



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
May 2018

Machinery

PIP RESP73H
Application of *ASME B73.1 - 2012*
Specification for Horizontal End Suction
Centrifugal Pumps for Chemical Process

PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by the Practice.

This Practice is subject to revision at any time.

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Data Forms

- RESP73-D – ASME Centrifugal Pumps
(US Customary Units)
- RESP73-DM – ASME Centrifugal Pumps
(SI Units)

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 - 2012*. 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.

For general water services that fall out of the limitations of this practice use PIP RESP003H.

References

Applicable requirements in the latest edition (or the edition indicated) of the following industry standards shall be considered an integral part of this Practice:

Industry Codes and Standards

- American Society for Mechanical Engineers (ASME)
 - ASME B73.1 - 2012 - *Specification for Horizontal End Suction Centrifugal Pumps for Chemical Process*
- American Society for Testing and Materials (ASTM)
 - ASTM A193 - *Specification for Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service*
- Process Industries Practices
 - RESP002 - *Design of ASME B73.1 and General Purpose Pump Baseplates*
 - REEE003 - *Guidelines for General Purpose Non-lubricated Flexible Couplings*
 - Add ISO 21940-12

Definitions

Terms used in this Practice to introduce the exceptions to the requirements in *ASME B73.1* are defined as follows:

Modify to Read: Introduces a requirement that modifies a requirement in *ASME B73.1*

Add: Inserts requirement(s) that is/are additional to the requirements in *ASME B73.1*

Delete: Introduces deletion of requirement(s) in *ASME B73.1*