FERRITIC STAINLESS STEEL	
EN DESIGNATION	**ASTM DESIGNATION**
1.4521	**444**
	S44400

Description:

Stainless steels are high-alloy steels that have excellent corrosion resistance in comparison with other steels as they contain more chromium. Based on their crystalline structure, stainless steels are divided into three groups, namely, martensitic, austenitic and ferritic steels. A combination of martensitic and ferritic steels forms a fourth group known as precipitation-hardened steels.

Chemical Composition:

C	S	P	Mn	Si	Cr	Mo	Ti
≤ 0.025	≤ 0.015	≤ 0.040	≤ 1.00	≤ 1.00	17.50-19.50	1.75-2.50	0.20+4(C+N) < (Ti+Nb) < 0.8

Mechanical Properties

Rm (MPa)	Rp0.2 (MPa)	A50 (%)	HRBW
≥ 415	≥ 275	≥ 20	≤ 96

Applications:

Suitable for roofing and cladding in marine environments, as well as hot water tanks and geysers, heat exchanger tubing and food processing equipment.

Corrosion Resistance

CS444 has good resistance to a wide variety of corrosive environments. With 18% chromium and 2% molybdenum the steel has good pitting resistance, better than CS316, good crevice corrosion resistance, similar to CS316 and good general corrosion resistance and oxidation resistance, similar to CS316 in most environments. Atmospheric corrosion resistance is good and similar to CS316. Being a ferritic stainless steel, CS444 is not susceptible to stress corrosion cracking.

Specifications:

It can be delivered according to EN, ASTM, ASME standard requirements