

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### MED 22 : Turbo Machinery

**Scope:** a)Formulation of standards for compressors, blowers, exhausters 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. c)Co-ordination of work with ISO/TC 118 Compressors, Pneumatic Tools and Pneumatic machines.

**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 11119 : 2023	TECHNICAL SUPPLY CONDITIONS FOR SLIDING VANE ROTARY AIR COMPRESSORS First Revision of IS 11119		-	Indigenous
2	IS 11421 : 1985 <span style="color: green;">Reviewed In : 2021</span>	Techniques of pulsation for suppression for reciprocating compressors	November, 2021	1	Indigenous
3	IS 11461 : 1985 ISO 5388 <span style="color: green;">Reviewed In : 2021</span>	Code of practice for compressor safety	November, 2021	-	Indigenous
4	IS 11563 : 2022	TECHNICAL SUPPLY CONDITIONS FOR DYNAMIC COMPRESSORS		-	Indigenous
5	IS 11780 : 2023	CODE FOR SELECTION AND TESTING OF ROTARY SCREW AIR COMPRESSOR OIL-FLOODED First Revision of IS 11780		-	Indigenous
6	IS 11891 : 2022	LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS-SPECIFICATION (First Revision)		-	Indigenous
7	IS/ISO 1217 : 2009 ISO 1217 : 2009 <span style="color: green;">ISO 1217:2009</span>	Displacement Compressors - Acceptance Test		1	Identical under single numbering
8	IS 12258 : 2023	TECHNICAL SUPPLY CONDITION FOR AIR SCREW COMPRESSORS (OIL-FLOODED) FOR GENERAL PURPOSE AND INDUSTRIAL		-	Indigenous

		APPLICATIONS (First Revision)			
9	IS/ISO 13631 : 2002 ISO 13631 : 2002 ISO 13631:2002	Petroleum and Natural Gas Industries "Packaged Reciprocating Gas Compressors		-	Identical under single numbering
10	IS 13707 : 2022 ISO 13707 : 2000 ISO 13707 : 2000	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS		-	Identical under single numbering
11	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
12	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
13	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
14	IS 15661 : 2006 ISO 10439 Reviewed In : 2021	Petroleum, chemical and gas service industries - Centrifugal compressors	November, 2021	-	Indigenous
15	IS 15664 : 2006 ISO 2314 Reviewed In : 2016 ISO 2314:1989	Gas turbines "Acceptance tests	April, 2016	-	Identical under dual numbering
16	IS 15665 : 2006 ISO 11086 Reviewed In : 2016 ISO 11086:1996	Gas turbines - Vocabulary	April, 2016	-	Identical under dual numbering
17	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
18	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
19	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
20	IS 15666 (Part 4) : 2006 ISO 3977-4 Reviewed In : 2021 ISO 3977-4	Gas turbines - Procurement: Part 4 fuels and environment	April, 2021	-	Identical under dual numbering
21	IS 15666 (Part 5) : 2006 ISO 3977-5	Gas turbines - Procurement: Part 5 applications for petroleum and natural gas industries	April, 2021	-	Identical under dual numbering

	Reviewed In : 2021 ISO 3977-5				
22	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
23	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
24	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
25	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
26	IS 15879 : 2009 Reviewed In : 2019	Breathing air compressor package - Specification	September, 2019	-	Indigenous
27	IS 17093 : 2019 Reviewed In : 2024	Technical supply conditions for reciprocating air compressors for general purpose and industrial applications	March, 2024	-	Indigenous
28	IS/ISO 3857-1 : 1977 Reviewed In : 2019 ISO 3857 : PART 1 : 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 1 general	September, 2019	-	Identical under single numbering
29	IS/ISO 3857-2 : 1977 Reviewed In : 2019 ISO 3857 : PART 2 : 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 2 compressors	September, 2019	-	Identical under single numbering
30	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
31	IS/ISO 5389 : 2005 ISO 5389 : 2005 Reviewed In : 2020 ISO 5389 : 2005	Turbocompressors - Performance test code	April, 2020	-	Identical under single numbering
32	IS 5456 : 2006 Reviewed In : 2021	Testing of positive displacement type air compressors and exhausters - Code of practice (Second Revision)	November, 2021	1	Indigenous
33	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
34	IS 6206 : 1985 Reviewed In : 2021	Guide for selection, installation and maintenance of air compressor plants with operating pressures up	November, 2021	2	Indigenous

35	IS 6430 : 2023	to 10 bars (First Revision) MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION ( Second Revision )		-	Indigenous
36	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
37	IS 7938 : 2023	Air Receivers for Compressed Air Installation $i_c/2$ Specification ( First Revision )		-	Indigenous
38	IS 9242 : 1986 ISO 5941 Reviewed In : 2021 5941	Rated pressure of air compressors (First Revision)	November, 2021	-	Identical under dual numbering

### 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
1	MED 22 (20005) Revision of: IS 5456:2006	POSITIVE DISPLACEMENT TYPE AIR COMPRESSORS AND EXHAUSTERS - CODE OF PRACTICE Third Revision
2	MED 22 (23718)	COMPRESSED AIR ENERGY EFFICIENCY ASSESSMENT Adoption of ISO 11011
3	MED 22 (23719)	TURBOCOMPRESSORS PERFORMANCE TEST CODE SIMPLIFIED ACCEPTANCE TEST Adoption of ISO 18740
4	MED 22 (24282) Revision of: IS 11461:1985	COMPRESSOR SAFETY CODE OF PRACTICE First Revision

**Total Published Standards:37 Total Standards Under development:4**

## Aspect Wise Report

Product : 10  
 Code of Practices : 8  
 Methods of Test : 13  
 Terminology : 4  
 Dimensions : 1  
 System Standard : 0  
 Safety Standard : 1  
 Others : 0  
 Service Specification : 0  
 Process Specification : 0  
 Unclassified : 0

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

Sl. 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

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

Sl. 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	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS

	ISO 13707 : 2000 ISO 20251 : 2016	
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 6430 : 2023	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION Second Revision
10	IS 7938 : 2023	Air Receivers for Compressed Air Installation Specification First Revision