

Brand name | Avesta® 254 SMO

Standards

Material No.	EN Designation	UNS	Alloy
1.4547	X1CrNiMoCuN20-18-7	S31254	254 SMO

Description

1.4547 / 254 SMO is an austenitic chromium-nickel-molybdenum stainless steel.

Special properties

Outstanding resistance to localized corrosion such as pitting and crevice corrosion, as well as to stress-corrosion. Acceptable seawater-corrosion.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.02	0.70	1.00	0.03	0.01
Cr %	Mo %	Ni %	N %	Cu %
19.5-20.5	6.00-7.00	17.5-18.5	0.18-0.25	0.50-1.00

Mechanical Properties  
20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R <sub>p</sub> ≥ N/mm <sup>2</sup>	Tensile strength R <sub>m</sub> N/mm <sup>2</sup>	Elongation A <sub>5</sub> ≥ %	Modulus of elasticity kN/mm <sup>2</sup>
250	300	650-850	35	200

Physical Properties 20°C

Density g/cm <sup>3</sup>	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm <sup>2</sup> /m
8	500	13	0.85

Suitable welding  
filler materials

1.4547

Application

Chemical industry, offshore, seawater desalination plant

Available forms for 1.4547  
/ ALLOY 254 SMO

Sheets/Plates	Bars	Tubes/Pipes	Fittings	Forged / cast parts	Finished part (drawing)
					