



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
November 2021

Machinery

PIP RESP73H
Application of ASME B73.1 – 2020
Specification for Horizontal End Suction
Centrifugal Pumps for Chemical Process

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Scope

The purpose of this Practice is to specify the requirements for design and manufacture of horizontal end suction centrifugal pumps.

The requirements in this Practice are modifications, additions, and/or deletions (exceptions) to the requirements in *ASME B73.1 - 2020*. The section/paragraph numbers and the associated headings used in this Practice correspond to the ones used in *ASME B73.1*. Since this Practice does not take exception to all the requirements in *ASME B73.1*, the section/paragraph numbers in this Practice may not be sequential. Data sheets *PIP RESP73-D* and *PIP RESP73-DM*, appended, may be used to select options for ordering the pumps specified in this Practice.

This practice is intended for chemical and hydrocarbon services and does not cover pumps sealed with packing.

For general water services that fall out of the limitations of this practice use *PIP RESP73H*.

References

Applicable parts of the following Practices, industry codes and standards, and government regulations shall be considered an integral part of this Practice. The edition in effect on the date of contract or purchase order award shall be used, except as otherwise noted. Short titles will be used herein where appropriate.

Industry Codes and Standards

- American Petroleum Institute (API)
 - API STD 610 - *Centrifugal Pumps for Petroleum, Petrochemical, and Natural Gas Industries*
- American Society for Mechanical Engineers (ASME)
 - ASME B73.1 - 2020 - *Specification for Horizontal End Suction Centrifugal Pumps for Chemical Process*
 - ASME Code - *Boiler and Pressure Vessel Code*
- American Society for Testing and Materials (ASTM)
 - ASTM A193 - *Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service*
- Process Industry Practices (PIP)
 - RESP002 - *Design of ASME B73.1 and General Purpose Pump Baseplates*
 - REEE003 - *Guidelines for General Purpose Non-lubricated Flexible Couplings*
 - REEP005 - *Guideline for Selection of Rotating Equipment Bearing Lubrication Methods*
 - REEP007 - *Guidelines for Minimum and Maximum Flow Rates for Centrifugal Pumps*