



SINOXX 4462 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SINOXX 4462	PK338	1.4462	-	X2CrNiMoN22-5-3	-

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.02	0.50	1.00	22.00	3.00	5.50	-	-	-

Description

Austenitic-ferritic steel (approx. 40-50% ferrite) with high stability against stress corrosion and stability in chlorine media. Very good welding characteristics. Very good pitting corrosion stability.

Applications

Chemical and oil processing industry. Highly resistant to stress corrosion in chlorine surroundings.

Physical properties (average values) at ambient temperature

Modulus of elasticity [$10^3 \times \text{N/mm}^2$]: 200

Density [g/cm^3]: 7.8

Thermal conductivity [W/m.K]: 16.0

Electric resistivity [$\text{Ohm mm}^2/\text{m}$]: 0.80

Specific heat capacity [J/g.K]: 0.45

Coefficient of Linear Thermal Expansion $10^{-6} \text{ }^\circ\text{C}^{-1}$

20-100°C	20-200°C	20-300°C
13.0	13.5	14.0

Hardening

Harden from a temperature of 1040-1100°C followed by water quenching.

Mechanical properties at ambient temperature

Condition: Annealed

Hardness: 185 HB

0.2% proof stress: $\geq 480 \text{ N/mm}^2$

Tensile strength: 680-880 N/mm^2

Elongation (A5): $\geq 25\%$

0.2 % proof stress in N/mm^2 vs. Temperature in $^\circ\text{C}$

50°C	100°C	150°C	200°C	250°C	280°C
410	360	335	310	295	285

Forging

Hot forming temperature: 1200-900°C, slow cooling in air.

Machinability

No data.

Forms manufactured: Please see the [Dimensional Sales Program](#).

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