

Ductile Iron GJS-400C

EN-GJS-400C / EN-GJS-400-15 / EN-JS1030

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

Ferritic spheroidal-graphite (ductile / SG) cast iron bar, continuously cast to a dense, sound section. The spheroidal graphite nodules give high ductility and impact toughness combined with good machinability. EN-GJS-400C is the ferritic ductile grade — specified where elongation, shock loading and pressure tightness are required.

TYPICAL APPLICATIONS

- Hydraulic and pneumatic manifolds
- Pressure-tight valve and pump bodies
- Pipe fittings and flanges
- Machine bases and brackets
- Wheel hubs and axle components
- Shock-loaded general engineering

SUPPLY & PROCESSING

Supply: Round bar 25-400mm diameter.
Condition: As continuously cast.
Weldability: Good for ductile iron. Ni electrodes, pre-heat for critical work.
Machinability: Good. Nodular graphite gives clean cut. 60-100 m/min.
Certification: 2.2 Test Report standard. 3.1 on request.

GRADE EQUIVALENTS

Standard	Designation
BS EN 1563:2018	EN-GJS-400-15 / EN-JS1030
BS 2789:1985 (withdrawn)	400/15 (SNG 400/15)
ASTM A536	60-40-18
DIN (former)	GGG-40 / 0.7040
JIS	FCD400

CHEMICAL COMPOSITION (% by weight)

Element	Typical Range (%)	Notes
Carbon (total)	3.40–3.90	Spheroidal graphite nodules
Silicon (Si)	2.20–2.90	Promotes ferritic matrix
Manganese (Mn)	0.10–0.40	
Phosphorus (P)	0.05 max	
Magnesium (Mg)	0.03–0.06	Nodularising agent (residual)

MECHANICAL PROPERTIES

Designation	Tensile Strength (N/mm ²)	0.2% Proof Stress (N/mm ²)	Elongation A (%)	Hardness (HB)
EN-GJS-400C EN-JS1030	>400	>250	>15	130–180

Indicative values per BS EN 1563. Properties vary by section size and matrix 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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