



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
March 2024

Process Control

**PIP PCEPA002
Process Analyzer Project
Implementation Guidelines**

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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 standards 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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1. Scope

This Practice provides guidelines for the design, specification, purchasing, and installation of process analyzer systems. This requires knowledge, integration, and management of multi-disciplinary engineering skills and resources that may bridge several different organizations. This Practice can be used to assist in assessment and definition of roles and responsibilities for those tasks required for a given project.

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 PCSPA001 - *Process Analyzer Project Documentation Data Sheet Instructions*
- PIP PCSPA001-D - *Process Analyzer Project Documentation Data Sheet*
- PIP PCSPA002 - *Process Analyzer System Data Sheet Instructions*
- PIP PCSPA002-D - *Process Analyzer System Data Sheet*
- PIP PCSPA003 - *Process Analyzer Smitter Data Sheet Instructions*
- PIP PCSPA003-D - *Process Analyzer Smitter Data Sheet*
- PIP PCSPA004 - *Process Analyzer Bid Proposal Data Sheet Instructions*
- PIP PCSPA004-D - *Process Analyzer Bid Proposal Data Sheet*

2.2 Industry Codes and Standards

- National Fire Protection Association (NFPA)
- NFPA 30 - *Flammable and Combustibles Liquids Code*
 - NFPA 70 - *National Electrical Code* - Latest Edition
 - NFPA 496 - *Standards for Purged and Pressurized Enclosures for Electrical Equipment*
 - NFPA 99 - *Recommended Practice for the Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas*

3. General

3. The implementation of process analyzers can require the participation of only one or several of the following resource groups:
- a. Owner Company personnel
 - b. Engineering and Construction contractor(s) (E&C)
 - c. Analyzer Systems Vendor (ASV)
 - d. Analyzer Original Equipment Manufacturer (OEM)