



# TECHNICAL DATASHEET

## 440A – 1.4109 – X65CrMo17 FT 00X – Version 0

Martensitic stainless steel hardenable.  
Erosion resistance is one of its main characteristics.  
Because it is high in carbon, 440A hardness can reach 56HRC according to the heat treatment.  
The corrosion resistance will depend on the quality of polishing.

APPLICATIONS	ADVANTAGES
Orthopaedics instrumentation and food industry	Good balance between hardness and corrosion resistance
STANDARDS	SHAPES
WERKSTOFF NR. 1.4109 ASTM F899 NF S94-090	<b>BAR</b>  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	0.60	Max	Max	Max	Max	16.0	Max	Balance
max	0.75	1.0	0.040	0.030	1.00	18.0	1.00	



## TECHNICAL DATASHEET

**440C – 1.4125 –X105CrMo17  
FT – Version 0**

### ➤ MECHANICAL PROPERTIES

Condition		Hardness
Annealed state	Heated to 850°C followed by slow cooling	230 HB
After quench		≥ 52 HRc

### ➤ HEAT TREATMENT

Annealed	843-870°C for 2-4 hours then very slow cooling
Quenching	Quenching in oil or air : 1000-1030°C
Tempering	

### ➤ PHYSICAL PROPERTIES

Density (g/cm <sup>3</sup> )	7.7
Typical hardness (HRc)	52
Modulus of elasticity at 20°C (N/mm <sup>2</sup> )	215 x10 <sup>3</sup>
Thermal conductivity at 20°C (W/m °C)	15,5
Specific heat (J/Kg °C)	460
Magnetic	YES

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