TECHNICAL DATASHEET

420C – 1.4034 –X46Cr13
FT 00X – Indice 0

Martensitic stainless steel hardenable.
The corrosion resistance will depend on the quality of polishing.

APPLICATIONS	ADVANTAGES
Manufacture of dental and surgical instruments. Food industry applications	Good balance between hardness and corrosion resistance
STANDARDS	**SHAPES**
WERKSTOFF NR. 1.4034 EN 10088-3 ASTM F899 NF S94-090	**BAR** Diameter 4-220 mm Length 3000-3500 mm Tolerance Ø≤20 mm: h9 – Ø>20 mm: h11

➢ CHEMICAL COMPOSITION

%	C	Mn	P	S	Si	Cr	Ni	Fe
min	0.43	Max	Max	Max	Max	12.5	Max	Balance
max	0.50	1.0	0.040	0.030	1.00	14.5	1.00	

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➢ MECHANICAL PROPERTIES

Condition				Hardness
Annealed state	680°C			262 HB
After quench				≥ 53 HRc

➢ HEAT TREATMENT

Annealed	750-830°C for 2-4 hours then very slow cooling
Quenching	Quenching in water, air or gas: 1000-1050°C
Tempering	

➢ PHYSICAL PROPERTIES

Density (g/cm³)	7.7
Typical hardness (HRc)	53
Modulus of elasticity at 20°C (N/mm²)	215 x10³
Thermal conductivity at 20°C (W/m °C)	30
Specific heat (J/Kg °C)	460
Magnetic	YES

The information and technical data contained in this sheet are for information purposes only. Only the information written on our material analysis certificates will be official.