



PROCESS  
INDUSTRY  
PRACTICES

COMPLETE REVISION  
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***Machinery***

**PIP REEE003  
Guidelines for General Purpose  
Non-Lubricated Flexible Couplings**

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## 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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### **PUBLISHING HISTORY**

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## PIP REEE003 Guidelines for General Purpose Non-Lubricated Flexible Couplings

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## 1. Scope

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This Practice describes guidelines for selecting non-lubricated flexible couplings for general purpose applications for most types of rotating equipment. General purpose coupling applications include loads with steady, non-fluctuating torque characteristics within the power and speed ranges defined in this Practice.

This Practice does not include guidelines for diaphragm couplings.

This Practice does not cover coupling applications for rotating equipment having any of the following characteristics:

- a. Rotational speeds greater than 3,600 rpm
- b. Driver-rated power greater than 2,000 horsepower
- c. Non-steady (fluctuating) torque characteristic
- d. Couplings covered by *API 671*, Special Purpose Couplings for Petroleum, Chemical and Gas Industry Services

## 2. References

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Applicable parts of the following industry codes and standards shall be considered an integral part of this Practice. The latest 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 Industry Codes and Standards

- American National Standards Institute (ANSI)
  - ANSI/AGMA 9000-C90 - *Flexible Couplings - Potential Unbalance Classification*
  - ANSI/AGMA 9002-A86 - *Bores and Keyways for Flexible Couplings (Inch Series)*
- American Petroleum Institute (API)
  - API 671 - *Special Purpose Couplings for Petroleum, Chemical, and Gas Industry Services*
- Occupation Safety and Health Administration (OSHA)
  - OSHA 1910.219 - *Mechanical power-transmission apparatus*

## 3. Definitions

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*diaphragm coupling*: Type of flexible coupling consisting of one or more flexible elements that are attached to the outside diameter of one flange and that transfer torque through the diaphragm to its inside diameter attachment (i.e., a spacer or another flange). This type of coupling is considered a special purpose device and is not covered in this Practice.

*disc coupling*: Type of flexible coupling consisting of several flexible elements that are alternately attached with bolts to the opposite flanges. This type of coupling may be applied on either general purpose or special purpose machines.