Tool steel A2 | 1.2363 | X100CrMoV5-1- Annealed state

Tool Steel A2 is air-hardening tool steel for punches and dies.

Mechanical properties

Ultimate tensile strength	670 - 710 MPa
Yield strength	345 - 350 MPa
Young's modulus (modulus of elasticity)	190 GPa
Elongation at break	21 %

Physical properties

Magnetism	Magnetic
Weldability	Poor

Thermal properties

Maximum service temperature	195 - 245 °C
Thermal expansion coefficent	10.5 - 11 10^-6/ºC
Thermal conductivity	36.1 - 39 W/(m·°C)

Electrical properties

Electrical resistivity	40.7 - 56.2 µΩ*cm

Post treatments

Post-Processing	Hardening & Annealing
Anodizing compatibility	Not suitable

Common applications

Cold-forming dies	

Cutting & Shearing tools	
Die casting and molding dies	

Tool Steel A2 CNC Machining Applications & Parts

Tool Steel A2 is an air-hardening, medium-alloy cold work tool steel that offers an excellent balance of wear resistance, toughness, and dimensional stability during heat treatment. Its good machinability and relatively low distortion make it a popular choice for various precision tooling applications.

Typical Parts We Machine from Tool Steel A2:

- **Precision Tooling:** Jigs, fixtures, gauges, measuring tools
- **Stamping Dies:** Punching tools, blanking dies, forming dies
- **Industrial Blades:** Cutting blades, slitter knives, industrial knives

Our Machining Advantage:

We utilize optimized machining parameters and specialized tooling to process A2 tool steel, ensuring minimal distortion and excellent dimensional accuracy for critical tooling components that require reliable performance.

Get an Instant Quote for your custom Tool Steel A2 parts today.