Alloy steel 1215 | EN1A | 1.0715

Alloy Steel 1215 is a free-machining grade for high-volume CNC parts.

Mechanical properties

Ultimate tensile strength	355-370 MPa
Yield strength	230 MPa
Young's modulus (modulus of elasticity)	190 - 210 GPa
Elongation at break	18-26 %

Physical properties

Corrosion resistance	Moderate to Poor
Magnetism	Semi-Magnetic
Weldability	Poor

Thermal properties

Thermal expansion coefficent	11.5 - 13.9 10^-6/ºC
Thermal conductivity	51.9 W/(m·°C)

Electrical properties

Electrical resistivity	17.4 µΩ*cm

Post treatments

Post-Processing	Cold working
Anodizing compatibility	Not suitable

Common applications

Marine engineering	
Furnaces and gas turbines	

Chemical processing plants	
Nuclear power plants	
Boiler and pressure vessels	

Alloy Steel 1215 (EN1A | 1.0715) CNC Machining Applications & Parts

Alloy Steel 1215 is a low-carbon, free-machining steel specifically designed for high-speed CNC production. It offers excellent machinability, producing small, broken chips and delivering superb surface finishes, making it ideal for high-volume projects.

Typical Parts We Machine from Alloy Steel 1215:

- **High-Volume Fasteners:** Screws, bolts, nuts, studs, washers
- **Automotive Components:** Bushings, fittings, non-critical structural parts
- **General Hardware:** Connectors, pins, shafts, knobs

Our Machining Advantage:

We leverage the superior free-cutting properties of 1215 to achieve extremely high production rates, minimal tool wear, and exceptional dimensional consistency for cost-effective mass production.

Get an Instant Quote for your custom Alloy Steel 1215 parts today.