Data Sheet

Steel 1.0330 / DC01

Alternative Designations

10130 (EN) | A1008 (ASTM) | G3141 (JIS) | 3574 (ISO)

Key Features

Low-carbon content • Ductile • Good weldability • Low strength

Description

It is a non-alloy cold-rolled steel with very low carbon content. It is often used in the automotive industry and for making electronic components. The low carbon content of this steel makes it very easy to work with. It can be welded, brazed and soldered without any issues. It is also very ductile, meaning it can be easily formed into different shapes. This makes it ideal for use in a wide range of applications. It is not as strong as some other steel grades, so it is not suitable for use in applications where high levels of strength are required.

Mechanical Properties

Yield strength	140 – 280 MPa
Tensile strength	270 – 410 MPa
Elongation at break	28%
Hardness	105
Module of elasticity	200 GPa

Physical Properties

Density	700 kg/dm³
Electrical resistivity	0.34 Ω mm²/m
Coefficient of thermal expansion	21 K-1 · 10-6
Thermal conductivity	14.3 – 31.2 W/m · K
Specific heat capacity	112 J/kg · K

Chemical Composition

Al	-	N	-
Bi	-	Nb	-
C	0.12%	Ni	-
Cd	-	O	-
Co	-	P	0.045%
Cr	-	Pb	-
Cu	-	S	0.045%
Fe	-	Si	-
H	-	Sn	-
Mg	-	Ti	-
Mn	0.6%	V	-
Mo	-	Zn	-

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.