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Sandvik 430

(Plate and sheet)

Sandvik 430 is a ferritic stainless steel with minimum 16% chromium. Due to its ferritic structure Sandvik 430 has a lower tensile strength, elongation and impact resistance than the austentic stainless steels. The proof strength is somewhat higher.

STANDARDS

- ASTM 430
- UNS S43000
- W.Nr. 1.4016

Product standards
ASTM A240, A480

CHEMICAL COMPOSITION (NOMINAL) %

C	Si	Mn	P	S	Cr	Ni
0.12	1.0	1.0	0.040	0.03	16-18	0.75

FORMS OF SUPPLY-FINISHES AND DIMENSIONS

Sheet and coil
Sheet and coil may be supplied as annealed and pickled, polished or in the bright-annealed condition
The size ranges available ex-mill are given below.

Thickness Range Max Width Finishes
0.7 - 1.50 mm 1219mm 2D, 2B & No4
2.0 - 3.00 mm 1500mm 2D & 2B

MECHANICAL PROPERTIES

At 20°C (68°F)

METRIC UNITS

Proof strength		Tensile Strength		Elong.
$R_{p0.2}$ [a)]		R_m		A [b)]
MPa	ksi	MPa	ksi	%
min	min			min
205	30	450	65	22

1 MPa = 1 N/mm^2
The hardness (Brinell) is approximately 183, (Rockwell B) 89

PHYSICAL PROPERTIES

Density 7.79 g/cm^3

Thermal conductivity at 20 ^{o}C 25 W/mK

Modulus of Elasticity 220 GPa

Magnetisability Yes

Specific Heat at 20 ^{o}C 460 J/kgK

Thernal Expansion between

- 20 & 200 ^{O}C 10.0 x 10^{-6}
- 20 & 400 ^{O}C 10.5 x 10^{-6}

DISCLAIMER:

Recommendations are for guidance only, and the suitability of a material for a specific application can be confirmed only when we know the actual service conditions. Continuous development may necessitate changes in technical data without notice. This datasheet is only valid for Sandvik materials.