



## SAE1018 Cold Drawn Square Bars – A Preferred Choice for Precision, Strength & Finish

### Description

Steelmet Industries offers **SAE1018 Cold Drawn Square Bars** with clean surface finish, tight dimensional tolerances, and superior machinability. These bright bars are ideal for manufacturing components that demand moderate strength with excellent weldability and formability. SAE1018, a medium-low carbon steel grade, is widely chosen in industries like:

- **Automotive** (shafts, pins, spacers)
- **Machinery & Equipment** (machine parts, jigs, tools)
- **Fabrication & Construction** (frames, supports, and brackets)
- **General Engineering**

The **cold drawing process** enhances strength and surface quality while maintaining good ductility and consistency across batches.

### • Typical Size Range Offered

- **Squares** from **10mm to 75mm**
- Custom sizes available on request

## • Mechanical & Metallurgical Highlights

- **Yield Strength:** ~370~410 MPa
- **Tensile Strength:** ~440~480 MPa
- **Elongation:** ~15~20%
- **Hardness (HBW):** ~125~180
- **Machinability:** Excellent
- **Weldability:** Very Good

## © Related Grades and Variants

Grade	Carbon %	Manganese %	Sulphur/Phosphorus	Notes
SAE1015	0.13~0.18	0.30~0.60	~0.040 / ~0.040	Slightly softer, better formability
SAE1018	0.15~0.20	0.60~0.90	~0.040 / ~0.040	Balanced properties; general purpose
SAE1020	0.18~0.23	0.30~0.60	~0.040 / ~0.040	Higher strength, slightly less ductile
C15E (EN)	~0.14~0.19	0.40~0.70	~0.035	EN equivalent to SAE1015/1018
C20E	~0.17~0.23	0.30~0.60	~0.035	Closest EN grade to SAE1020

## • Frequently Asked Questions

### Q1. Is SAE1018 suitable for welding and bending?

Yes. SAE1018 is highly weldable and can be bent or formed without cracking due to its balanced carbon content.

### Q2. How is cold drawn steel better than hot rolled steel?

Cold drawn steel has tighter dimensional tolerances, a cleaner surface, improved strength, and is better suited for machining.

### Q3. Is any heat treatment required for SAE1018 cold drawn squares?

Generally, no. It can be used as-is. However, annealing or stress relieving can be performed based on the application.

## Category

1. SAE:1018

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## Tags

1. 1018 steel India
2. bright steel squares
3. cold drawn square steel
4. machinable steel bars
5. machine grade steel
6. SAE1018 square bars
7. Steelmet

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## Author

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*Steelmet Industries - Bright Bars, Alloy  
Steels, Free Cutting Steels, Stainless Steels*