



Precision Fasteners from Steel Bright Bars

Description

At **Steelmet Industries**, we understand that the smallest components often bear the biggest responsibilities. Our **cold drawn steel bright bars** form the foundation for **high-performance bolts, screws, nuts, washers, and rivets** that hold critical infrastructure together — from skyscrapers to spacecraft.

Why Precision Matters in Fastener Manufacturing

Modern fasteners must meet exacting standards:

- **Consistent thread formation** for perfect engagement
- **Reliable tensile strength** under dynamic loads
- **Corrosion resistance** for harsh environments
- **Dimensional stability** across temperature variations

Our bright bars deliver:

- **Surface finish of $0.8-1.6 \mu\text{m Ra}$** for smooth thread rolling
- **Diameter tolerance of $\pm 0.02\text{mm}$** for precision fits
- **Hardness range of 22-32 HRC** (ideal for cold forming)
- **Custom diameters** from 3mm to 120mm

Key Fastener Applications

1. Structural Fasteners

- **ASTM A325/A490 structural bolts** for steel construction
- **High-strength anchor bolts** (Grade 8.8/10.9)

- Seismic-resistant moment connection bolts

2. Automotive Fasteners

- Engine mounting bolts (ISO 898-1 Class 10.9)
- Wheel studs and hub bolts
- Transmission housing screws

3. Specialized Fasteners

- Aerospace rivets (NASM/MS standards)
- Marine-grade stainless fasteners (AISI 316)
- High-temperature alloy fasteners for power plants

Technical Specifications

Grade	Standard	Tensile Strength	Yield Strength	Key Applications
C45	ISO 898-1	800-1000 MPa	640 MPa min	General purpose bolts
40CrMo4	ASTM A193 B7	1000-1200 MPa	850 MPa min	High-temp fasteners
316 Stainless	ASTM A193 B8M	515 MPa min	205 MPa min	Marine/chemical plants
10B21	SAE J429	900 MPa min	700 MPa min	Cold-formed screws

Discover our fastener-grade bright bars at [Steelmet Industries's website](#) or request samples for your next production run.

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Steels, Free Cutting Steels, Stainless Steels*