CORROSION AND HEAT RESISTANT STEEL

1.4501 (X2CrNiMoCuWN25-7-4)

Excellence in Specialty Steel

Material Designation

1.4501	DIN
S32760	UNS
F55	AISI

Standards

NORSOK M-630, MDS D57
ANSI/NACE MR0175/ISO 15156-3
ASTM A182, A276, A479
DIN EN 10088-3

Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N	W
min.	-	-	-	-	-	24,0	6,0	3,0	0,50	0,20	0,50
max.	0,030	1,00	1,00	0,030	0,010	26,0	8,0	4,0	1,00	0,30	1,00

Customer specific restrictions upon request

Properties

25% Cr-Austenitic-ferritic steel (super duplex) with excellent resistance against corrosion, especially in media containing chloride (PREN > 40). Good mechanical properties.

Delivery Condition

- Solution annealed (+AT)

Application Area

High-strength components in environments requiring resistance to crevice and pitting corrosion.

Typical Applications

- Chemical and petrochemical industry
- On- and offshore industry
- Piping and tank construction
- Pulp and paper industry

Mechanical Properties

Yield strength		Tensile strength		Elongation	Hardness	Impact toughness Charpy-V / - 46 °C	
[ksi]	[N/mm²]	[ksi]	[N/mm²]	[%]	[HBW]	[J]	[ft·lb]
≥ 80	≥ 550	≥ 110	≥ 750	≥ 25	≤ 310	≥ 45	≥ 33

Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Solution annealing (+AT)	1040 - 1120	Water

Quality

- ISO 9001
- ISO 14001
- ISO 50001
- Approvals acc. to standards like ABS, BV, DNVGL ...
- Customer specific approval certificates

Innovation

- Fully automated ultrasonic testing up to dia. 39.3'' (1000 mm)
- CO_2-reduction by innovative heat treatment solutions

Flexibility

- Product range from fine wire to forging
- Directly from stock close at hand

Individuality

- Dimensions
- Tolerances
- Surface qualities
- Delivery conditions

Your personal contact:

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