

ALLOY 1.4410 SUPER DUPLEX UNS S32750 2507 / F53

Super Duplex UNS S32750 is the most common super duplex grade in the market. UNS S32750 is a duplex stainless steel especially designed for service in aggressive chloride-containing environments.

ALLOY 14410 / SUPER DUPLEX UNS S32750 / F53 / 2507

Approvals: NACE MR0175, Norsok M650, Norsok M630 MDS D51/ D53/ D54/ D55/ D57/ D58

Product Standards: EN 10088-3, ASTM A276, ASTM A479, ASTM A182-11A

(Chemical composition and mechanical properties only)

APPLICATIONS

The main applications are for details with special requirements for high corrosion resistance. It has very good resistance to localized corrosion and stress corrosion cracking in combination with high mechanical strength. It is widely used in oil & gas, hydropower, pressure vessels, pulp & paper, structural components and chemical tankers.

Heat Treatment

Solution annealing at min 1100°C followed by water quenching.

Weldability

Very good.

$PREN = (Cr\% + 3.3Mo\% + 16N\%) \geq 40$

CHEMICAL COMPOSITION

Weight %	C	Si	Mn	S	P	Cr	Ni	Mo	N	Cu
Min.						24,00	6,00	3,00	0,24	
Max.	0,03	0,80	1,20	0,020	0,035	26,00	8,00	5,00	0,32	0,50

MECHANICAL PROPERTIES

	Yield strength Rp0.2, MPa	Tensile strength Rm, MPa	Elongation [%]	Hardness [HB]	Impact, Charpy-V, -46°C [J]	Pre
Bar	≥ 550	≥ 750	≥ 25	≤ 310	≥ 45	≥ 40
Plate CR (Coil)	≥ 550	750 – 1000	≥ 25	≤ 310	≥ 45	≥ 40
Plate HR (Coil)	≥ 550	750 – 930	≥ 25	≤ 310	≥ 45	≥ 40
Plate (Quarto)	≥ 550	750 – 930	≥ 25	≤ 310	≥ 45	≥ 40

PLATE

2 x 1500 x 3000 mm	6 x 1500 x 6000 mm	15 x 1500 x 3000 mm	30 x 1500 x 3000 mm
3 x 1500 x 3000 mm	6 x 2000 x 6000 mm	15 x 1500 x 6000 mm	30 x 1500 x 6000 mm
3 x 1500 x 6000 mm	8 x 1500 x 3000 mm	15 x 2000 x 6000 mm	30 x 2000 x 6000 mm
3 x 2000 x 6000 mm	8 x 1500 x 6000 mm	16 x 1500 x 6000 mm	35 x 2000 x 4000 mm
4 x 1500 x 3000 mm	8 x 2000 x 6000 mm	16 x 2000 x 6000 mm	35 x 2000 x 6000 mm
4 x 1500 x 6000 mm	10 x 1500 x 3000 mm	20 x 1500 x 3000 mm	40 x 1500 x 3000 mm
4 x 2000 x 6000 mm	10 x 1500 x 6000 mm	20 x 1500 x 6000 mm	40 x 2000 x 6000 mm
5 x 1500 x 3000 mm	10 x 2000 x 6000 mm	20 x 2000 x 6000 mm	45 x 2000 x 4000 mm
5 x 1500 x 6000 mm	12 x 1500 x 3000 mm	25 x 1500 x 3000 mm	50 x 1500 x 3000 mm
5 x 2000 x 6000 mm	12 x 1500 x 6000 mm	25 x 1500 x 6000 mm	50 x 2000 x 4000 mm
6 x 1500 x 3000 mm	12 x 2000 x 6000 mm	25 x 2000 x 6000 mm	

COIL

1300 mm	1500 mm	2000 mm
0,4 mm	1,5 mm	3 mm
0,5 mm	3 mm	4 mm
0,7 mm	4 mm	5 mm
1 mm	5 mm	6 mm
	6 mm	

ROUND BAR

DIA	DIA	DIA	DIA
16 mm	60 mm	130 mm	250 mm
20 mm	70 mm	140 mm	280 mm
25 mm	80 mm	150 mm	300 mm
30 mm	90 mm	160 mm	330 mm
35 mm	100 mm	170 mm	350 mm
40 mm	110 mm	180 mm	380 mm
45 mm	120 mm	200 mm	406,4 mm
50 mm	125 mm	225 mm	