## **E STEEL SDN BHD (891338-A)**



NO 3, Lorong Sungai Puloh 7/KU 6, Kawasan Perindustrian Sungai Puloh,42100 Selangor D.E Tel: 03-3292 8686 / 32928666 / 32928777

Fax: 03-3292 8383





SUS316Ti

Stainless Steel: Austenitic

(UNS S31635)

DIN: X6CrNiMoTi17-12-2

EN: 1.4571

## **GENERAL PROPERTIES**

SUS 316Ti stainless is a titanium-stabilized version of SUS316 molybdenum-bearing austenitic stainless steel. It is also known as DIN/EN designation No. 1.4571. The SUS316 alloys offer excellent resistance to general corrosion and pitting/crevice corrosion, which is better than the conventional chromium-nickel austenitic stainless steels such as SUS304. They also offer higher creep, stress-rupture and tensile strength at elevated temperature. SUS 316 stainless steel can be susceptible to sensitization – the formation of grain boundary chromium carbides at

temperatures between approximately 900 and 1500 °F (425 to 815 °C) – which can result in rapid corrosion. Reduced carbon SUS316L is resistant to sensitization; however, extended exposures in this temperature range will eventually result in sensitization of even the low carbon grade. Resistance to sensitization is achieved in SUS316Ti with titanium additions to stabilize the structure against chromium carbide precipitation, which is the source of sensitization. This stabilization is achieved by an intermediate-temperature heat treatment, during which the titanium reacts with carbon to form titanium carbides. This significantly reduces susceptibility to sensitization in service by limiting the formation of chromium carbides. Thus, the alloy can be used for extended periods at elevated temperatures without compromising its corrosion resistance.

Chemical composition: SUS316TI

JIC C4204		Elements %							
JIS G4304	C≤	Mn≤	P≤	S ≤	Si≤	Cr	Ni≤	Мо	Ti
SUS316Ti stainless	0.082.00	2 00	0.045	U U3U	1 50	16.00-	10.00-	2.00-	5*C%min
steel plate		0.045	0.030	1.50	18.00	14.00	3.00	J · C-70111111	

Stainless steel plate SUS316Ti Mechanical Properties:

Tensile Strength, MPa	Yield Strength, MPa	Elongation, %	Hardness, HRB
520min	205min	40 min	90 max

We are Malaysia Stainless Steel supplier with full range of Stainless Steel sheets, stainless steel round bar, stainless steel rod, stainless steel plate, 300 Series stainless steel, 400 series stainless steel, 253ma, sus301, sus304, sus304l, sus309, sus310, sus316ti, sus317, sus321, sus403, sus410, sus420, sus430, sus431, sus440c, sus630, sus904L, s31803, s32750, s32760, s31254, s320j4l, Nitronic30, Nitronic50, Nictronic60