

UNS S32760

High impact strength at sub-zero temperatures, UNS S32760 displays excellent corrosion resistance.

Suitable for use in harsh environments UNS S32760 is a cost effective super duplex stainless steel.

PRODUCT FORMS

PRODUCT FORM	SIZE RANGE FROM	SIZE RANGE TO
UNS S32760 forgings	To customer specifications	To customer specifications
UNS S32760 pipe	0.5 in	48 in
UNS S32760 round bar	50 mm	400 mm
UNS S32760 sheet & plate	1 mm	76.2 mm
UNS S32760 welding wire	0.8 mm	3.2 mm
UNS S32760 pipe fittings	0.5 in	48 in
UNS S32760 flanges	0.5 in	36 in

Can't find the size you need? **Please contact us at onlinesales@neonickel.com**

CHEMICAL ANALYSIS

%	CR	NI	MO	CU	W	C	N	MN	SI	P	FE	S
Min	24	6	3	0.5	0.5	-	0.2	-	-	-	-	-
Max	26	8	4	1	1.0	0.03	0.3	1	1	0.03	Balance	0.01

APPLICATIONS

- Desalination plants
- Seawater systems
- Heat exchangers
- Subsea pipework systems
- Flue gas desulphurisation (FGD) plants
- Centrifuges and agitators
- Valves and pumps
- Storage tanks and pressure vessels

ABOUT UNS S32760

Containing 25% chromium, 7% nickel, 3.6% molybdenum as well as copper, tungsten, and nitrogen, UNS S32760 is a highly alloyed super duplex stainless steel with high PREN for use in aggressive environments. This is a super duplex grade with a ferritic-austenitic microstructure. The alloy consists of around 40-50% ferrite in the annealed condition. The super duplex microstructure has the high strength of the ferritic grades whilst retaining the corrosion resistance of the austenitic grades. It is not uncommon to see the metal used as a practical solution to chloride-induced stress cracking, which is the Achille's' heel of stainless steel. It also has outstanding resistance against sulphide-stress corrosion cracking in sour-gas environments. Well known for its high impact strength, UNS S32760 displays no ductile-brittle transition but only a slight reduction in impact energy as temperature decreases. Even when welded, UNS S32760 displays only slightly lower impact strength. It was initially developed as a seawater resistant material for pump applications in the North Sea. Following its success, it became the desired material for a wide range of uses including [oil and gas applications](#), seawater, subsea pipework systems, heat exchangers and more. To purchase this alloy or for more information [contact us](#) today!

MECHANICAL & PHYSICAL PROPERTIES

MECHANICAL & PHYSICAL PROPERTIES	20 °C	100 °C	150 °C	200 °C	250 °C
Ultimate Tensile Strength, MPa	751.5	703.3	682.6	669	648.1
0.2% Yield Strength, MPa	551.6	469	448.2	427.5	400

CORROSION RESISTANCE

ALLOY	% MO	CCCT, °C (°F)	CPT, °C (°F)	PREN
316L	2.1	< -2.22 (28)	20 (68)	24
2205	3.1	20 (68)	49 (120)	35
904L	4.4	24 (75)	54.4 (130)	36
UNS S32760	3.5	42.2 (108)	82 (180)	41
AL-6XN	6.2	43.3 (110)	82 (180)	44
625	9	45 (113)	-	51
C22	13	-	-	64
C-276	15.5	54.4 (130)	> 103 (217)	67

SPECIFICATIONS

W.Nr.Number:

1.4501