

Brand name | SAF 2205®

Trade name | Alloy 2205, Duplex

Standards

Material No.	EN Designation	AISI/SAE	UNS
1.4462	X2CrNiMoN22-5-3	318 LN	S31803
Alloy			
2205			

Description | 1.4462 / AISI 318 LN is a duplex austenitic-ferritic chromium-nickel-molybdenum stainless steel.

Special properties | 1.4462 belongs to the DUPLEX-family. This grade has a good resistance against pitting and stress corrosion cracking. Unique combination of corrosion resistance, resistance to stress corrosion cracking, high tensile and yield strength.

Chemical Composition

C %	Si ≤ %	Mn ≤ %	P ≤ %	S ≤ %
≤ 0.030	1.00	2.00	0.035	0.015
Cr %	Mo %	Ni %	N %	
21.0-23.0	2.50-3.50	4.50-6.50	0.10-0.22	

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>
270	450	650-880	25	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
7.8	500	15	0.8

Suitable welding  
filler materials | 1.4462

Application | Chemical and petro-chemical industry, cellulose industry, seawater desalination

Available forms for 1.4462  
/ AISI 318 LN

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