

## 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 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 ISO 11011 : 2013 ISO 11011 : 2013	COMPRESSED AIR ENERGY EFFICIENCY ASSESSMENT Adoption of ISO 11011		-	Identical under single numbering
2	IS 11119 : 2023	TECHNICAL SUPPLY CONDITIONS FOR SLIDING VANE ROTARY AIR COMPRESSORS First Revision of IS 11119		-	Indigenous
3	IS 11421 : 1985 Reviewed In : 2021	Techniques of pulsation for suppression for reciprocating compressors	November, 2021	1	Indigenous
4	IS 11461 : 1985 Reviewed In : 2021	Code of practice for compressor safety	November, 2021	-	Indigenous
5	IS 11461 : 2024	Compressor Safety " Code of Practice (First Revision)		-	Indigenous
6	IS 11563 : 2022	TECHNICAL SUPPLY CONDITIONS FOR DYNAMIC COMPRESSORS		-	Indigenous
7	IS 11780 : 2023	CODE FOR SELECTION AND TESTING OF ROTARY SCREW AIR COMPRESSOR OIL-FLOODED First Revision of IS 11780		-	Indigenous
8	IS 11891 : 2022	LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS-SPECIFICATION (First Revision)		-	Indigenous
9	IS/ISO 1217 : 2009	Displacement Compressors -		1	Identical under single

	ISO 1217 : 2009 ISO 1217:2009	Acceptance Test			numbering
10	IS 12258 : 2023	TECHNICAL SUPPLY CONDITION FOR AIR SCREW COMPRESSORS (OIL-FLOODED) FOR GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS (First Revision)		-	Indigenous
11	IS/ISO 13631 : 2002 ISO 13631 : 2002 ISO 13631:2002	Petroleum and Natural Gas Industries "Packaged Reciprocating Gas Compressors		-	Identical under single numbering
12	IS 13707 : 2022 ISO 13707 : 2000 ISO 13707 : 2000	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS		-	Identical under single numbering
13	IS 14198 (Part 1) : 1994 IEC 953-1 Reviewed In : 2017 IEC Pub 953-1(1990)	Rules for steam turbine thermal acceptance tests: Part 1 method A - High accuracy for large condensing steam turbines		-	Identical under dual numbering
14	IS 14198 (Part 2) : 1994 IEC 953-2 Reviewed In : 2017 IEC Pub 953-2(1990)	Rules for steam turbines thermal acceptance tests		-	Identical under dual numbering
15	IS 14205 (Part 1) : 1994 IEC 45-1 Reviewed In : 2017 IEC Pub 45-1:1991	Steam turbine: Part 1 specification		-	Identical under dual numbering
16	IS 15661 : 2006 ISO 10439 Reviewed In : 2021	Petroleum, chemical and gas service industries - Centrifugal compressors	November, 2021	-	Indigenous
17	IS 15664 : 2006 ISO 2314 Reviewed In : 2016 ISO 2314:1989	Gas turbines "Acceptance tests	April, 2016	-	Identical under dual numbering
18	IS 15665 : 2006 ISO 11086 Reviewed In : 2016 ISO 11086:1996	Gas turbines - Vocabulary	April, 2016	-	Identical under dual numbering
19	IS 15666 (Part 1) : 2006 ISO 3977-1 Reviewed In : 2021 ISO 3977-1	Gas turbines - Procurement: Part 1 general introduction and definitions	April, 2021	-	Identical under dual numbering
20	IS 15666 (Part 2) : 2006 ISO 3977-2 Reviewed In : 2021 ISO 3977-2	Gas turbines - Procurement: Part 2 standard reference conditions and ratings	April, 2021	-	Identical under dual numbering
21	IS 15666 (Part 3) : 2006 ISO 3977-3 Reviewed In : 2021 ISO 3977-3	Gas turbines - Procurement: Part 3 design requirements	April, 2021	-	Identical under dual numbering
22	IS 15666 (Part 4) :	Gas turbines - Procurement: Part 4	April, 2021	-	Identical under dual

	2006 ISO 3977-4 Reviewed In : 2021 ISO 3977-4	fuels and environment			numbering
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	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 ISO 3977-8	Gas turbines - Procurement: Part 8 inspection, testing, installation and commissioning	April, 2021	-	Identical under dual numbering
26	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	IS 15879 : 2009 Reviewed In : 2019	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	TURBOCOMPRESSORS PERFORMANCE TEST CODE SIMPLIFIED ACCEPTANCE TEST (Adoption of ISO 18740 )		-	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)			
36	IS 5456 : 2006 Reviewed In : 2021	Testing of positive displacement type air compressors and exhausters - Code of practice (Second Revision)	November, 2021	1	Indigenous
37	IS 6206 : 2023	GUIDE FOR SELECTION INSTALLATION AND MAINTENANCE OF AIR COMPRESSOR PLANTS WITH OPERATING PRESSURES UP TO 10 BARS (Second Revision of IS 6206)		-	Indigenous
38	IS 6206 : 1985 Reviewed In : 2021	Guide for selection, installation and maintenance of air compressor plants with operating pressures up to 10 bars (First Revision)	November, 2021	2	Indigenous
39	IS 6430 : 2023	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION ( Second Revision )		-	Indigenous
40	IS/ISO 7183 : 2007 ISO 7183 : 2007 Reviewed In : 2021 ISO 7183 : 2007	Compressed - Air dryers - Specifications and testing	March, 2021	-	Identical under single numbering
41	IS 7938 : 2023	Air Receivers for Compressed Air Installation $\bar{i}_c$ 1/2 Specification ( First Revision )		-	Indigenous

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
<i>No Records Found</i>		

**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 Reviewed In : 2018	Measurement of air flow of compressors and exhausters by nozzles First Revision
2	IS 10962 : 1984 Reviewed In : 2016	Technical Supply Conditions For Reciprocating Air Compressor Above 60 Kw
3	IS 11012 : 1984 Reviewed In : 2016	Technical Supply Conditions for Reciprocating Air Compressors Above 25 Kw Up To And 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 Reviewed In : 2016	Technical supply conditions for reciprocating air compressors for power upto 25 kW for general purpose and industrial applications
6	IS 11989 : 1986 ISO 7183 Reviewed In : 2017	Specification for compressed air dryers
7	IS 13124 : 1993 Reviewed In : 2018	Reciprocating gas compressors - Technical supply conditions
8	IS 14641 : 1999 Reviewed In : 2018	Turbocompressor - Performance test code
9	IS 14642 (Part 1) : 1999 Reviewed In : 2008	Compressed Air for General Use - Part 1 Contaminants and Quality Classes
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 Reviewed In : 2021 5941	Rated pressure of air compressors First Revision

### 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 62281	LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS- SPECIFICATION First Revision
3	IS/ISO 13631 : 2002 ISO 13631 : 2002 ISO 13631:2002	Petroleum and Natural Gas Industries Packaged Reciprocating Gas Compressors
4	IS 13707 : 2022 ISO 13707 : 2000 ISO 20251 : 2016	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS
5	IS 14205 (Part 1) : 1994 IEC 45-1 Reviewed In : 2017 IEC Pub 45-1:1991	Steam turbine Part 1 specification
6	IS 15661 : 2006 ISO 10439 Reviewed In : 2021	Petroleum chemical and gas service industries - Centrifugal compressors
7	IS 15879 : 2009 Reviewed In : 2019	Breathing air compressor package - Specification
8	IS 17093 : 2019 Reviewed In : 2024	Technical supply conditions for reciprocating air compressors for general purpose and industrial applications
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