



PROCESS
INDUSTRY
PRACTICES

COMPLETE REVISION
July 2023

Machinery

PIP RESP002
Design of ASME B73.1 and General Purpose
Pump Baseplates

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PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

This Practice has been prepared by harmonizing technical requirements from existing standards of major industrial operators, contractors, and standard development organizations. While this Practice is intended to incorporate the majority of requirements, individual applications may have requirements which take precedence over this Practice. Determinations concerning fitness for purpose or application of this Practice to specific project or engineering situations should not be made solely on information contained in this Practice. All Practices are intended to be consistent with applicable laws and regulations. Should this Practice conflict with 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 this Practice.

Use of trade names should not be viewed as an expression of preference. Other brands having the same specifications are equally correct and may be substituted for those named.

This Practice is subject to revision at any time. For more information refer to PIP ADG001, *Specification for Developing Practices*.

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Data Forms

- ESP002-DM – Data Sheet for Pump Baseplates – SI Units
- ESP002-D – Data Sheet for Pump Baseplates – US Customary Units

1. Scope

This Practice provides the minimum requirements for *ASME B73.1* pump baseplates and baseplates for general purpose pumps.

Comment: The function of a baseplate is to provide a structure under a pump and its driver that maintains alignment between the two components while accepting published piping loads. A pump properly supported and installed improves pump reliability and extends the operating life of such components as bearings, couplings, and seals. Baseplates also provide a unified means for securing the equipment to its final location (i.e. foundation, skid, module).

This Practice describes minimum requirements for horizontal pump baseplates that are not covered in the API standards.

2. References

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

2.1 Process Industry Practices (PIP)

- PIP CTCE1000 - *External Coating Systems Selection Criteria*
- PIP CTSE1000 - *Application of External Coatings*
- PIP REIE686A - *Recommended Practice for Machinery Installation and Installation Design (Supplement to PIP REIE686/API RP686)*
- PIP RESP73H - *Application of ASME B73.1 Specification for Horizontal End Suction Centrifugal Pumps for Chemical Process*

2.2 Industry Codes and Standards

- American Society for Mechanical Engineers (ASME)
 - ASME B73.1 - *Specification for Horizontal End Suction Centrifugal Pumps for Chemical Process*
- Steel Structures Painting Council (SSPC)
 - SSPC SP 6/NACE NO. 3 - *Commercial Blast Cleaning*
Note: ISO 8501 Sa 2 provides equivalent preparation

3. Definitions

purchaser: Party who awards the contract to the supplier. Purchaser may be the owner or the owner's authorized agent.

supplier: Party responsible for furnishing general purpose pump baseplates