

EN8D / 080A42

C43E 1.1189 To chemical analysis

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

EN8D is a medium carbon steel to chemical analysis specification (080A42). Similar in strength to EN8 with tighter chemical composition limits. Used for bolts, studs and fasteners where chemical analysis certification is specified.

TYPICAL APPLICATIONS

- High-tensile bolts and studs
- Threaded fasteners
- General machined components

SUPPLY & PROCESSING

Supply: Bright round bar 6-150mm.
Condition: Cold drawn bright bar normalised.
Weldability: Fair. Preheat 150-250C.
Machinability: Good. 65-95 m/min.
Certification: 2.2 Test Report (chemical analysis).

GRADE EQUIVALENTS

Standard	Designation
BS 970:1991 (withdrawn)	080A42
Nearest EN equivalent	C42E / C45E (BS EN 10083-2)
AISI/SAE	1042 / 1045
DIN	C42 / 1.0540
ISO	C42E

CHEMICAL COMPOSITION (% by weight)

Designation	C	Si	Mn	P max	S max
080A42	0.40–0.45	0.10–0.40	0.60–1.00	0.05	0.05

MECHANICAL PROPERTIES

Condition	Tensile Rm (N/mm ²) approx	Hardness HB approx
Bright Drawn (normalised)	~570–720	~170–210

Indicative values. Properties vary by section size and heat treatment condition. Confirm with Parkside Steel.

TO ORDER / GET A QUOTE Call: 01623 687 660 Email: sales@parksidesteel.uk.com Online: parksidesteel.co.uk/quote No minimum order. Same-day collection available.

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