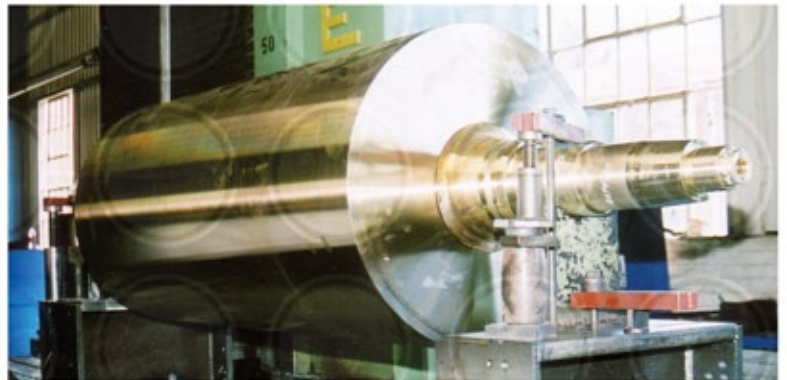


Castings for the steel industry

Steloy Castings bases its comprehensive range of cast components for the steel industry on its established role as a supplier of heat resistant castings for fired heaters in the petrochemical industry in accordance with API 560.

The product range, which consists of centrifugally cast tubes and pipes as well as static sand-mould castings, makes provision for applications in heaters and heat exchangers, steel manufacturing infrastructure and heat treatment plants and equipment.



Steel Industry

Heaters and Heat Exchangers

- Radiant Tubes
- Hairpins
- Bends
- Tube Support Elements
 - Tube Sheet
 - Hangers
 - Brackets
- Burners and Burner Nozzles
- Flue Gas Dampers

Manufacturing Equipment and Infrastructure

- Furnace Rollers and Stub Ends
- Walking Beams
- Rabble Arms and Fingers
- Discharge Heads
- Grates
- Cooling Bed Grids
- Guide Bars and Spacers
- Rollers (Dip Galvanising)

Heat Treatment Plants and Furnace Equipment

- Grids
 - Batch
 - Carburising
 - Pusher
- Carrier Spiders
- Impellers
- Base Rings
- Chain Links
- Side Wall Plates

Castings for the steel industry

HEATERS AND HEAT EXCHANGERS

Radiant tubes, hairpins, burners and tube support elements are supplied in a variety of heat and creep resistant alloys. Castings produced for these applications are manufactured mainly in accordance with API 560 guidelines and specifications, with ASTM A608 (centrifugally cast tubes) and ASTM A297 (heat resistant static castings) forming the basis. Typical applications and material grades are as follows:



APPLICATION	PRODUCT	TYPICAL MATERIALS/ALLOYS
Radiant tubes (hairpin and jacket types included)	Centrifugally cast tubes and pipes Bends, Y-fittings, collectors (static)	25Cr20Ni 25Cr35Ni 25Cr35NiNb 48Ni28Cr5W 35Cr45NiNb micro 35Ni25Cr15Co5W 50Cr50NiNb (low-grade fuel)
Flame tubes	Centrifugally cast tubes	25Cr35Ni 25Cr20Ni 48Ni28Cr5W 50Cr50NiNb (low-grade fuel)
Transfer lines	Centrifugally cast tubes Bends, Y-fittings, collectors (static)	25Cr35Ni Low Carbon 32Ni20CrNb
Direct reduction furnaces (gas reformers)	Centrifugally cast tubes (Oil, gas reformers)	25Cr20Ni 25Cr35NiNb 48Ni28Cr5W 35Cr45NiNb micro
Tube supports	Tube sheets, hangers, brackets, sidewall supports (static)	50Cr50NiNb 25Cr35NiNb 25Cr20Ni 48Ni28Cr5W3Co 25Cr35NiNb micro
Burners and burner nozzles	Burners and nozzles (static)	50Cr50NiNb 35Ni15Cr 25Cr12Ni 51Co31CrNb

Note: Material designations indicate nominal compositions. Formally acknowledged specifications are available. Visit www.steloy.com for more information.



MANUFACTURING INFRASTRUCTURE AND HEAT TREATMENT PLANTS/ FURNACE EQUIPMENT

The majority of castings for general steel manufacturing infrastructure and heat treatment plants/furnace equipment are static though centrifugally cast furnace rollers are also produced. Typical applications and material grades are as follows:

APPLICATION	PRODUCT	TYPICAL MATERIALS/ALLOYS
Furnace rollers	Centrifugally cast tubes Stub ends (static)	19Cr9Ni 25Cr35NiNb micro 25Cr12Ni 48Ni28Cr5W 25Cr35NiNb 24Cr24NiNb 51Co31CrNb
Walking beams	Static castings	25Cr35NiNb 25Cr35NiNb micro 48Ni28Cr5W 51Co31CrNb 40Co30Cr20Ni
Rabble arms and fingers (gasifiers)	Static castings	19Cr9Ni 50Cr50NiNb 48Ni28Cr5W
Grids	Static castings	25Cr20Ni 25Cr12Ni 48Ni28Cr5W 35Ni25Cr15Co5W 24Cr24NiNb 18Cr36NiNb 25Cr35NiNb micro High Si 25Cr35NiNb micro
Carrier spiders	Static castings	25Cr35NiNb micro High Si 24Cr24NiNb 25Cr20Ni 25Cr12Ni 35Ni25Cr15Co5W 48Ni28Cr5W 25Cr35NiNb micro 18Cr36NiNb
Impellers	Static castings	35Ni15Cr 35Ni15CrNb 39Ni19Cr
Chain links	Static castings	18Cr36NiNb
Grate systems	Static castings (including guide bars, spacers, support beams)	18Cr36NiNb 25Cr35NiNb 25Cr35NiNb micro 51Co31CrNb 25Cr45Ni3Mo3Co3W

Note: Material designations indicate nominal compositions. Formally acknowledged specifications are available. Visit www.steloy.com for more information.