

GP 03-03-05	Suction, Discharge, and Interstage Piping for Reciprocating Compressors	July 2001
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Suction, Discharge, and Interstage Piping for Reciprocating Compressors

GP 03-03-05

Scope

[I] This Global Practice (GP) covers the layout, design, and fabrication of suction, discharge, and interstage piping for reciprocating compressors in process air or gas services.

[I] This GP also covers requirements for the support of pulsation suppression devices (other than those mounted to the top of cylinders).

[I] An asterisk (*) indicates that additional information is required. If a job is contracted, this additional information is furnished in the Job Specification.

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1. Required References

[I] The following Practice is generically referenced and assumed to be a part of this document. Unless otherwise specified herein, use the latest edition

1.1. Global Practices–ExxonMobil Engineering Practices

GP 10-04-01	Reciprocating Process Compressors
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2. Applicable Requirements

[I] Where process and air piping systems are to be furnished by the compressor vendor, the contractor shall specify applicable requirements for piping and auxiliaries including:

- 1) Design
- 2) Materials of construction
- 3) Fabrication
- 4) Inspection
- 5) Testing

3. Piping System Layout and Design

3.1. Acoustic Simulation Studies

- 1) [R], [O] Acoustic simulation studies shall be conducted per [GP 10-04-01](#).
- 2) [R], [O] If an acoustic simulation study has not been made, the following requirements for the piping system are applicable:
 - a) The use of elbows in the piping shall be minimized.
 - b) Elbows shall not be used between compressor cylinders and pulsation suppression devices.
 - c) All valves, including pressure relief valves, shall be positioned to minimize the length of piping between the valve and the major process line.
 - d) Laterals from inlet and discharge headers to compressor cylinders shall be symmetrical.

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