

Code	X6CrNiMoTi17-12-2
US standard (AISI)	316Ti
Composition Alloying components [%]	<ul style="list-style-type: none"> ■ C: 0 - 0.08 ■ Cr: 16.50 - 18.50 ■ Mn: 0 - 2.00 ■ Mo: 2.00 - 2.50 ■ Ni: 10.50 - 13.50 ■ P: 0 - 0.045 ■ S: 0 - 0.015 (0.030*) ■ Si: 0 - 1.00 ■ Ti: 5 x C - 0.70 ■ Remainder: Fe
Stainless steel grade	A4
Density [g/cm ³]	8.0
Nickel migration [µg/(cm ² x week)] in artificial perspiration (pH 4.5)	<0.05
Yield point Rp0.2 [N/mm ²]	≥200
Tensile strength Rm [N/mm ²]	500 - 700
Corrosion resistance	<ul style="list-style-type: none"> ■ Very good ■ Resistant to acids, lyes and chlorides in medium concentrations as well as to quiet seawater
Machinability	medium - poor
Weldability	very good
Other properties	<ul style="list-style-type: none"> ■ Austenitic non-magnetic structure ■ Cannot be mechanically polished with satisfactory results ■ Suitability for electropolishing: good ■ For use in the temperature range -50 - 550°C
Main uses	<p>General applications involving higher levels of corrosive stress within the following sectors:</p> <ul style="list-style-type: none"> ■ Food industry ■ Pipeline construction ■ Oil industry ■ Shipbuilding ■ Construction industry ■ Chemical industry ■ Medical engineering and the pharmaceutical industry