

1.4922 / 1.4923

Standards

Material No.	EN Designation
1.4922 / 1.49	X20CrMoV 12-1 / X22CrMoV12-1

Description

1.4922 / 1.4923 is a high strength chromium stainless steel with molybdenum in addition.

Special properties

Due to its relatively low chromium content, the corrosion resistance of 1.4923, is somewhat limited, but sufficient to resist corrosion in rural and urban atmospheres, provided no chlorides or salts are present. 1.4922 / 1.4923 is resistant to steam.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
0.18-0.24	0.50	0.40-0.90	0.025	0.015
Cr %	Mo %	Ni %	V %	
11.0-12.5	0.80-1.20	0.30-0.80	0.25-0.35	

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 ≥ %	Resistant on air up to °C
270	600	800-950	14	600
Modulus of elasticity kN/mm ²				
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	460	27	0.6

Application

Pressure vessels and boilers, aerospace, reactor engineering, turbine

Available forms for 1.4922 / 1.4923 /

