

1.4841 (X15CrNiSi25-21)

Material Designation

1.4841 DIN EN 10095
S31400 UNS
314 AISI

Standards

DIN EN 10095
ASTM A276

Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Ni	N
min.		1,5	-	-	-	24,0	19,0	-
max.	0,20	2,5	2,0	0,045	0,015	26,0	22,0	0,11

Customer specific restrictions upon request

Properties

Stainless austenitic Cr-Ni-steel with excellent heat resistance and good mechanical properties at elevated temperatures. Scaling resistance up to 1150 °C in air. Resistant against chemical corrosion (PREN ≈ 24 - 29) up to 1100 °C.

The maximum operational temperature is lowered in carburizing or reducing atmospheres.

Delivery Condition

✘ solution annealed (+AT)

Application Area

High mechanical loads at elevated temperatures where resistance against scaling and corrosion is required.

Typical Applications

- ✘ Glass moulds
- ✘ Chemical and petrochemical industry
- ✘ General mechanical engineering
- ✘ Automotive industry

Mechanical Properties solution annealed (+AT), acc. DIN EN 10095

Yield strength [N/mm ²]	Tensile strength [N/mm ²]	Elongation [%]	Hardness [HBW]
≥ 230	550 - 750	≥ 30	≤ 223

Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Solution annealing (+AT)	1050 - 1150	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
- CO₂-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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