2024	-	Identical under single
	61511-3:2016	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			
61	IS/IEC	(First Revision) Enterprise - Control system	January, 2021	_	Identical under single
01	62264-1:2003	integration: Part 1 models and	January, 2021	_	numbering
	Reviewed In : 2021	terminology			numbering
	IEC 62264-1:2003	commoregy			
62	IS/IEC	Enterprise - Control system	October, 2024	-	Identical under single
	62264-2:2004	integration: Part 2 object model			numbering
	Reviewed In: 2024	attributes			
<u> </u>	IEC 62264-2:2004				
63	IS/IEC	Industrial Communication		-	Identical under single
	62443-1-1):2009	Networks Part 1 Network and			numbering
	IEC/TS 62443-1-1 : 2009	System Security Section 1 Terminology, concepts and models			
	IEC62443-1-1:2009	Terminology, concepts and models			
64	IS/IEC	Security for Industrial Automation		-	Identical under single
	62443-2-4):2017	and Control Systems Part 2:			numbering
	IEC 62443-2-4:	Section 4: Security Program			
	2017	Requirements for IACS Service			
	IEC62443-2-4:2017	Providers			
65	IS/IEC	Industrial Communication		-	Identical under single
	62443-3-3):2013	Networks Part 3 Network and			numbering
	IEC 62443-3-3:	System Security Section 3 System			
	2013 IEC62443-3-3:2013	security requirements and security levels			
66	IS/IEC	Security for Industrial Automation			Identical under single
		and Control Systems Part 4 Section			numbering
	IEC 62443-4-1:	1 Secure Product Development			
	2018	Lifecycle Requirements			
	IEC				
	62443-4-1:2018				
67	IS/IEC	Security for Industrial Automation		-	Identical under single
	62443-4-2):2019	and Control Systems Part 4 Sec 2			numbering
	IEC 62443-4-2 : 2019	Technical Security Requirements for IACS Components			
	IEC62443-4-2:2019	-			
68	IS 6804:1972	Specification for glass electrodes	December, 2025	-	Indigenous
	Reviewed In: 2025	for direct reading pH meter			
69	IS 7358:1984	Specification for thermocouples	September, 2015	-	Indigenous
	Reviewed In: 2015	(First Revision)			
	Reaffirmed but not				
	taken up for revision				
70	10 7700 2004	Analassa D. C. C. J. C.			T14: 1 1 1 1
70	IS 7722:2024 IEC 60382: 1991	Analogue Pneumatic Signals for		-	Identical under dual
	IEC 60382: 1991 IEC 60382: 1991	Process Control Systems (First Revision)			numbering
71	IS 7728:1984	Specification for analogue dc	September, 2015	-	Indigenous
'1	Reviewed In : 2015	current signals for process control	50ptember, 2015		marganous
		systems (First Revision)			
72	IS 8018:1976	Specification for platinum and		-	Indigenous
	Reviewed In: 2013	platinum alloy wires for			
	Reaffirmed but not	thermocouple elements			
	taken up for revision				
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73	IS 8493:2024	Analogue DC voltage signals for		-	Identical under dual
	IEC 60381-2:1978	Industrial Process Measurement			numbering
	IEC 60381-2:1978	and Control Systems (First			
		Revision)			
74	IS 8495 (Part	Specification for ceramic		-	Indigenous
	1):1977	components for thermocouples and			
	Reviewed In: 2013	resistance thermometers: Part 1			
	Reaffirmed but not	terminal blocks			
	taken up for revision				
75	IS 8784:1987	Specification for thermocouple	April, 2018		Indigenous
13	Reviewed In : 2018	compensating cables (Second	Aprii, 2018	-	margenous
	Reaffirmed but not	Revision)			
	taken up for revision	ŕ			
	taken up for revision				
76	IS 8992:1978	Test methods for induction	March, 2016	-	Modified/Technically
	IEC 60396	furnaces with submerged channels			Equivalent
	Reviewed In: 2016	-			
	IEC 60396:1972				
77	IS 9021:1978	General test conditions for	March, 2016	-	Modified/Technically
	IEC 60398	industrial electro - Heating			Equivalent
	Reviewed In: 2016	equipment			
70	IEC 60398:1972	Mothodo of tests for hetal form	Merch 2016	1	Modified/Textended
78	IS 9029:1978 IEC 60397	Methods of tests for batch furnaces with metallic heating resistors	March, 2016	1	Modified/Technically Equivalent
	Reviewed In: 2016	with metanic heating resistors			Equivalent
	Reaffirmed but not				
	taken up for revision				
	IEC 60397:1972				
79	IS 9050:1979	Nominal dimensions of cylindrical	March, 2016	-	Modified/Technically
	IEC 60239	machined graphite electrodes with	,		Equivalent
	Reviewed In: 2016	threaded sockets and connecting			
	IEC 60239:1967	pins for use in electric arc furnaces			
80	IS 9080 (Part 2/Sec	Safety requirements in electro -	March, 2016	-	Modified/Technically
	1):1979	Heat installations: Part 2 particular			Equivalent
		requirements for resistance heating			
	Reaffirmed but not	equipment: Sec 1 protection - In			
	taken up for revision	•			
0.1	IEC 60239:1967	installations	Me1 2016	1	Ţ
81	IS 9080 (Part 2/Sec	Safety requirements in electro -	March, 2016	-	Indigenous
	2):1980 Reviewed In : 2016	Heat installations: Part 2 particular requirements for resistance heating			
	Reaffirmed but not	equipment: Sec 2 protection in			
	taken up for revision				
	mich ap 101 10 10 1010	installations			
82	IS 9080 (Part 2/Sec	Safety requirements in electro -	March, 2016	-	Indigenous
	3):1981	Heat installations: Part 2 particular	, •-•		- 6- 7
	· ·	requirements for resistance heating			
	Reviewed In: 2016	equipment: Sec 3 protection in			
	Reaffirmed but not	potassium and sodium nitrate			
	taken up for revision	nitrite bath furnaces			
	10,0000 (7, 2.0		) / 1 Acc	-	Y "
83	IS 9080 (Part 2/Sec	Safety requirements in electro -	March, 2016	-	Indigenous
	4):1981	Heat installations: Part 2 particular			
	Reviewed In: 2016 Reaffirmed but not	requirements for resistance heating			
	taken up for revision	equipment: Sec 4 protection in installations used for drying			
	aken up 101 1evision	varnishes and other similar			
	1	, armoneo ana omer similar		1	i

L			products			
Γ	84	IS 9080 (Part	Safety requirements in electro -	March, 2016	-	Indigenous
١		4):1981	Heat installations: Part 4 particular			
		Reviewed In: 2016	requirements for arc furnace			
1			installations			

## **Standards under Development**

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

	Preliminary Draft Standards				
SI. No. Doc No.		Title			
1	ETD 18 (27392) Revision	Specification for Base Metal Mineral Insulated Thermocouple Cables and Thermocouples First			
	of: IS 12579:1988	Revision			

Drafts Standards in WC Stage				
SI. No.	SI. No. Doc No. Title			
No Records Found				

	Draft Standards Completed WC Stage				
SI. No.	SI. No. Doc No. Title				
1	ETD 18 (24120)	Binary Direct Voltage Signals for Process Measurement and Control Systems First Revision			

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

Finalized Draft Indian Standards under Print			
SI. No.	Doc No.	Title	
No Records Found			

Total Published Standards:78 Total Standards Under development:2

## **Aspect Wise Report**

Product: 21 Code of Practices: 6 Methods of Test: 13 Terminology: 3 Dimensions: 2 System Standard: 0 Safety Standard: 15

Others: 23 Service Specification :  $\mathbf{0}$ Process Specification: 0 Unclassified: 0

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

SI. No. IS No. & Year	Title
1 IS 10144:1982	Specification for electronic speed limiters for diesel vehicles
Reviewed In: 2013	
2 IS 10625:1983	Reference tables for nickel chromium-copper nickel chromel-constantan thermocouples
Reviewed In: 2015	
3 IS/IEC 1131-2:1992	Programmable controllers Part 2 equipment requirements and tests
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	
	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	
	Safety in electroheat installations Part 3 particular requirements for induction and conduction
Reviewed In : 2020 IEC	heating and induction melting installations
60519-3:1988	Coffee in the start has the still still Dest 5 and 16 action from a fixed in the start in the st
13 IS/IEC 519-5:1980 Reviewed In : 2020 IEC	Safety in electroheat installation Part 5 specification for safety in plasma installation
60519-5:1980	
	Cofety in electrohect installations Dort 0 particular requirements for high. Frequency dialectric
Reviewed In : 2020 IEC	Safety in electroheat installations Part 9 particular requirements for high - Frequency dielectric heating installations
60519-9:1987	neating instanations
15 IS 5883:1970	Specification for nickel resistance thermometer elements
Reviewed In : 2013	specification for meker resistance dictinometer elements
	Reference tables for platinum 30 percent rhodium - Platinum 6 percent rhodium thermocouples
Reviewed In : 2013	reference alones for plannam 50 percent moduling a farmation of percent modulin anethrocouples
17 IS 7988:1976	Referance tables for chromel-kopel thermocouples
Reviewed In: 2013	Reference ables for enroller roper thermocouples
18 IS 8935:1985	Specification for electric solenoid operated actuators First Revision
Reviewed In: 2015	The second secon
19 IS 9319:1979	Specification for electronic self - Balancing potentiometric indicators and recorders
Reviewed In: 2013	i or
20 IS 9334:1986	Specification for electric motor operated actuators First Revision
Reviewed In: 2016	1
21 IS 9347:1979	Specification for charts for recording instruments
Reviewed In: 2016	
22 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):1993 Reviewed In : 2013 IEC Publication 534-2-2 ( 1980	Industrial process control valves Part 2 flow capacity Section 2 sizing equations for compressible fluid flow under Installed conditions
3	IS 10639:1983 Reviewed In : 2021 IEC 60181 - 1964	Specification for disappearing filament type optical pyrometer
4	IS 12188:1987 Reviewed In : 2018	Specification for electric direct arc melting furnaces
5	IS 12434:1988 Reviewed In : 2013	Specification for coating plating thickness tester destructive type
6	IS 12554 (Part 1):1988	Specification for non - destructive coating thickness testing instruments Part 1 eddy current
7	Reviewed In: 2013 IS 12554 (Part 2):1999	instruments  Specification for non - destructive coating thickness testing instruments - Part 2 magnetic
	Reviewed In: 2013	instruments
8	IS 13211:1991 Reviewed In : 2016	Vapour pressure dial - Type thermometer - Specification
	Reaffirmed but not taken up for revision	
9	IS 14254 (Part 2):2021	Industrial-Process Measurement and Control - Programmable Controllers Part 2 Equipment Requirements and Tests Second Revision
	ISO 6560:1983	
10	IS 16923 (Part 1):2018	Thermocouples Part 1 EMF Specifications and Tolerances First Revision
	IEC 60584-1 : 2013	
	Reviewed In : 2023 IEC 60584-1 : 2013	
11	IS 16923 (Part 3):2023	THERMOCOUPLES - PART 3 EXTENSION AND COMPENSATING CABLES -
	IEC 60584-3: 2021 IEC 60071-12:2022	TOLERANCES AND IDENTIFICATION SYSTEM
12	IS 19284 (Part 1):2025 IEC 60240-1:1992	Characteristics of Electric Infra-Red Emitters for Industrial Heating Part 1 Short Wave Infra-Red Emitters
13	IS 2053:1974 Reviewed In : 2019 Reaffirmed but not taken up for revision	Specification for thermocouple pyrometers First Revision
14	IS 2711:1979 Reviewed In : 2025	Specification for direct reading pH meters Second Revision
15	IS 2848:2023 IEC 60751: 2022 IEC 62932-2-2: 2020	INDUSTRIAL PLATINUM RESISTANCE THERMOMETERS AND PLATINUM TEMPERATURE SENSORS
16	IS 3624:1987 Reviewed In : 2018	Specification for pressure and vacuum gauges Second Revision
17	IS 6804:1972	Specification for glass electrodes for direct reading pH meter
	Reviewed In: 2025	appendent for glass stock out of an out fourthly pit motor
18	IS 7358:1984	Specification for thermocouples First Revision
	Reviewed In : 2015 Reaffirmed but not taken up	
	for revision	
19	IS 8018:1976	Specification for platinum and platinum alloy wires for thermocouple elements
19	Reviewed In : 2013	Specification for plaunum and plaunum alloy wifes for diefiniocoupie elements
	Reaffirmed but not taken up	
	for revision	
20	IS 8495 (Part 1):1977	Specification for ceramic components for thermocouples and resistance thermometers Part 1
20	Reviewed In : 2013	terminal blocks
	Reaffirmed but not taken up	

	for revision	
21	IS 8784:1987	Specification for thermocouple compensating cables Second Revision
	Reviewed In: 2018	
	Reaffirmed but not taken up	
	for revision	