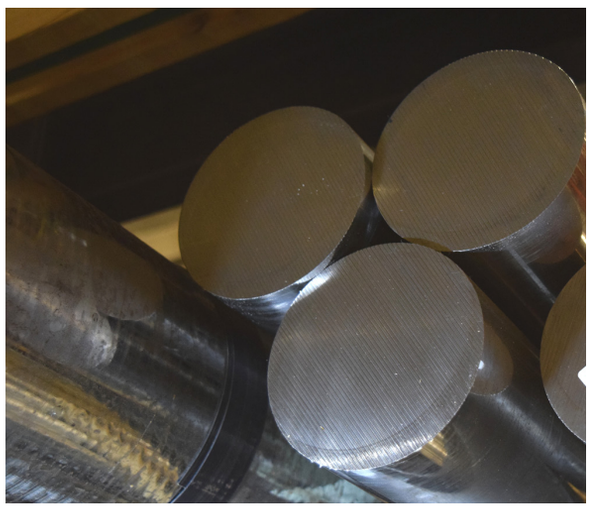
D2

Product Datasheet

Tool Steel

High Carbon, High Chromium Steel

D2 is ideal for use in applications where high abrasion and wear resistance is required.



D2 tool steel is a raw material used in applications where improved toughness is required. The alloy benefits from superior wear resistance combined with higher compressive strength. Once hardened, the alloys high chromium content gives the material improved corrosion-resistant characteristics. As a high wear and abrasion resistant steel, D2 offers a hardness range of 55 - 62 HRC. Classed as a high-carbon, high-chromium tool steel, D2 benefits from air hardening and finds use in a variety of engineering applications including heavy-duty press tools, punches, swaging dies, general-purpose dies, gauges and blanking tools.

Key Features

- High Compression Strength
- Low Distortion
- High Abrasion & Wear Resistance
- Heat Treatable
- Mild Corrosion Resistance

Applications

- Knifes
- Punches & dies
- Thread rollers
- Coining
- Heavy duty press tools

Chemical Composition (weight %)

	C	Mn	Si	Co	Cr	Mo	V	P	Ni	Cu	S
Min	1.4				11.0	0.7					
Max	1.6	0.6	0.6	1.0	13.0	1.2	1.1	0.03	0.3	0.25	0.03

Physical Properties

	@ 20°C	@ 200°C	@ 400°C
Density (kg/dm³)	7.70	7.65	7.60
Coefficient of thermal expansion (per °C from 0°C)	-	11.0 x 10-6	10.8 x 10-6
Thermal conductivity (cal/cm.s °C)	40.9 x 10-3	50.4 x 10-3	55.2 x 10-3
Specific heat (cal/g °C)	0.110		
Modulus of elasticity:			
Kp/mm²	19 700	19 200	17 650
N/mm²	193 000	188 000	173 000

We stock D2 tool steel in round bar, flat bar, square bar and plate