

## Chemical Composition

C ≤%	Si ≤%	Mn ≤%	P ≤%	S ≤%
0.03	0.70	2.00	0.035	0.015
Cr %	Mo %	Ni %	N %	Cu %
24.0-26.0	3.00-4.00	6.00-8.00	0.20-0.30	1.00-2.50

## Description

1.4507 / Alloy F255 is a SUPER-DUPLEX chromium-nickel stainless steel with copper in addition.

## Special Properties

Excellent corrosion resistance in a wide variety of corrosive chemicals including sulphuric, phosphoric and nitric acids.

## Steel Grade

Alloy	UNS	Material No.	EN Designation
F255	S32520	1.4507	X2CrNiMoCuN25-6-3

## 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	550	760	25	190

## 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
7.85	500	18	0.95

## Suitable Welding Filler Materials

1.4507

## Application

Chemical industry, oil and petrochemical industry

## Available Forms for ALLOY F255

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