

EN32M / 210M15

C15E 1.1141 — with mechanical test certificate

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

EN32M is a low carbon case hardening steel supplied to BS 970 designation 210M15, with a mechanical test certificate confirming tensile and impact properties. After carburising and hardening it develops a hard case (typically 58-63 HRC) over a soft ductile core. The mechanical certification makes it suitable for specification-driven procurement where a test certificate is mandatory.

TYPICAL APPLICATIONS

- General case hardening applications
- Small gears and sprockets
- Camshafts
- Light-duty gearing
- Pins and bushes
- Worm gears

SUPPLY & PROCESSING

Supply: Bright round bar 3-100mm. Hexagon bar.
Condition: As-drawn. Carburise and harden after machining.
Weldability: Good in as-drawn condition. Low carbon.
Machinability: Excellent. Low carbon cuts freely. Fast speeds achievable.
Certification: 2.2 Test Report with mechanical properties standard.

GRADE EQUIVALENTS

Standard	Designation
BS 970 (withdrawn)	210M15
EN	C15E / 1.1141
AISI/SAE	1015
DIN	C15 / 1.0401

CHEMICAL COMPOSITION (% by weight)

Designation	C	Si	Mn	P max	S max
210M15	0.12-0.18	0.10-0.35	0.80-1.20	0.050	0.050

MECHANICAL PROPERTIES

Condition	Size (mm)	Tensile Rm (N/mm2)	Yield Re (N/mm2)	A% min	HB approx
As drawn (normalised)	All	430-570	~280	24	125-170
After carburising & hardening	—	Core: ~600-800	Core: ~400	~15	—
Case hardness (after CH)	—	—	—	—	58-63 HRC

Indicative values. Confirm requirements 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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