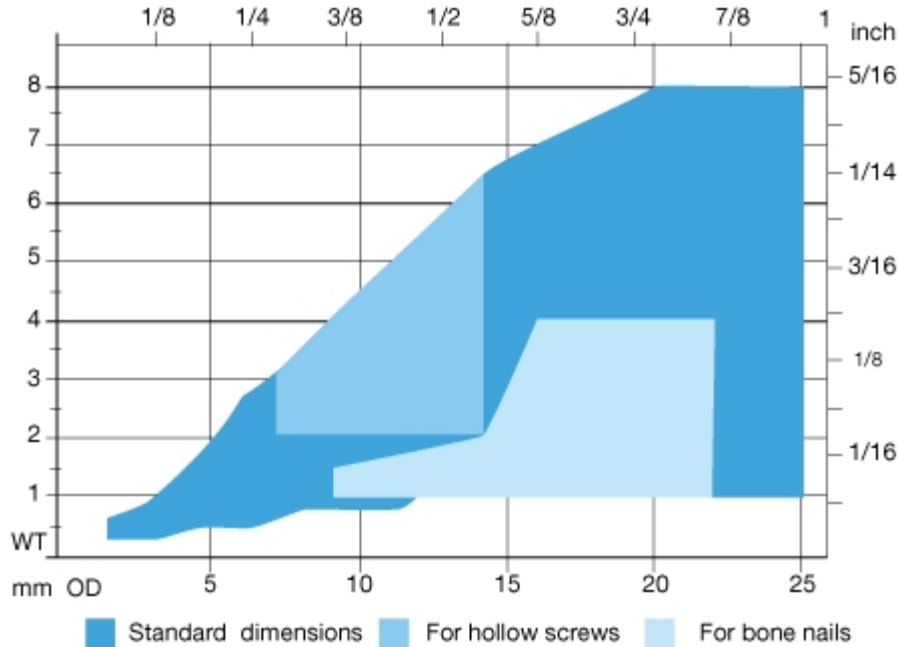


Tolerances

The tolerances for OD and ID, eccentricity and straightness are determined in accordance with customers' requirements.

Sandvik standard: OD and ID ± 0.04 mm (0.0016 in.); eccentricity max. 5%



Other product forms

Sandvik High-N can also be supplied as bar.

MECHANICAL PROPERTIES

Product	Condition	Tensile strength	Proof strength	Elongation A,		
		R _m	R _{p0,2}	%		
		MPa	ksi	MPa	ksi	
		min	min	min	min	typical
Wire		1500 max	217 max			
Bar	Annealed	740	107	430	62	35
Bar	Medium	1000	145	700	102	20
Bar	Hard	1100	160	1000	145	10
Tube, thick wall	Bright annealed	740	107	430	62	min 35
Tube, thick wall	Cold finished	1200	174	1100	160	min 10

Specific tensile requirements available on request

PHYSICAL PROPERTIES

Property		
Density (20 °C)	8.0 g/cm ³	0.29 lb/in ³
Modulus of elasticity, x10 ³ (20°C)	200 MPa	29.0ksi
Specific heat capacity (20°C)	485 J/(kg °C)	0.11Btu/(lb°F)

Property		
Thermal conductivity (20°C)	14W/(m°C)	8 Btu/(ft h °F)
Thermal expansion, x10 ⁻⁶ (30-100°C)	16.5 per °C	9.5 per °F

MACHINING

	Hardness	Cutting speed range	Feed range		
		SFM	m/min	IPR	mm/rev
Turning	250-400	885-145	270-45	0.002-0.024	0.05-0.6
Milling	250-400	855-245	260-75	0.002-0.016	0.05-0.4
Drilling	250-400	115-195	35-60	0.002-0.012	0.05-0.3

Disclaimer: Sandvik is not providing any products or services that are intended or may be construed to be recommending or otherwise advising on, in any manner, the design, suitability, appropriateness or effectiveness, from a medical/biological/safety perspective, of any medical material, instrument and/or medical device.