CORROSION AND HEAT-RESISTANT STEEL

X1NiCrMoCuN25-20-7 (1.4529)

Excellence in Specialty Steel

Material Designation

1.4529	DIN EN
N08926	UNS
N08367	UNS

Standards

DIN EN 10088-3
DIN EN 10222-5
DIN EN 10272
ASTM A479/A479 M
ASTM B649
ASTM B691

Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
min.	-	-	-	-	-	20,0	24,0	6,0	0,50	0,15
max.	0,020	0,50	1,00	0,030	0,010	21,0	25,5	7,0	0,75	0,25

Customer specific restrictions upon request

Properties

1.4529 is a super-austenitic steel with very good corrosion resistance. Its resistance to pitting and stress corrosion cracking is enhanced by its high molybdenum content (PREN > 40).

Delivery Condition

- solution annealed (+AT)

Application Area

Components for environmental media that place high demands on resistance to pitting and stress corrosion cracking.

Typical Applications

- Chemical industry
- Onshore and offshore industries
- Pipework and vessel construction
- Medical industry
- Decorative items & household goods

Mechanical Properties

Diameter d [mm]	Yield strength [N/mm²]	Tensile strength [N/mm²]	Elongation [%]		Hardness [HBW]	Impact toughness [J] Charpy-V	
	long.	long.	long.	trans.		long.	trans.
≤ 160	≥ 300	650 - 850	≥ 40	-	≤ 250	≥ 100	-
160 < d ≤ 250	≥ 300	650 - 850	-	≥ 35	≤ 250	-	≥ 60

Heat Treatment Guideline values acc. to DIN EN 10088-3

	Temperature [°C]	Cooling medium
Solution annealing (+AT)	1120 - 1180	Water, air

Quality

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

Innovation

- Fully automated ultrasonic testing up to dia. 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

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