

1.4418

Standards

Material No.	EN Designation
1.4418	X4CrNiMo16-5-1

Description

1.4418 is a soft martensitic chromium-nickel-molybdenum stainless steel.

Special properties

Excellent corrosion resistance to aggressive media coupled with very good mechanical properties.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.06	0.70	1.50	0.04	0.015
Cr %	Mo %	Ni %	N %	
15.0-17.0	0.80-1.50	4.00-6.00	≤ 0.20	

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
320	550	760-980	16	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
7.7	430	15	0.8

Suitable welding filler materials

1.4430

Application

Mechanical engineering, arbors, components of pumps

Available forms for 1.4418 /

Bars	Forged / cast parts	Finished part (drawing)
		