N360 / X30 / 1.4108

N360 / X30 / 1.4108: High-Hardness, Corrosion-Resistant Martensitic Stainless Steel

Properties of N360 / X30 / 1.4108

BÖHLER N360 is a martensitic stainless steel produced via a pressure electroslag remelting (P-ESR) process. This advanced metallurgy results in significantly improved corrosion resistance, toughness, and compressive strength compared to conventional Cr or CrMo steels:

- Excellent corrosion resistance
- High hardness and compressive strength (up to 60HRc)
- Superior toughness, even at low temperatures
- Outstanding wear resistance
- Excellent polishability

Applications of N360 / X30 / 1.4108

Typical applications:

- Aerospace industry (e.g. high-load bearing components)

- Medical technology (e.g. surgical instruments)

- Pharmaceutical and food processing (e.g. hygienic components)

- Plastics industry (e.g. wear-resistant tooling)

- Precision mechanics (e.g. ball screws, rolling bearings)

Specification Overview

Material number	1.4108
UNS	S42027
ASTM	F899
AMS	5898B
SEW	400

Physical Properties

Property	**Value**
Material Density	7.72 kg/dm^3
Thermal Conductivity	14.0 W/(m·K)
Specific Heat Capacity	430 J/(kg·K)
Electrical Resistivity	0.80 Ω·mm^2/m
Elastic Modulus	223 × 10^3 N/mm^2

Mechanical Properties

Typical values after heat treatment:

- Hardness: > 58 HRC
- Tensile strength, yield strength, elongation: available upon request

Chemical Composition (SEW)

C	Si	Mn	Cr	Mo	N	P	S	Ni
0,25 - 0,35%	max. 1,00%	max. 1,00 %	14,00- 16,00 %	0,85 - 1,10%	0,30 - 0,50%	max. 0,030%	max. 0,035%	max. 0,50%

Product Portfolio:

Round bar steel: - Ground: Ø 5–10 mm - Peeled: Ø 12.7– Ø 130 mm

Delivery condition: annealed

Additional machining stages available on request

All data without guarantee, provided for information only.