



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

iet Industri 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 assupplied 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 a?? Preheat recommended

# **Applications of EN8 Black Squares**

- Machine tool frames and plates
- Bushes, clamps, and guide blocks
- ries Bright Bars, Alloy
  ng Steels, Stainless Steels 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

# 

CK45 / 1.1191 DIN

ISO C45 S45C JIS

**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
- ŏ??? **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

# Frequently Asked Questions a?? 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 inless Steels 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 lowcarbon 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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#### Category

1. BS970 1955 EN8 Steel and variants

#### **Tags**

- 2. EN8 080M40
- 1. Black Square Bars
  2. EN8 080M40
  3. EN8 Bar Manufacturer
  4. EN8 Black Steel

  India

  Steels

  India

  Steels

  Stainless Steels

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