

FERRITIC STAINLESS STEEL	
EN DESIGNATION	ASTM DESIGNATION
1.4000	410S
	S41008

Description:

410S Stainless Steel is a non-hardening modification of Type 410. Control of the chemistry balance (low carbon and optional additions of Ti or Nb) minimizes austenite formation at high temperatures, restricting the alloy's ability to harden. The material remains soft and ductile even when the material is rapidly cooled from above the critical temperature. This low hardening characteristic helps to prevent cracking when the steel is welded or exposed to high temperatures. The alloy is ferritic in the annealed condition and ferromagnetic.

Chemical Composition:

C	S	P	Mn	Si	Cr	Ni
≤ 0.08	≤ 0.030	≤ 0.040	≤ 1.00	≤ 1.00	11.5-13.5	≤ 0.60

Mechanical Properties:

Rm (MPa)	Rp0.2 (MPa)	A50 (%)	HRBW
≥ 415	≥ 205	≥ 22	≤ 89

Applications:

Because 410S cools from elevated temperatures without hardening, it is particularly useful for annealing boxes, quenching racks, oxidation resistant partitions and other high-temperature units. It also is used in the petrochemical industry for tower packing and distillation trays.

Corrosion Resistance

The corrosion resistance of 410S Stainless Steel is similar to Type 410. It provides adequate resistance to atmospheric corrosion, fresh water, mild acids and alkalies, and some other chemicals.

Specifications:

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