

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4580	X6CrNiMoNb17-12-2	316 Cb	S31640

Description

1.4580 / AISI 316 Cb is an austenitic chromium-nickel stainless steel with an increased molybdenum content.

Special properties

Resistant to a wide variety of marine environments, salts, dilute nitric, acetic and sulfuric acids.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.08	1.00	2.00	0.045	0.015
Cr %	Mo %	Ni %	Nb %	
16.5-18.5	2.00-2.50	10.5-13.5	10 x C	

Mechanical Properties 20°C

Hardness HB 30 ≤ HB	0.2% Yield strength R _p ≥ N/mm ²	Tensile strength R _m N/mm ²	Elongation A ₅ ≥ %	Modulus of elasticity kN/mm ²
190	205	510-740	35/30	200

Physical Properties 20°C

Density g/cm ³	Specific heat capacity J/kg K	Thermal conductivity W/m K	Electrical resistivity Ω mm ² /m
8	500	15	0.75

Suitable welding filler materials

1.4430; 1.4576

Application

Chemical industry

Available forms for 1.4580 / AISI 316 Cb

Sheets/Plates	Bars	Tubes/Pipes	Fittings
			