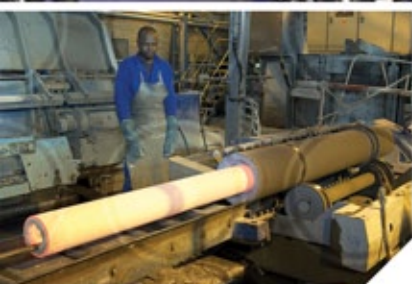


Castings for the petrochemical industry

Steloy Castings has a track record spanning more than 20 years in the supply of castings to the international petrochemical industry, with a customer base that includes prominent engineering houses and end users like Foster Wheeler, Selas Linde, ExxonMobil, Sasol, Natref and Chevron as well as furnace design companies such as OnQuest and JNK Heaters. It supplies individual corrosion and heat resistant components as well as complete subassemblies for fired-heater applications covered by API 560. Products range from static castings such as tube sheets, brackets and fittings to fully fabricated coils for reformer, ethylene cracking and direct reduction furnaces.



CENTRIFUGALLY CAST TUBE

Centrifugally cast tubes such as reformer, cracking and catalyst tubes for high temperature and high-pressure applications are manufactured in accordance with the general requirements of ASTM A608. Selected alloys from DIN EN10295 and a number of unassigned/proprietary alloys are also used.

Tubes are supplied as cast, partially machined or fully machined. Machining of outer tube surfaces involves turning while inner surfaces are pull bored. The current Steloy range offers sizes up to 830mm in diameter and 5 500mm long. Smaller diameter tubes can be longer, i.e. 5 500mm long, with outer diameters ranging from 80mm to 200mm, and inner diameters as small as 32mm. The surface finish after pull boring is typically 1.6 to 3.2 μ m. The variation in dimensions is within the tolerances indicated in Section 8 of ASTM A608 and complies with the requirements of ASTM A530.

Product marking, certification and pressure testing are conducted in accordance with mutually agreed procedures. Provision has been made to conform with supplementary requirements of ASTM A608 through various analyses, testing and examination procedures.

Please consult the Steloy Castings Material Catalogue or website for a full range of materials.



Castings for the petrochemical industry

STATIC CASTINGS

Produced in accordance with a number of ASTM specifications, static castings can be divided into two main applications: return bends and tube supports. Materials for return bends (and other components in the same grouping such as Y-pieces, elbows and plug headers) are listed in Table 6 of API 560. Tube supports, for which major materials are listed in Table 8 of API 560, include tube sheets, side wall supports, tube hangers and brackets.

Static castings are subject to the requirements indicated by the applicable specifications and also to specific Quality Assurance requirements prescribed by the customer. These may include radiographic and liquid penetrant examination, inspection of dimensional tolerances and surface finish, and mechanical and stress rupture testing.

Please consult the Steloy Castings Material Catalogue or website for a full range of materials.



FABRICATION & TESTING

Steloy Castings operates in conjunction with qualified partners to supply assemblies. Fabrications include various configurations of heater coils (reformer, cracking, catalyst) and harps and collectors, using static castings and centrifugally cast tubes. Related wrought components as indicated in Tables 4 and 6 of API 560 are acquired from approved suppliers.

Machining includes pull boring of inner tube surfaces, the machining of outer surfaces and the machining of weld preps on both static castings and cast tube. Fabrication partners are responsible for the assemblies in accordance with Sections 13.3 and 14 as well as selected activities in Appendix C of API 560.

www.steloy.com



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