

Petroleum, Petrochemical and Natural Gas Industries—Steam Turbines—Special-purpose Applications

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ISO 10437, (Identical) Petroleum, petrochemical and natural gas industries—Steam turbines—Special-purpose applications



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Contents

	Page
API Foreword	ii
Foreword	vi
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	4
4 Dimensions	8
5 Statutory requirements	8
6 Basic design	8
6.1 General	8
6.2 Nameplates and rotation arrows	11
7 Casings	12
7.1 Pressure casings	12
7.2 Casing connections	14
7.3 Internal stationary components	15
7.4 External forces and moments	15
8 Rotating elements	15
8.1 General	15
8.2 Shafts	16
8.3 Blading	16
8.4 Speed-sensing element	17
9 Rotor dynamics	17
9.1 General	17
9.2 Lateral analysis	18
9.3 Unbalanced rotor response verification test	23
9.4 Additional testing	24
9.5 Torsional analysis	25
9.6 Vibration and balancing	26
10 Bearings, bearing housings, and seals	27
10.1 Radial bearings	27
10.2 Thrust bearings and collars	28
10.3 Bearing housing	29
10.4 Grounding	29
10.5 Shaft seals	29
11 Materials	30
11.1 General	30
11.2 Castings	31
11.3 Welding	32
12 Controls and instrumentation	33
12.1 General	33
12.2 Turbine governing system	33
12.3 Overspeed shutdown system	36
12.3.1 General	36
12.3.2 Electronic overspeed detection system	37
12.3.3 Electro-hydraulic solenoid valves	37
12.3.4 Trip valves/combined trip and throttle valves	37
12.4 Other alarms and shutdowns	39

12.5	Instrument and control panels	40
12.6	Indicating instrumentation	41
12.6.1	Tachometers	41
12.6.2	Temperature gauges	41
12.6.3	Thermowells.....	41
12.6.4	Thermocouples and resistance temperature detectors	41
12.6.5	Pressure gauges.....	41
13	Electrical systems	41
14	Piping and appurtenances	41
14.1	General	41
14.2	Oil piping	42
14.3	Instrument piping	42
15	Accessories	42
15.1	Couplings and guards	42
15.2	Gear units.....	42
15.3	Mounting plates	43
15.3.1	General	43
15.3.2	Baseplates.....	44
15.3.3	Soleplates and subplates	45
15.4	Relief valves.....	45
15.5	Lubrication and control-oil system	45
15.6	Gland vacuum systems	46
15.7	Insulation and jacketing	46
15.8	Turning gear.....	47
15.9	Special tools	47
16	Inspection, testing and preparation for shipment	47
16.1	General	47
16.2	Inspection.....	48
16.2.1	General	48
16.2.2	Materials inspection	48
16.2.3	Mechanical inspection	49
16.3	Testing.....	49
16.3.1	General	49
16.3.2	Casing pressure hydro tests.....	50
16.3.3	Mechanical running test	51
16.3.4	Optional tests and inspections	52
16.4	Preparation for shipment.....	54
17	Vendor's information	55
17.1	General	55
17.2	Proposals	56
17.2.1	General	56
17.2.2	Drawings	56
17.2.3	Technical data.....	56
17.2.4	Curves	57
17.3	Contract data	57
17.3.1	General	57
17.3.2	Drawings and technical data.....	58
17.3.3	Parts lists and recommended spares.....	58
17.3.4	Installation, operation, maintenance and technical manuals	58
Annex A	(informative) Typical data sheets	59
Annex B	(informative) Steam turbine nomenclature	80
Annex C	(normative) Procedures for determining residual unbalance	82
Annex D	(informative) Alarm and shutdown systems.....	88
Annex E	(normative) Coupling guards	90

Annex F (informative) Foundation drawings	92
Annex G (informative) Gland sealing and leak-off system.....	96
Annex H (informative) Typical inspection of components	98
Annex I (informative) Inspector's checklist.....	99
Annex J (informative) Vendor drawing and data requirements (VDDR)	101
Bibliography	113

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10437 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems*.

This second edition cancels and replaces the first edition (ISO 10437:1993), which has been technically revised.

Introduction

This International Standard is based on API Std 612, fourth edition, June 1995.

Users of this International Standard should be aware that further or differing requirements may be needed for individual applications. This International Standard is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly appropriate where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this International Standard and provide details.

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A bullet (●) at the beginning of a clause or subclause indicates that either a decision is required or further information is to be provided by the purchaser. This information or decision should be indicated on the data sheets; otherwise it should be stated in the quotation request (inquiry) or in the order.

In this International Standard, where practical, US Customary units have been included in brackets for information.

Petroleum, petrochemical and natural gas industries — Steam turbines — Special-purpose applications

1 Scope

This International Standard specifies requirements and gives recommendations for the design, materials, fabrication, inspection, testing and preparation for shipment of steam turbines for special-purpose applications. It also covers the related lube-oil systems, instrumentation, control systems and auxiliary equipment. It is not applicable to general-purpose steam turbines, which are covered in ISO 10436.

NOTE For the purpose of this provision, API Std 611 is equivalent to ISO 10436.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.*

ISO 261, *ISO general-purpose metric screw threads — General plan*

ISO 262, *ISO general-purpose metric screw threads — Selected sizes for screws, bolts and nuts*

ISO 724, *ISO general-purpose metric screw threads — Basic dimensions*

ISO 965 (all parts), *ISO general-purpose metric screw threads — Tolerances*

ISO 1940-1, *Mechanical vibration — Balance quality requirements of rigid rotors — Part 1: Determination of permissible residual unbalance*

ISO 3744, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane*

ISO 7005-1, *Metallic flanges — Part 1: Steel flanges*

ISO 7005-2, *Metallic flanges — Part 2: Cast iron flanges*

ISO 8068, *Petroleum products and lubricants — Petroleum lubricating oils for turbines (categories ISO-L-TSA and ISO-L-TGA) — Specifications*

ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

ISO 8821, *Mechanical vibration — Balancing — Shaft and fitment key convention*