

EN8 Hot Rolled Black Square Bars â?? 16mm to 150mm â?? Tough Medium Carbon Steel for Engineering Use

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

Description

EN8, as per **BS970:1955**, is a widely used medium carbon steel offering an ideal balance between strength, hardness, and machinability. At **Steelmet Industries**, we supply **EN8 Hot Rolled Black Square Bars** in a comprehensive size range from **16mm to 150mm**, serving diverse sectors such as heavy engineering, agriculture, tool making, and automotive component manufacturing.

Hot rolled square bars provide a robust starting material for forgings, machine bases, structural applications, and heavy-duty components where tight dimensional tolerances are not critical in the as-supplied condition.

Key Technical Details

- **Standard:** BS970:1955
- **Grade:** EN8
- **Shape:** Square (Hot Rolled, Black Finish)
- **Size Range:** 16mm to 150mm
- **Condition:** As Rolled / Annealed (on request)
- **Finish:** Black surface with mill scale

- **Hardness:** ~180â??230 BHN (As Rolled)
- **Machinability:** Moderate
- **Heat Treatment:** Suitable for hardening and tempering
- **Weldability:** Limited â?? Preheat recommended

Applications of EN8 Black Squares

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- **Forgings, shafts, and levers**
- **Machine tool frames and plates**
- **Bushes, clamps, and guide blocks**
- **Agricultural and construction equipment**
- **Heavy-duty tools and dies**

Advantages of EN8 Hot Rolled Squares

- **Good strength and toughness balance**
- **Cost-effective for structural or forging use**
- **Readily available in multiple sizes**
- **Suitable for hardening and further machining**
- **Durable material for rugged environments**

Also Available from Steelmet Industries

- EN8 in **Rounds, Hexagons, and Flats**
- **Cold Drawn Bright Squares** for tighter tolerances
- Custom supply in **cut lengths** and bulk packaging
- Higher-purity **EN8D variant** on request
- Steel bars per **EN8, EN9, C45, SAE1045, 1040, S45C**

Explore our manufacturing capabilities at What We Do

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Global Grade Equivalents for EN8

Standard	Equivalent Grade
AISI / SAE	1040 / 1045
EN (New)	C45E / C40E (EN10083)
DIN	CK45 / 1.1191
ISO	C45
JIS	S45C
GOST	45
IS	IS 1570 C45
BS (Old)	EN8
BS (New)	080M40
GB (China)	45#

Note: Equivalent grades listed above are based on similar chemical composition. Users should verify exact mechanical properties and applications before substitution. For more, see BS970:1955 Specification.

Steelmet Industries â?? Consistency You Can Count On

- ð??© Wide size range â?? **16mm to 150mm** square

- â??ï¸• **Custom lengths** and **cut-to-size** services
- ð??? **Documentation** support â?? MTCs, TCs, lorry receipts, inspection reports
- ð??? **Scheduled delivery** support for industrial projects
- ð??• Serving **India and international markets** since decades
- ð?? ï¸• Trusted for **engineering-grade steels**

See our Quality Policy and explore other Specifications

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Frequently Asked Questions â?? EN8 Black Square Bars

Q1: What is the surface condition of EN8 hot rolled black squares?

A: These bars have a black oxide layer (mill scale) from the hot rolling process, suitable for rough machining or forging applications.

Q2: Are EN8 black squares supplied annealed?

A: As standard, they are hot rolled. Annealing or normalizing can be arranged upon request for better machinability.

Q3: Can I get third-party inspection or test certificates?

A: Yes. Upon prior agreement, Steelmet Industries can supply third-party inspection reports, internal QC reports, and MTCs.

Q4: Is EN8 black square weldable?

A: It is weldable with pre-heating and post-weld treatment. Welding is not as straightforward as low-carbon steels.

Q5: What sizes are available ex-stock?

A: Sizes from **16mm to 150mm square** are commonly available. Custom requirements can also be produced.

Enquire Today

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ð??? **International:** +91-712-2728071
ð??© **Enquiry Form:** Click here

Categorie

1. BS970 1955 EN8 Steel and variants

Tags

1. Black Square Bars
2. EN8 080M40
3. EN8 Bar Manufacturer
4. EN8 Black Steel
5. EN8 Square Bars
6. Forging Steel
7. Medium Carbon Steel India
8. Square Section Steel
9. Structural Steel Bars

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