

AISI 446 Seamless Welded Stainless Steel Tube EN 1.4749 2" Sch80

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: MOQ500kg
- Packaging Details: In wooded cases or pallets,or as for clients requirement

Wenzhou, China

Zheheng

ISO9001

446

- Delivery Time: 7-15 working days after receiving payment
- Payment Terms: L/C, D/P, T/T, Western Union
- Supply Ability: 1000 Ton/Tons per Month



Product Specification

Port:OD:

Section Shape:

• Package:

Length:Technique:

Series:

• Highlight:

• Price Terms:

Wall Thickness:

- Ningbo Φ6--630mm Round Seaworthy Standard Package FOB,CIF,CFR,EXW 1-12m Hot Rolling 1-40mm 400 Series
- - Seamless Welded Stainless Steel Tube, AISI 446 Stainless Steel Tube, Sch80 Steel Tube



Overview

Stainless Steel 446 is a very high chromium ferritic temperature resistant alloy with outstanding resistance to metabolism, sulfidation along with other types of hot corrosion. This grade is most frequently utilized between 1500 – 2100°F, even though it is elevated temperatures energy is really low.

446 is the only temperature resistant alloy that can tolerate molten copper or brass. Similar to other high chromium ferritic stainless steel, 446 embrittles severely in the 700-1000°F temperatures range (885°F embrittlement).

446 ought not to be utilized in this heat range except close to complete loss of room temperatures ductility might be tolerated. Sigma phase embrittlement takes place upon very long time exposure in the 1000-1300°F range.

446 possess excellent ductile-to-brittle impact transition temperatures.

Thus, effective forming and also bending is assisted by lower forming speeds, edge preparation or preheating to 250-400°F. Annealing, while necessary have to be performed at 1550-1650°F followed by quick cool.

Welding can be accomplished by standard methods. Pre-heating and postheating to 300-600°F is beneficial.

Austenitic weld fillers, for example AWS E310 or E312 are usually recommended to maximize weld deposit ductility.

Corrosion and Oxidation Resistance

Excellent corrosion resistance in many industrial environments. Excellent oxidation resistance at elevated temperatures (up to 2000° F).

Fair Sulfidation resistance.

Good resistance to chlorides, organic acids, and molten copper.

Application

SS-446 is often used in industrial applications such as boilers and furnaces due to its ability to withstand extreme temperatures and chemical corrosion from acids or alkalis. It can also be used for exhaust systems on cars and trucks and for storage tanks in chemical plants since it resists pitting caused by acidic substances such as saltwater or chlorine solutions. Additionally, because of its excellent weldability properties, it can be used in welding projects with the confidence that there won't be any cracks or leaks due to weak welds along seams or joints over time.

446 Stainless Pipe Chemical Composition

SS 446 contains a combination of chromium (around 18%), molybdenum (around 1%), and nickel (about 2%). It also has a low carbon content. This combination gives it excellent resistance to oxidation at high temperatures. In addition to these metals, it also has trace amounts of phosphorus and sulfur, which add additional strength to the material.

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Grade	С	Mn	Si	Р	S	Cr	Ni	Fe	N
446	0.12	1.5	0.75	0.04	0.03	23.0 -30.0	0.5	Balance	0.10 -0.25

Mechanical Properties Stainless Steel 446

Grade	Tensile StrengthKSI (MPA)	Yield Strength 0.2% KSI offset KSI (MPA)	Elongation (% in 2''(50.8 mm)	Hardness (Brinell) MAX	Hardness (Rockwell B) MAX
446	65	40	20%	159	B95 Max

Product Testing

Hydrostatic test Flaw detection test Lab test

Package Process

1.with plastic cap to protect both ends 2.weaving bag wrapped outside the pipe 3.then pack into wooden case.

Image

