



AMERICAN PETROLEUM INSTITUTE

API Standard 610

Centrifugal Pumps for Petroleum, Petrochemical and Natural Gas Industries

ISO 13709:2009 (Identical), Centrifugal pumps for petroleum, petrochemical and natural gas industries

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This International Standard specifies requirements for centrifugal pumps, including pumps running in reverse as hydraulic power recovery turbines, for use in petroleum, petrochemical and gas industry process services.

This International Standard is applicable to overhung pumps, between-bearings pumps and vertically suspended pumps (see Table 1). Clause 9 provides requirements applicable to specific types of pump. All other clauses of this International Standard are applicable to all pump types. Illustrations are provided of the various specific pump types and the designations assigned to each specific type.

Relevant industry operating experience suggests pumps produced to this International Standard are cost effective when pumping liquids at conditions exceeding any one of the following:

- | | |
|-------------------------------------|----------------------------------|
| — discharge pressure (gauge) | 1 900 kPa
(275 psi; 19,0 bar) |
| — suction pressure (gauge) | 500 kPa
(75 psi; 5,0 bar) |
| — pumping temperature | 150 °C (300 °F) |
| — rotative speed | 3 600 r/min |
| — rated total head | 120 m (400 ft) |
| — impeller diameter, overhung pumps | 330 mm (13 in) |

NOTE For sealless pumps, reference can be made to API Std 685. For heavy duty pump applications in industries other than petroleum, petrochemical and gas processing, reference can be made to ISO 9905.

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Contents

Page

API Foreword	ii
Foreword	v
Introduction.....	vi
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions	4
4 General	10
4.1 Unit responsibility	10
4.2 Classification and designation	10
5 Requirements.....	18
5.1 Units.....	18
5.2 Statutory requirements	18
5.3 Requirements.....	18
6 Basic design	19
6.1 General	19
6.2 Pump types	23
6.3 Pressure casings.....	24
6.4 Nozzles and pressure casing connections.....	27
6.5 External nozzle forces and moments	30
6.6 Rotors	37
6.7 Wear rings and running clearances	38
6.8 Mechanical shaft seals.....	39
6.9 Dynamics.....	42
6.10 Bearings and bearing housings.....	56
6.11 Lubrication	61
6.12 Materials	61
6.13 Nameplates and rotation arrows.....	66
7 Accessories	67
7.1 Drivers	67
7.2 Couplings and guards.....	70
7.3 Baseplates.....	71
7.4 Instrumentation	74
7.5 Piping and appurtenances	74
7.6 Special tools	76
8 Inspection, testing, and preparation for shipment	76
8.1 General	76
8.2 Inspection.....	77
8.3 Testing.....	79
8.4 Preparation for shipment.....	86
9 Specific pump types.....	87
9.1 Single-stage overhung pumps	87
9.2 Between-bearings pumps (types BB1, BB2, BB3 and BB5)	88
9.3 Vertically suspended pumps (types VS1 through VS7)	93
10 Vendor's data	99
10.1 General	99
10.2 Proposals	100
10.3 Contract data	103
Annex A (informative) Specific speed and suction-specific speed	105

Annex B (normative) Cooling water and lubrication system schematics	106
Annex C (normative) Hydraulic power recovery turbines.....	115
Annex D (normative) Standard baseplates.....	119
Annex E (informative) Inspector's checklist.....	121
Annex F (normative) Criteria for piping design	123
Annex G (informative) Materials class selection guidance.....	137
Annex H (normative) Materials and material specifications for pump parts	139
Annex I (normative) Lateral analysis.....	147
Annex J (normative) Determination of residual unbalance	154
Annex K (informative) Shaft stiffness and bearing system life	160
Annex L (informative) Vendor drawing and data requirements	166
Annex M (informative) Test data summary	175
Annex N (informative) Pump datasheets and electronic data exchange.....	179
Annex O (informative) API Regional Annex.....	201
Bibliography	202



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