

Fired Heaters for General Refinery Service

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Fired Heaters for General Refinery Service

1 Scope

This standard specifies requirements and gives recommendations for the design, materials, fabrication, inspection, testing, preparation for shipment, and erection of fired heaters, air preheaters (APHs), fans, and burners for general refinery service.

This standard does not apply to the design of steam reformers or pyrolysis furnaces.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE See M.2 for normative references specific to ceramic coatings.

API Standard 530, *Calculation of Heater Tube Thickness in Petroleum Refineries*

API Standard 673, *Centrifugal Fans for Petroleum, Chemical, and Gas Industry Services*

API Standard 936, *Refractory Installation Quality Control—Inspection and Testing Monolithic Refractory Linings and Materials*

API Standard 975, *Refractory Installation Quality Control - Inspection and Testing of Refractory Brick Systems and Materials*

API Standard 976, *Refractory Installation Quality Control-Inspection and Testing of AES/RCF Fiber Linings and Materials*

ABMA Standard 9 ¹, *Load Ratings and Fatigue Life for Ball Bearings*

ASME B17.1 ², *Keys and Keyseats*

ASME *Boiler and Pressure Vessel Code, Section VIII: Pressure Vessels*

ASTM A36 ³, *Standard Specification for Carbon Structural Steel*

ASTM A53, *Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*

ASTM A105, *Standard Specification for Carbon Steel Forgings for Piping Applications*

ASTM A106, *Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service*

ASTM A123, *Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products*

ASTM A143, *Standard Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement*

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² ASME International, 2 Park Avenue, New York, New York 10016-5990, www.asme.org.

³ ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, www.astm.org.