

BUREAU OF INDIAN STANDARDS

Program of Work

MED 22 : Turbo Machinery

Scope: a) Formulation of standards for compressors, blowers, exhausters, turbines, and expanders. It also covers methods of measuring various parameters connected with the testing and code of practices. b) Preparation of technical supply conditions and acceptance tests for reciprocating, rotary, and dynamic compressors (centrifugal and axial), blowers, exhausters, turbines, and expanders. 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** **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	Techniques of pulsation for suppression for reciprocating compressors	November, 2021	1	Indigenous
4	IS 11461:2024	Compressor Safety " Code of Practice (First Revision)		-	Indigenous
5	IS 11563:2022	TECHNICAL SUPPLY CONDITIONS FOR DYNAMIC COMPRESSORS		-	Indigenous
6	IS 11780:2023	CODE FOR SELECTION AND TESTING OF ROTARY SCREW AIR COMPRESSOR OIL-FLOODED First Revision of IS 11780		-	Indigenous
7	IS 11891:2022	LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS-SPECIFICATION (First Revision)		-	Indigenous
8	IS/ISO 1217:2009	Displacement Compressors -		1	Identical under single

	ISO 1217 : 2009 ISO 1217:2009	Acceptance Test			numbering
9	IS 12258:2023	TECHNICAL SUPPLY CONDITION FOR AIR SCREW COMPRESSORS (OIL-FLOODED) FOR GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS (First Revision)		-	Indigenous
10	IS/ISO 13631:2002 ISO 13631 : 2002 ISO 13631:2002	Petroleum and Natural Gas Industries "Packaged Reciprocating Gas Compressors		-	Identical under single numbering
11	IS 13707:2022 ISO 13707 : 2000 ISO 13707 : 2000	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS		-	Identical under single numbering
12	IS 14198 (Part 1):1994 IEC 953-1 IEC Pub 953-1(1990)	Rules for steam turbine thermal acceptance tests: Part 1 method A - High accuracy for large condensing steam turbines	February, 2024	-	Identical under dual numbering
13	IS 14198 (Part 2):1994 IEC 953-2 IEC Pub 953-2(1990)	Rules for steam turbines thermal acceptance tests	March, 2025	-	Identical under dual numbering
14	IS 14205 (Part 1):1994 IEC 45-1 IEC Pub 45-1:1991	Steam turbine: Part 1 specification	February, 2025	-	Identical under dual numbering
15	IS 15661:2006 ISO 10439	Petroleum, chemical and gas service industries - Centrifugal compressors	November, 2021	-	Indigenous
16	IS 15664:2006 ISO 2314 ISO 2314:1989	Gas turbines "Acceptance tests	February, 2025	-	Identical under dual numbering
17	IS 15665:2006 ISO 11086 ISO 11086:1996	Gas turbines - Vocabulary	February, 2025	-	Identical under dual numbering
18	IS 15666 (Part 1):2006 ISO 3977-1 ISO 3977-1	Gas turbines - Procurement: Part 1 general introduction and definitions	April, 2021	-	Identical under dual numbering
19	IS 15666 (Part 2):2006 ISO 3977-2 ISO 3977-2	Gas turbines - Procurement: Part 2 standard reference conditions and ratings	April, 2021	-	Identical under dual numbering
20	IS 15666 (Part 3):2006 ISO 3977-3 ISO 3977-3	Gas turbines - Procurement: Part 3 design requirements	April, 2021	-	Identical under dual numbering
21	IS 15666 (Part 4):2006 ISO 3977-4 ISO 3977-4	Gas turbines - Procurement: Part 4 fuels and environment	April, 2021	-	Identical under dual numbering
22	IS 15666 (Part 5):2006 ISO 3977-5 ISO 3977-5	Gas turbines - Procurement: Part 5 applications for petroleum and natural gas industries	April, 2021	-	Identical under dual numbering
23	IS 15666 (Part	Gas turbines - Procurement: Part 7	April, 2021	-	Identical under dual

	7):2006 ISO 3977-7 ISO 3977-6	technical information			numbering
24	IS 15666 (Part 8):2006 ISO 3977-8 ISO 3977-8	Gas turbines - Procurement: Part 8 inspection, testing, installation and commissioning	April, 2021	-	Identical under dual numbering
25	IS 15666 (Part 9):2006 ISO 3977-9 ISO 3977-9	Gas turbines - Procurement: Part 9 reliability, availability, maintainability and safety	April, 2021	-	Identical under dual numbering
26	IS 15667:2006 ISO 19860 ISO 19860:2005	Gas turbines - Data acquisition and trend monitoring system requirements for gas turbine installations	April, 2016	-	Identical under dual numbering
27	IS 15879:2026	BREATHING AIR COMPRESSOR PACKAGE - SPECIFICATION (First Revision of IS 15879)		-	Indigenous
28	IS 15879:2009	Breathing air compressor package - Specification	February, 2025	-	Indigenous
29	IS 17093:2026	TECHNICAL SUPPLY CONDITIONS FOR RECIPROCATING AIR COMPRESSORS FOR GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS (First Revision of IS 17093)		-	Indigenous
30	IS 17093:2019	Technical supply conditions for reciprocating air compressors for general purpose and industrial applications	March, 2024	-	Indigenous
31	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
32	IS 19603:2026	Petroleum, chemical and gas service industries — Packaged, integrally geared centrifugal air compressors (Adoption of ISO 10442: 2002)		-	
33	IS 19604 (Part 1):2026	Petroleum, petrochemical and natural gas industries — Rotary-type positive, displacement compressors — Part 1: Process compressors (Adoption of ISO 10440-1: 2007)		-	
34	IS 19604 (Part 2):2026	Petroleum and natural gas industries — Rotary-type positive-displacement compressors — Part 2: Packaged air compressors (oil-free) (Adoption of ISO 10440-2: 2001)		-	
35	IS 19605 (Part 1):2026	Petroleum, petrochemical and natural gas industries — Axial and centrifugal compressors and expander compressors — Part 1: General requirements (Adoption of ISO 10439-1: 2015)		-	

36	IS 19605 (Part 2):2026	Petroleum, petrochemical and natural gas industries — Axial and centrifugal compressors and expander compressors — Part 2: Non-integrally geared centrifugal and axial compressors. (Adoption of ISO 10439-2: 2015)		-	
37	IS 19605 (Part 3):2026	Petroleum, petrochemical and natural gas industries — Axial and centrifugal compressors and expander compressors — Part 3: Integrally geared centrifugal compressors (Adoption of ISO 10439-3: 2015)		-	
38	IS 19605 (Part 4):2026	Petroleum, petrochemical and natural gas industries — Axial and centrifugal compressors and expander compressors — Part 4: Expander-compressors (Adoption of ISO 10439-4: 2015)		-	
39	IS/ISO 3857-1:1977 ISO 3857 : PART 1 : 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 1 general	September, 2024	-	Identical under single numbering
40	IS/ISO 3857-2:1977 ISO 3857 : PART 2 : 1977	Compressors, pneumatic tools and machines - Vocabulary: Part 2 compressors	September, 2024	-	Identical under single numbering
41	IS/IEC 41:1991 IEC 41:1991	Field acceptance tests to determine the hydraulic performance of hydraulic turbines, storage pumps and pump - Turbines	February, 2025	-	Identical under single numbering
42	IS/ISO 5389:2005 ISO 5389 : 2005 ISO 5389 : 2005	Turbocompressors - Performance test code	April, 2020	-	Identical under single numbering
43	IS 5456:2024	Positive Displacement Type Air Compressors and Exhausters “Testing and Acceptance (Third Revision), Amendment No. 1		1	Indigenous
44	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
45	IS 6430:2023	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION (Second Revision)		-	Indigenous
46	IS/ISO 7183:2007 ISO 7183 : 2007 ISO 7183 : 2007	Compressed - Air dryers - Specifications and testing	March, 2021	-	Identical under single numbering
47	IS 7938:2023	Air Receivers for Compressed Air Installation 1½ 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
1	MED 22 (11602) Revision of: IS 11465:1985	Technical supply conditions for reciprocating air compressors for general purpose and industry applications Specification for Bottle coolers Amalgamation of IS 10962 IS 11012 and IS 11465
2	MED 22 (13482)	Petroleum and natural gas industries Packaged reciprocating gas compressors Adoption of ISO 13631 2002
3	MED 22 (13483)	Displacement compressors Acceptance test Adoption of ISO 1217
4	MED 22 (15455)	Amendment No 1 to ISO 1217 2009 Displacement compressors Acceptance tests Calculation of isentropic efficiency and relationship with specific energy
5	MED 22 (17633) Revision of: IS 7938:1976	Air Receivers for Compressed Air Installation Specification First Revision
6	MED 22 (17809) Revision of: IS 11891:1986	SPECIFICATION FOR LUBRICATION AND OIL SEAL SYSTEM FOR DYNAMIC COMPRESSORS
7	MED 22 (17810) Revision of: IS 11563:1986	TECHNICAL SUPPLY CONDITIONS FOR DYNAMIC COMPRESSORS
8	MED 22 (18803)	PETROLEUM AND NATURAL GAS INDUSTRIES RECIPROCATING COMPRESSORS
9	MED 22 (20005) Revision of: IS 5456:2006	Positive Displacement Type Air Compressors and Exhausters Testing and Acceptance Third Revision
10	MED 22 (20149) Revision of: IS 6206:1985	GUIDE FOR SELECTION INSTALLATION AND MAINTENANCE OF AIR COMPRESSOR PLANTS WITH OPERATING PRESSURES UP TO 10 BARS Second Revision of IS 6206
11	MED 22 (20150) Revision of: IS 6430:1985	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION Second Revision
12	MED 22 (20151) Revision of: IS 11119:1984	TECHNICAL SUPPLY CONDITIONS FOR SLIDING VANE ROTARY AIR COMPRESSORS First Revision of IS 11119
13	MED 22 (20152) Revision of: IS 11780:1986	CODE FOR SELECTION AND TESTING OF ROTARY SCREW AIR COMPRESSOR OIL-FLOODED First Revision of IS 11780
14	MED 22 (20153) Revision of: IS 12258:1987	TECHNICAL SUPPLY CONDITION FOR AIR SCREW COMPRESSORS OIL-FLOODED FOR GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS First Revision
15	MED 22 (23718)	COMPRESSED AIR ENERGY EFFICIENCY ASSESSMENT Adoption of ISO 11011
16	MED 22 (23719)	TURBOCOMPRESSORS PERFORMANCE TEST CODE SIMPLIFIED ACCEPTANCE TEST Adoption of ISO 18740
17	MED 22 (24282) Revision of: IS 11461:1985	COMPRESSOR SAFETY CODE OF PRACTICE First Revision
18	MED 22 (27735) Revision	TECHNICAL SUPPLY CONDITIONS FOR RECIPROCATING AIR COMPRESSORS FOR

	of: IS 17093:2019	GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS First Revision of IS 17093
19	MED 22 (28240) Revision of: IS 15879:2009	BREATHING AIR COMPRESSOR PACKAGE - SPECIFICATION First Revision of IS 15879
20	MED 22 (32826)	Positive Displacement Type Air Compressors and Exhausters Testing and Acceptance Third Revision Amendment No 1
21	MED 22 (32905)	Petroleum petrochemical and natural gas industries Axial and centrifugal compressors and expander compressors Part 1 General requirements Adoption of ISO 10439-1 2015
22	MED 22 (32910)	Petroleum petrochemical and natural gas industries Axial and centrifugal compressors and expander compressors Part 2 Non-integrally geared centrifugal and axial compressors Adoption of ISO 10439-2 2015
23	MED 22 (32920)	Petroleum petrochemical and natural gas industries Axial and centrifugal compressors and expander compressors Part 3 Integrally geared centrifugal compressors Adoption of ISO 10439-3 2015
24	MED 22 (32922)	Petroleum petrochemical and natural gas industries Axial and centrifugal compressors and expander compressors Part 4 Expander-compressors Adoption of ISO 10439-4 2015
25	MED 22 (32924)	Petroleum petrochemical and natural gas industries Rotary-type positive displacement compressors Part 1 Process compressors Adoption of ISO 10440-1 2007
26	MED 22 (32925)	Petroleum and natural gas industries Rotary-type positive-displacement compressors Part 2 Packaged air compressors oil-free Adoption of ISO 10440-2 2001
27	MED 22 (32928)	Petroleum chemical and gas service industries Packaged integrally geared centrifugal air compressors Adoption of ISO 10442 2002

Total Published Standards:45 Total Standards Under development:27

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 : 7

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
2	IS 10962:1984	Technical Supply Conditions For Reciprocating Air Compressor Above 60 Kw
3	IS 11012:1984	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	Technical supply conditions for reciprocating air compressors for power upto 25 kW for general purpose and industrial applications
6	IS 11989:1986 ISO 7183	Specification for compressed air dryers
7	IS 13124:1993	Reciprocating gas compressors - Technical supply conditions
8	IS 14197:1994 IEC 193 60193: 2019	Code for model acceptance tests of hydraulic turbines

9	IS 14641:1999	Turbocompressor - Performance test code
10	IS 14642 (Part 1):1999	Compressed Air for General Use - Part 1 Contaminants and Quality Classes
11	IS/ISO 2151:2004	Acoustics - Noise Test Code for Compressors And Vacuum Pumps - Engineering Method Grade 2
12	IS 5538 (Part 1):1969	Measurement of airflow of compressors and exhausters Part 1 Nozzles
13	IS 5538 (Part 2):1969	Measurement of airflow of compressors and exhausters Part 2 Orifice plates
14	IS 5727:1981	Glossary of Terms Relating to Compressors and Exhausters
15	IS/ISO 7919-1:1986	Mechanical Vibration of Non-reciprocating Machines - Measurement on Rotating Shafts and Evaluation - Part 1 General Guidelines
16	IS 9242:1986 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 IEC Pub 45-1:1991	Steam turbine Part 1 specification
6	IS 15661:2006 ISO 10439	Petroleum chemical and gas service industries - Centrifugal compressors
7	IS 15879:2026	BREATHING AIR COMPRESSOR PACKAGE - SPECIFICATION First Revision of IS 15879
8	IS 17093:2026	TECHNICAL SUPPLY CONDITIONS FOR RECIPROCATING AIR COMPRESSORS FOR GENERAL PURPOSE AND INDUSTRIAL APPLICATIONS First Revision of IS 17093
9	IS 5456:2024	Positive Displacement Type Air Compressors and Exhausters Testing and Acceptance Third Revision Amendment No 1
10	IS 6430:2023 ISO 12625-3 : 2014	MOBILE AIR COMPRESSOR FOR CONSTRUCTION PURPOSES SPECIFICATION Second Revision
11	IS 7938:2023	Air Receivers for Compressed Air Installation Specification First Revision