

# Steel 1.2510 / 100MnCrW4 / SKS3, annealed

Alternative Designations	Key Features
O1 (AISI)   SKS3 (JIS)	Durable • Wear-resistant • High strength

## Description

Steel 100mncrw4 is a high-carbon steel that is often used in the manufacturing of blades and other cutting tools. The steel is known for its durability and resistance to wear. The steel is also easy to sharpen, making it a good choice for tools that will need to be regularly maintained. It is typically used in applications where high levels of wear resistance are required, such as in cutting tools for metal.

Mechanical Properties	Chemical Composition
Yield strength350 – 550 MPa	Al- N-
Tensile strength650 – 880 MPa	Bi- Nb-
Elongation at break8 – 25%	C0.90 – 1.05%Ni-
Hardness34 – 64	Cd- O-
Module of elasticity193 GPa	Co- P0.035%
	Cr0.50 – 0.70%Pb-
	Cu- S0.035%
	Fe- Si0.15 – 0.35%
	H- Sn-
	Mg- Ti-
	Mn1 – 1.2%V0.05 – 0.15%
	Mo- Zn-
Physical Properties	
Density7.75 g/cm³	
Electrical conductivity3.125 m/Ω · mm²	
Coefficient of thermal expansion10 K-1 · 10-6	
Thermal conductivity25 W/m · K	
Specific heat capacity460 J/kg · K	

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit [Materialdatacenter.com](https://Materialdatacenter.com) for further information on this material.