

GP 03-15-01	Pressure Relief Valves	December 2004
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Pressure Relief Valves

GP 03-15-01

Scope

- 1) [I] This Global Practice covers the design, inspection, testing, and preparation for shipment of pressure relief valves.
- 2) [I] Pressure relief valves within the scope of American Society of Mechanical Engineers (ASME) Code Section I (ASME SEC I) Power Boilers are not covered by this Practice.
- 3) [I] An Asterisk (*) indicates that a decision by the Purchaser is required or that additional information is furnished by the Purchaser.
- 4) [I] This GP identifies additions/exceptions to API STD 526.

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Page 1 of 12	©ExxonMobil Development Company	 Documents Document Sharing Hub

GP 03-15-01	Pressure Relief Valves	December 2004
-------------	------------------------	---------------

Table of Contents

1. Required References	3
1.1. API–American Petroleum Institute	3
1.2. ASME–American Society of Mechanical Engineers	3
2. Additional Requirements	4
2.1. Global Practices–ExxonMobil Engineering Practices	4
2.2. ASME–American Society of Mechanical Engineers	4
2.3. ASTM–American Society for Testing and Materials	4
2.4. ISO–International Organization for Standardization	4
2.5. JSA–Japanese Industrial Standards.....	4
2.6. NACE–National Association of Corrosion Engineers International.....	4
3. Revisions to API Standard 526 Fifth Edition.....	5
Modifications to Section 1: General.....	5
Modifications to Section 2: Design	5
Modifications to Section 3: Material	7
Modifications to Section 4: Inspection and Shop Tests	8
Modifications to Section 5: Identification and Preparation for Shipment	9
Record of Change	10
Attachment: Purpose Codes Definitions	13

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Page 2 of 12	©ExxonMobil Development Company	



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1. Required References

This Section lists Practices and Standards that are generically referenced and assumed to be a part of this document. Unless otherwise specified herein, use the latest edition.

1.1. API–American Petroleum Institute

API RP 520 PT I	Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries; Part I - Sizing and Selection
API RP 520 PT II	Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries Part II - Installation
API RP 521	Guide for Pressure-Relieving and Depressuring Systems
API STD 526	Flanged Steel Pressure Relief Valves
API STD 527	Seat Tightness of Pressure Relief Valves
API STD 2000	Venting Atmospheric and Low-Pressure Storage Tanks Nonrefrigerated and Refrigerated

1.2. ASME–American Society of Mechanical Engineers

ASME B1.20.1	Pipe Threads, General Purpose (Inch)
ASME B16.34	Valves - Flanged, Threaded, and Welding End
ASME SEC I	BPVC Section I – Rules for Construction of Power Boilers
ASME SEC II A SA-216/SA-216M	SA-216/SA-216M Specification for Steel Castings, Carbon, Suitable for Fusion Welding for High-Temperature Service ASTM A216/A216M-93
ASME SEC II A SA-217/SA-217M	SA-217/SA-217M Specification for Steel Castings, Martensitic Stainless and Alloy, for Pressure-Containing Parts, Suitable for High-Temperature Service ASTM A217/A217M-99
ASME SEC II A SA-351/SA-351M	SA-351/SA-351M Specification for Castings, Austenitic, Austenitic-Ferritic (Duplex), for Pressure-Containing Parts ASTM A351/A351M-94a
ASME SEC II A SA-494/SA-494M	SA-494/SA-494M Specification for Castings, Nickel and Nickel Alloy ASTM A494/A494M-99
ASME SEC VIII D1	BPVC Section VIII - Rules for Construction of Pressure Vessels Division 1
ASME SEC VIII D2	BPVC Section VIII - Rules for Construction of Pressure Vessels Division 2–Alternate Rules

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Page 3 of 12	©ExxonMobil Development Company	



GP 03-15-01	Pressure Relief Valves	December 2004
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2. Additional Requirements

- 1) * [I] The following Practices and Standards shall be used with this Practice as specified by the Owner's Engineer.
- 2) * [I] Vendor shall comply with any local rules or regulations specified by the Purchaser.

2.1. Global Practices–ExxonMobil Engineering Practices

GP 03-02-04	Pressure Relieving Systems
GP 03-12-09	General Requirements for Valves
GP 03-16-01	Flanged Joints, Gaskets, and Bolting

2.2. ASME–American Society of Mechanical Engineers

ASME B16.5	Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24
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2.3. ASTM–American Society for Testing and Materials

ASTM A 370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products
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2.4. ISO–International Organization for Standardization

ISO 148	Steel - Charpy Impact Test (V-Notch)
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2.5. JSA–Japanese Industrial Standards

JSA B 7722	Charpy Impact Testing Machines
JSA Z 2242	Method of Impact Test for Metallic Materials

2.6. NACE–National Association of Corrosion Engineers International

NACE MR0175	Petroleum and Natural Gas Industries Materials for Use in H ₂ S-Containing Environments in Oil and Gas Production
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Page 4 of 12	©ExxonMobil Development Company	



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