

C45 Cold Drawn Bright Steel Round Bars â?? Versatile Medium Carbon Steel for Precision Use

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

Description

C45 steel is a widely used medium carbon steel known for its **balance of strength, toughness, and machinability**. When cold drawn into **bright bar form**, it gains improved surface finish, dimensional tolerance, and enhanced mechanical properties, making it ideal for use in **precision engineering, machinery components, and automotive applications**.

At **Steelmet Industries**, we supply **C45 cold drawn bright steel round bars** in a wide range of sizes, with the ability to deliver **custom lengths**, **special profiles**, and **critical quality requirements** on request.

Key Features of C45 Bright Steel Bars

- **Standard:** IS:1570 / EN ISO 683-1 / DIN 17200
- **Grade:** C45
- **Form:** Cold Drawn Bright Round Bars
- **Size Range:** As per requirement â?? up to Dia 100mm
- **Condition:** Cold drawn + Annealed / Cold drawn + Spherodized Annealed / Cold drawn + Stress Relieved

- **Surface Finish:** Bright, peeled or turned finish
- **Dimensional Tolerance:** Typically h9, h11 or as specified
- **Machinability:** Good in annealed or normalized condition
- **Weldability:** Fair â?? preheating recommended
- **Heat Treatable:** Yes â?? can be hardened and tempered

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Typical Applications

C45 bright steel bars are highly versatile and used in:

- **Automotive Components:** Axles, pins, shafts, and connecting rods
- **Machinery:** Gears, bolts, guide rods, jigs & fixtures
- **Precision Engineering:** Tooling, base plates, fasteners
- **General Fabrication:** Forging stock, support structures
- **Hydraulics & Pneumatics:** Cylindrical parts, pistons

Its combination of workability, strength, and cost-effectiveness makes C45 ideal for small to medium-sized mechanical components.

Related Sections and Products Available

Steelmet Industries also offers:

- **C45 Cold Drawn:** Squares, Flats, Hexagons

- **Peeled / Turned C45 Bars**
- **Forged C45 Bars** for larger diameters
- **Cut-to-Length Services**
- **Tailor-made profiles** â?? including special shapes

Explore What We Do for more on our processing capabilities.

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Equivalent Grades of C45

Standard	Equivalent Grade
ISO	C45
DIN	C45 (1.0503)
EN	C45E, C45R
BS	080M46
AISI / SAE	1045
JIS	S45C
GOST	45
IS	C45 (IS:1570)
GB (China)	45
AFNOR	XC48

Note: Equivalents are based on chemical composition. Mechanical properties may differ by condition or standard.

See more:

- DIN Specs
- SAE Specs
- BS970-1

Why Choose Steelmet for C45 Bright Bars?

- â? **Superior Dimensional Accuracy** from cold drawing
- ð??§ **Custom Machining Options & Profiles** available
- ð??¦ **Sizes** from small diameters up to 100mm
- ð?§¾ **Documentation:**
  - MTCs
  - Internal lab reports
  - Third-party inspection (on request)
  - NABL lab reports
  - Lorry receipts for traceability
- â•±ï¸• **Reliable Scheduling and Timely Delivery**
- ð??• **Domestic and Global Reach**
- ð?? ï¸• **Technical Expertise for Custom Requirements**

Read our Quality Policy to understand our standards in manufacturing and documentation.

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Frequently Asked Questions â?? C45 Cold Drawn Bright Bars

Q1: Whatâ??s the advantage of cold drawn bright bars over hot rolled bars?

A: Cold drawing enhances surface finish, dimensional control, and mechanical properties â?? ideal for precision machining.

Q2: Can C45 be heat treated?

A: Yes, C45 is suitable for hardening and tempering, improving hardness and tensile strength.

Q3: What tolerances are possible in C45 bright bars?

A: h9, h10, h11 tolerances are common. Closer tolerances available on request.

Q4: Do you offer custom cut-to-length bars?

A: Yes, we provide cutting services as per your job requirements.

Q5: Are test certificates and inspection reports available?

A: Yes. Steelmet provides complete traceability and documentation, including MTCs and third-party reports.

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Enquire Now for C45 Cold Drawn Bright Steel Bars

ð??? **Call:** 0712-2728071 (India) | +91-712-2728071 (International)
ð??• **Website:** www.steelmet.in
ð??¨ **Enquiry Form:** Click here to enquire

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