



## EN8 Black Hexagons 20mm to 80mm Tough & Machinable Carbon Steel Bars

EN8 Black Hexagons

EN8 (BS970:1955) is a **medium carbon steel** with good tensile strength and machinability, making it highly popular for general engineering applications. In **black hexagon form**, it offers strength and form factor ideal for **wrench flats, bolt heads, spanners, shafts**, and more.

Steelmet Industries supplies **EN8 Black Hexagon bars** in the size range of **20mm to 80mm A/F**, with excellent control over dimensions, surface finish, and chemistry—ideal for machining and mechanical use.

## Key Features of EN8 Black Hexagons

- **Standard:** BS970:1955
- **Grade:** EN8
- **Form:** Hot Rolled Black Hexagons
- **Size Range:** 20mm to 80mm A/F (Across Flats)
- **Condition:** As Rolled / Normalized / Annealed
- **Tensile Strength (UTS):** 550–650 MPa (typically)

- **Yield Strength:** 280-360 MPa
  - **Elongation:** ~16-20%
  - **Hardness:** 160-220 BHN (approx.)
  - **Machinability:** Good
  - **Weldability:** Fair - Preheating recommended
  - **Heat Treatment:** Hardenable by quenching and tempering
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## Typical Applications of EN8 Hexagon Bars

- Manufacturing of **spanners, wrenches, bolts, and fasteners**
  - **Drive shafts, machine keys, and axles**
  - **Jigs, fixtures, tool holders, and connecting rods**
  - **Engine parts, hubs, bushings, and gears**
  - Construction and heavy-duty engineering components
  - Suitable for further heat treatment if higher strength is needed
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## Alternate Supply Options & Related Products

Steelmet Industries can also supply:

- **EN8 Rounds, Squares, and Flats**

- Cold Drawn Bright Bars in EN8
- EN8D for higher purity and impact resistance
- Hexagons in EN1A, EN9, EN19, C45, and SAE1045 grades
- Cut-to-length supply based on customer requirements
- Heat treated or normalized bars available on request

Learn more about [What We Do](#).

## Global Equivalents of EN8 (BS970:1955)

Standard	Equivalent Grade
AISI / SAE	1040 / 1045
EN (New)	C40E / C45E (EN10083)
DIN	CK45 / 1.1191
ISO	C45
JIS	S45C
GOST	45
IS	1570 C45 / IS:1875 C45
BS (Old)	EN8
BS (New)	080M40
GB (China)	45#

*Disclaimer: Always confirm equivalency based on chemical & mechanical properties.*

View [BS970:1955 Standard](#) and [DIN Specifications](#).

## Why EN8 Hexagons from Steelmet Industries?

- **Size Range:** 20mm to 80mm A/F with tight tolerances
- **Cut-to-length or long bar supply**

- **Custom machining and prep options possible**
- **Bundled packaging and identification tags**
- **Timely, scheduled deliveries across India & exports**
- **Third-party inspections, MTCs, test reports available**
- **Export-capable with multilingual documentation**

See our commitment to [Quality](#).

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## Frequently Asked Questions about EN8 Black Hexagon Bars

### Q1: What are EN8 black hexagons used for?

A: EN8 hexagons are used for spanners, bolts, shafts, mechanical linkages, and fasteners that require medium strength and machinability.

### Q2: Can EN8 hexagons be heat treated?

A: Yes. EN8 is hardenable by oil quenching and tempering. It can be normalized or annealed before further processing.

### Q3: Are bright EN8 hexagons better than black ones?

A: Bright bars have tighter tolerances and better surface finish, but black hexagons are more cost-effective for heavy-duty and hot-machined parts.

### Q4: Is EN8 weldable?

A: Yes, with preheating. Its medium carbon content requires proper procedures to avoid cracking.

### Q5: Do you supply specific cut lengths or custom sizes?

A: Yes. Steelmet can supply custom cut lengths and sizes with advance notice and mutual agreement.

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## Call to Action - Enquire Today

