

GP 07-01-01	Fired Heaters	July 2001
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Fired Heaters

GP 07-01-01

Scope

[I] This Global Practice (GP) supplements the minimum requirements on the design, fabrication, and inspection of fired process heaters (hereinafter referred to as heaters) given in API STD 560, Fired Heaters for General Refinery Services. This GP does not cover steam cracking heaters.

[I] An asterisk (*) indicates that a decision by Purchaser is required, or that additional information is furnished by Purchaser.

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1. Required References

[1] 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. Global Practices–ExxonMobil Engineering Practices

GP 02-01-01	Plant Noise Design Criteria
GP 03-04-01	Piping for Fired Equipment
GP 03-16-01	Flanged Joints, Gaskets, and Bolting
GP 03-18-01	Piping Fabrication Shop or Field
GP 04-01-02	Structural Steel Design
GP 04-01-03	Design Loads for Structures
GP 04-02-01	Auxiliary Structures for Operation and Maintenance
GP 07-04-01	Burners for Fired Heaters
GP 07-05-01	Coils for Fired Heaters and Boilers
GP 07-08-01	Dampers and Guillotines for Fired Equipment
GP 14-03-01	Fireproofing
GP 15-01-01	Instrumentation for Fired Heaters
GP 15-02-01	Temperature Instruments
GP 18-03-02	Statically Cast Steel and Alloy Pressure Containing Parts and Tube Supports for Fired Heaters
GP 18-07-01	Welding Procedures
GP 18-10-01	Additional Requirements for Materials
GP 18-12-01	Positive Material Identification
GP 19-01-01	Paint and Protective Coatings
GP 19-03-03	Linings for Fired Heaters
GP 20-01-01	Inspection of Equipment and Materials
GP 20-01-03	Quality Programs

1.2. API–American Petroleum Institute

API STD 560	Fired Heaters for General Refinery Services
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1.3. ASME–American Society of Mechanical Engineers

ASME B1.20.1	Pipe Threads, General Purpose (Inch)
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1.4. ASTM–American Society for Testing and Materials

ASTM C 680	Standard Practice for Determination of Heat Gain or Loss and the Surface Temperatures of Insulated Pipe and Equipment Systems by the Use of a Computer Program
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2. Additional Requirements

* [I] Vendor shall comply with any local rules or regulations specified by Purchaser.

* [I] The following Practices shall be used with this GP as specified by Purchaser.

2.1. Global Practices–ExxonMobil Engineering Practices

GP 03-06-01	Piping for Instruments
GP 04-05-01	Steel Stacks
GP 04-05-02	Reinforced Concrete Chimneys
GP 04-06-01	Reinforced Concrete Foundations, Anchor Bolts and Grout
GP 07-03-01	Sootblowers for Fired Equipment
GP 07-09-01	Expansion Joints for Fired Equipment
GP 10-13-01	Special Purpose Centrifugal Fans
GP 10-13-02	General Purpose Centrifugal Fans
GP 18-03-03	Centrifugally Cast High Alloy Tubes for Fired Heaters Other than Steam Cracking Reactors
GP 20-01-02	Administrative Procedures for Obtaining Inspection

3. Documentation

3.1. Post Award Review

[I] Vendor shall provide the following heater design details for review:

- 1) Coil anchor and thermal expansion provisions.
- 2) Tube casing penetration seals.

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