

Ductile Iron GJS-600C

EN-GJS-600C / EN-GJS-600-3 / EN-JS1060

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

Pearlitic-ferritic spheroidal-graphite (ductile / SG) cast iron bar, continuously cast to a dense, fine-grained section. EN-GJS-600C is the higher-strength, harder ductile grade — greater tensile strength and wear resistance with reduced elongation. Specified for heavily loaded, wear-resistant machined components.

TYPICAL APPLICATIONS

- Heavy-duty gears and pinions
- Crankshafts and drive components
- Wear-resistant rollers and guides
- High-pressure hydraulic bodies
- Dies, bushes and wear plates
- Loaded shafts and spindles

SUPPLY & PROCESSING

Supply: Round bar 25-400mm diameter.
Condition: As continuously cast.
Weldability: Limited. Ni electrodes and pre-heat if essential.
Machinability: Fair to good. Harder pearlitic matrix. 40-80 m/min.
Certification: 2.2 Test Report standard. 3.1 on request.

GRADE EQUIVALENTS

Standard	Designation
BS EN 1563:2018	EN-GJS-600-3 / EN-JS1060
BS 2789:1985 (withdrawn)	600/3 (SNG 600/3)
ASTM A536	80-55-06
DIN (former)	GGG-60 / 0.7060
JIS	FCD600

CHEMICAL COMPOSITION (% by weight)

Element	Typical Range (%)	Notes
Carbon (total)	3.30–3.80	Spheroidal graphite nodules
Silicon (Si)	2.00–2.70	Pearlitic-ferritic matrix
Manganese (Mn)	0.30–0.60	Promotes pearlite
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-600C EN-JS1060	>600	>370	>3	190–270

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.

PARKSIDE STEEL (STOCKHOLDERS) LTD Byron House, 4 Willow Drive Sherwood Park, Annesley Nottinghamshire NG15 0DP ISO 9001 | BSI FS 86692 | Est. 1977