

EN32B / 080M15

C15 1.0401 — Low Carbon Mild Steel — to chemical analysis specification

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

080M15 is a general-purpose low carbon mild steel. Readily weldable and generally used where heavy stresses and heat treatment are not involved. Supplied to chemical analysis specification only — no mandatory mechanical test certificate. Very commonly available in a wide variety of shapes and sizes, and is a go-to grade for many machined and mechanical components. Functionally equivalent in composition to 070M20 (EN3B) and 210M15 (EN32M) but without the mandatory mechanical properties requirement.

TYPICAL APPLICATIONS

- Lightly stressed shafts, spacers and hubs
- Bushings and bolts
- Brackets, pins, linkages and baseplates
- Welded and riveted structures
- General mechanical components
- Parts for fabrications
- Forgings, machine parts and hot pressings

SUPPLY & PROCESSING

Supply forms: Rounds 3–200mm, Squares 4–150mm, Flats 12×3mm to 300×25mm, Hexagons (limited)

Imperial sizes: Rounds 1/8"–8", Squares 3/16"–6", Flats 1/2"×1/8" to 12"×1"

Condition: Bright Drawn, Bright Turned or Centreless Ground depending on size and profile

Weldability: Excellent — no preheat required on standard sections

Machinability: Good — machines at reasonably high speeds with good surface finish

Certification: 2.2 Test Report (chemical analysis only).

Mechanical properties not required for this grade.

Note: Some producers include mechanical properties as a matter of course, which may allow crossover to 210M15 or 070M20.

MATERIAL IDENTIFICATION — BAR-END COLOUR CODE

Profile	Colour Code
Rounds, Squares, Hexagons	BLUE
Metric Bright Flats	WHITE

GRADE EQUIVALENTS

Standard	Designation
Current — PD 970:2005	080M15
BS 970:1991 (Withdrawn)	080M15
PD 970:2005 (related)	080M15 / 210M15
PD 970:2005 (related)	070M20
BS EN 10277:2018	S235JRC / 1.0122
BS EN 10277:2018	C16 / C16E / C16R
BS EN 10277:2018 Number	1.0407 / 1.1148 / 1.1208
AISI / SAE	1016
UNS	G10160

CHEMICAL COMPOSITION (% by weight, values are maxima unless stated)

Designation	C	Si	Mn	P max	S max
PD 970:2005 — 080M15	0.13–0.18	0.10–0.40	0.70–0.90	0.035	0.035

Incidental additions: Cr 0.40% max, Ni 0.40% max, Cu 0.40% max, Mo 0.10% max.

NOTE ON MECHANICAL PROPERTIES

Mechanical properties are NOT required for this grade of steel. Where supplied as a crossover to 210M15 (EN32M) or 070M20 (EN3B) it is generally denoted To Analysis Only. Many producers will however include mechanical properties as a matter of course, which may allow a full match to 210M15 or 070M20. Please inform your sales contact at time of enquiry if clarification is needed.

TO ORDER / GET A QUOTE Call: 01623 687 660 Email: sales@parksidesteel.co.uk Online: parksidesteel.co.uk/quote No minimum order. Same-day collection available.	PARKSIDE STEEL (STOCKHOLDERS) LTD Byron House, 4 Willow Drive Sherwood Park, Annesley Nottinghamshire NG15 0DP ISO 9001 BSI FS 86692 Est. 1977
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