

1.4123 (X40CrMoVN16-2)

Material Designation

1.4123	DIN
S42025	UNS
S42000/Type 420 Mod	ASTM

Standards

DIN EN 10088-3
SAE AMS 5925 (chemical composition)
ASTM F899

Chemical Composition Mass-%

	C	Si	Mn	P	S	Cr	Mo	Ni	V	N
min.	0,37	-	-	-	-	15,0	1,50	-	0,20	0,16
max.	0,45	0,60	0,60	0,020	0,005	16,0	1,90	0,3	0,40	0,25

Customer specific restrictions upon request

Properties

1.4123 is a nitrogen-alloyed, hardenable stainless martensitic steel with good corrosion resistance.

The ESR-variant fulfills highest requirements towards homogeneity and cleanliness and offers outstanding grindability and polishability.

Delivery Condition

- ✂ annealed (+A) max. 255 HBW
- ✂ quenched and tempered (+QT) upon request

Application Area

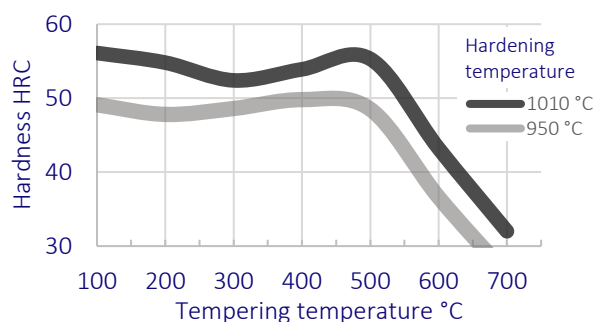
High demands on wear and corrosion resistance as well as on cutting edge retention.
High surface qualities.

Typical Applications

- ✂ Surgical instruments
- ✂ Fuel injections systems
- ✂ Cutting tools
- ✂ Ball and roller bearings

Heat Treatment Guideline Values

	Temperature [°C]	Cooling medium
Annealing (+A)	800 - 880	Furnace, Air
Quenching and tempering (+QT)	950 - 1050 (Hardening)	Oil, subzero treatment for hardening temperatures > 1020 °C (Risk for denitrification / nitridation)
	180 - 550 (Tempering)	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

Your personal contact:

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