BUREAU OF INDIAN STANDARDS

Program of Work

MED 22: Turbo Machinery

Scope:

a) Formulation of standards for compressors, blowers, exhausters, turbines, and their related accessories. It also covers methods of measuring various quantities connected with the testing and code of practices. b) Preparation of technical supply conditions and acceptance tests for centrifugal, reciprocating, rotary, and dynamic compressors, blowers and exhausters, and turbines. c) Coordination of work with ISO/TC 192 (Gas turbines) and ISO/TC 118 (Compressors, Pneumatic Tools, and Pneumatic machines and its sub-committees). d) Coordination of work with IEC/TC 4 (Hydraulic turbines) and IEC/TC 5 (Steam Turbines).

Liaison: TC-118 (P): Compressors and pneumatic tools, machines and equipment TC-118

TC 110 SC 4 (D). Commagaed sin treatment

SC-1 (P): Process compressors TC-118 SC-4 (P): Compressed air treatment

technology TC-118 SC-6 (P): Air compressors and compressed air systems IEC

TC-5 (P): Steam turbines IEC TC-4 (P): Hydraulic turbines ISO TC-192 (P): Gas turbines

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS/ISO 11011 : 2013	COMPRESSED AIR ENERGY		=	Identical under single
	ISO 11011 : 2013	EFFICIENCY ASSESSMENT			numbering
	ISO 11011 : 2013	Adoption of ISO 11011			
2	IS 11119 : 2023	TECHNICAL SUPPLY		-	Indigenous
		CONDITIONS FOR SLIDING			
		VANE ROTARY AIR			
		COMPRESSORS First Revision of			
		IS 11119			
3	IS 11421 : 1985	Techniques of pulsation for	November, 2021	1	Indigenous
	Reviewed In: 2021	suppression for reciprocating			
		compressors			
4	IS 11461 : 1985	Code of practice for compressor	November, 2021	-	Indigenous
	Reviewed In: 2021	safety			
5	IS 11461 : 2024	Compressor Safety â€" Code of		-	Indigenous
		Practice (First Revision)			
6	IS 11563 : 2022	TECHNICAL SUPPLY		-	Indigenous
		CONDITIONS FOR DYNAMIC			
		COMPRESSORS			
7	IS 11780 : 2023	CODE FOR SELECTION AND		-	Indigenous
		TESTING OF ROTARY SCREW			
		AIR COMPRESSOR OIL-			
		FLOODED First Revision of IS			
		11780			
8	IS 11891 : 2022	LUBRICATION AND OIL SEAL		-	Indigenous
		SYSTEM FOR DYNAMIC COMP			
		RESSORS-SPECIFICATION			
		(First Revision)			
9	IS/ISO 1217 : 2009	Displacement Compressors -		1	Identical under single
				1	

I	ISO 1217 : 2009	Acceptance Test		1	numbering
	ISO 1217:2009	1			
10	IS 12258 : 2023	TECHNICAL SUPPLY		-	Indigenous
		CONDITION FOR AIR SCREW			
		COMPRESSORS (OIL-			
		FLOODED) FOR GENERAL			
		PURPOSE AND INDUSTRIAL			
11	IS/ISO 13631 : 2002	APPLICATIONS (First Revision) Petroleum and Natural Gas			Identical under single
11	ISO 13631 : 2002	Industries â€" Packaged		_	numbering
	ISO 13631:2002	Reciprocating Gas Compressors			numbering
12	IS 13707 : 2022	PETROLEUM AND NATURAL		-	Identical under single
	ISO 13707 : 2000	GAS INDUSTRIES			numbering
	ISO 13707: 2000	RECIPROCATING			
		COMPRESSORS			
13	IS 14198 (Part 1):	Rules for steam turbine thermal		-	Identical under dual
		acceptance tests: Part 1 method A -			numbering
		High accuracy for large condensing			
	Reviewed In: 2017	steam turbines			
	IEC Pub				
14	953-1(1990) IS 14198 (Part 2) :	Rules for steam turbines thermal		_	Identical under dual
14	1994 (Part 2):	acceptance tests		_	numbering
	IEC 953-2	acceptance tests			numbering
	Reviewed In: 2017				
	IEC Pub				
L	953-2(1990)				
15		Steam turbine: Part 1 specification		-	Identical under dual
	1994				numbering
	IEC 45-1				
	Reviewed In: 2017				
1.6	IEC Pub 45-1:1991	D . 1 . 1 . 1 . 1	N 1 2021		T 1'
16	IS 15661 : 2006 ISO 10439	Petroleum, chemical and gas	November, 2021	-	Indigenous
	Reviewed In : 2021	service industries - Centrifugal compressors			
17	IS 15664 : 2006	Gas turbines â€" Acceptance tests	April, 2016	_	Identical under dual
'	ISO 2314	Cas taronies a Confidence tosts	71pm, 2010		numbering
	Reviewed In: 2016				
L_	ISO 2314:1989			<u> </u>	
18	IS 15665 : 2006	Gas turbines - Vocabulary	April, 2016	-	Identical under dual
	ISO 11086				numbering
	Reviewed In: 2016				
<u></u>	ISO 11086:1996	-			
19	` ′	Gas turbines - Procurement: Part 1	April, 2021	-	Identical under dual
	2006 ISO 3977-1	general introduction and			numbering
	18O 3977-1 Reviewed In : 2021	definitions			
	ISO 3977-1				
20	IS 15666 (Part 2):	Gas turbines - Procurement: Part 2	April, 2021	_	Identical under dual
20	2006	standard reference conditions and	. ipin, 2021		numbering
	ISO 3977-2	ratings			
	Reviewed In: 2021	5			
	ISO 3977-2			<u> </u>	
21	IS 15666 (Part 3):	Gas turbines - Procurement: Part 3	April, 2021	-	Identical under dual
	2006	design requirements			numbering
	ISO 3977-3				
	Reviewed In: 2021				
	ISO 3977-3	Control D	A 11 2021		T.14: 1 1 1 1
22	IS 15666 (Part 4):	Gas turbines - Procurement: Part 4	April, 2021	-	Identical under dual

	2006 ISO 3977-4	fuels and environment			numbering
	Reviewed In : 2021 ISO 3977-4				
23	IS 15666 (Part 5): 2006 ISO 3977-5 Reviewed In: 2021 ISO 3977-5	Gas turbines - Procurement: Part 5 applications for petroleum and natural gas industries	April, 2021	-	Identical under dual numbering
24	ISO 3977-3 IS 15666 (Part 7): 2006 ISO 3977-7 Reviewed In: 2021 ISO 3977-6	Gas turbines - Procurement: Part 7 technical information	April, 2021	-	Identical under dual numbering
25	IS 15666 (Part 8): 2006 ISO 3977-8 Reviewed In: 2021	Gas turbines - Procurement: Part 8 inspection, testing, installation and commissioning	April, 2021	-	Identical under dual numbering
26	ISO 3977-8 IS 15666 (Part 9): 2006 ISO 3977-9 Reviewed In: 2021 ISO 3977-9	Gas turbines - Procurement: Part 9 reliability, availability, maintainability and safety	April, 2021	-	Identical under dual numbering
27	IS 15667 : 2006 ISO 19860 Reviewed In : 2016 ISO 19860:2005	Gas turbines - Data acquisition and trend monitoring system requirements for gas turbine installations	April, 2016	-	Identical under dual numbering
28		Breathing air compressor package - Specification	September, 2019	-	Indigenous
29	IS 17093 : 2019 Reviewed In : 2024	Technical supply conditions for reciprocating air compressors for general purpose and industrial applications	March, 2024	-	Indigenous
30	IS/ISO 18740 : 2016 ISO 18740 : 2016 ISO 18740 : 2016	· · · · · · · · · · · · · · · · · · ·		-	Identical under single numbering
31	IS/ISO 3857-1: 1977 Reviewed In: 2024 ISO 3857: PART 1: 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 1 general	September, 2024	-	Identical under single numbering
32	IS/ISO 3857-2: 1977 Reviewed In: 2024 ISO 3857: PART 2: 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 2 compressors	September, 2024	-	Identical under single numbering
33	IS/IEC 41 : 1991 Reviewed In : 2018 IEC 41:1991	Field acceptance tests to determine the hydraulic performance of hydraulic turbines, storage pumps and pump - Turbines	March, 2018	-	Identical under single numbering
34	IS/ISO 5389 : 2005 ISO 5389 : 2005 Reviewed In : 2020 ISO 5389 : 2005	Turbocompressors - Performance test code	April, 2020	-	Identical under single numbering
35	IS 5456 : 2024	Positive Displacement Type Air Compressors and Exhausters â€" Testing and Acceptance (Third		-	Indigenous

		Revision)		1	
36	IS 5456 : 2006	Testing of positive displacement	November, 2021	1	Indigenous
	Reviewed In: 2021	type air compressors and			
		exhausters - Code of practice			
		(Second Revision)			
37	IS 6206 : 2023	GUIDE FOR SELECTION		-	Indigenous
		INSTALLATION AND			
		MAINTENANCE OF AIR			
		COMPRESSOR PLANTS WITH			
		OPERATING PRESSURES UP			
		TO 10 BARS (Second Revision of			
		IS 6206)			
38	IS 6206 : 1985	Guide for selection, installation and	November, 2021	2	Indigenous
	Reviewed In: 2021	maintenance of air compressor			
		plants with operating pressures up			
		to 10 bars (First Revision)			
39	IS 6430 : 2023	MOBILE AIR COMPRESSOR		-	Indigenous
		FOR CONSTRUCTION			
		PURPOSES SPECIFICATION (
		Second Revision)			
40	IS/ISO 7183 : 2007	Compressed - Air dryers -	March, 2021	-	Identical under single
	ISO 7183 : 2007	Specifications and testing			numbering
	Reviewed In: 2021				
	ISO 7183 : 2007				
41	IS 7938 : 2023	Air Receivers for Compressed Air		-	Indigenous
		Installation � Specification (
		First Revision)			

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	
No Records Found			

	Finalized Draft Indian Standard				
SI. No.	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:36 Total Standards Under development:0

Aspect Wise Report

Product: 11
Code of Practices: 6
Methods of Test: 15
Terminology: 3
Dimensions: 1
System Standard: 0
Safety Standard: 2

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 10431 : 1994	Measurement of air flow of compressors and exhausters by nozzles First Revision
	Reviewed In: 2018	
2	IS 10962 : 1984	Technical Supply Conditions For Reciprocating Air Compressor Above 60 Kw
	Reviewed In: 2016	
3	IS 11012 : 1984	Technical Supply Conditions for Reciprocating Air Compressors Above 25 Kw Up To And
	Reviewed In: 2016	Including 60 Kw
4	IS 11446 : 1985	Method of Measurement of Airborne Noise Emitted by Compressor Units Intended for Outdoor
		Use
5	IS 11465 : 1985	Technical supply conditions for reciprocating air compressors for power upto 25 kW for general
	Reviewed In: 2016	purpose and industrial applications
6	IS 11989 : 1986	Specification for compressed air dryers
	ISO 7183	
	Reviewed In: 2017	
7	IS 13124 : 1993	Reciprocating gas compressors - Technical supply conditions
	Reviewed In: 2018	
8	IS 14641 : 1999	Turbocompressor - Performance test code
	Reviewed In: 2018	
9	IS 14642 (Part 1): 1999	Compressed Air for General Use - Part 1 Contaminants and Quality Classes
	Reviewed In: 2008	
10	IS/ISO 2151 : 2004	Acoustics - Noise Test Code for Compressors And Vacuum Pumps - Engineering Method Grade 2
11	IS 5538 (Part 1): 1969	Measurement of airflow of compressors and exhausters Part 1 Nozzles
12	IS 5538 (Part 2): 1969	Measurement of airflow of compressors and exhausters Part 2 Orifice plates
13	IS 5727 : 1981	Glossary of Terms Relating to Compressors and Exhausters
14	IS/ISO 7919-1 : 1986	Mechanical Vibration of Non-reciprocating Machines - Measurement on Rotating Shafts and Evaluation - Part 1 General Guidelines
15	IS 9242 : 1986	Rated pressure of air compressors First Revision
	Reviewed In: 2021 5941	

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 11119 : 2023	TECHNICAL SUPPLY CONDITIONS FOR SLIDING VANE ROTARY AIR COMPRESSORS

		First Revision of IS 11119
2	IS 11891 : 2022	LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS-
	62281	SPECIFICATION First Revision
3	IS/ISO 13631 : 2002	Petroleum and Natural Gas Industries Packaged Reciprocating Gas Compressors
	ISO 13631 : 2002	
	ISO 13631:2002	
4	IS 13707 : 2022	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS
	ISO 13707 : 2000	
	ISO 20251 : 2016	
5	IS 14205 (Part 1): 1994	Steam turbine Part 1 specification
	IEC 45-1	
	Reviewed In: 2017 IEC	
	Pub 45-1:1991	
6	IS 15661 : 2006	Petroleum chemical and gas service industries - Centrifugal compressors
	ISO 10439	
	Reviewed In: 2021	
7	IS 15879 : 2009	Breathing air compressor package - Specification
	Reviewed In: 2019	
8	IS 17093 : 2019	Technical supply conditions for reciprocating air compressors for general purpose and industrial
		applications
	Reviewed In: 2024	
9	IS 5456 : 2024	Positive Displacement Type Air Compressors and Exhausters Testing and Acceptance Third
		Revision
10	IS 6430 : 2023	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION Second
		Revision
11	IS 7938 : 2023	Air Receivers for Compressed Air Installation Specification First Revision