

EN1A / 230M07

11SMn30 1.0715 AISI 1213

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

EN1A is a free-cutting steel with elevated sulphur (0.25-0.35%) forming MnS inclusions that act as chip-breakers. This gives EN1A the best machinability of any standard engineering steel. DO NOT WELD - elevated sulphur causes hot cracking during weld solidification.

TYPICAL APPLICATIONS

- High-volume CNC turning
- Automatic screw machine products
- Nuts bolts and fasteners
- Hydraulic fittings
- Pneumatic components
- Connectors and couplings

SUPPLY & PROCESSING

Supply: Bright round bar 5-210mm. Hexagon bar 6-90mm A/F.
Condition: Cold drawn bright bar.
Weldability: DO NOT WELD. Hot cracking risk.
Machinability: Excellent. 130-180 m/min carbide. Short manageable chips.
Certification: 2.2 Test Report standard.

GRADE EQUIVALENTS

Standard	Designation
BS EN 10277:2018	11SMn30 / 1.0715
BS 970:1991 (withdrawn)	230M07
AISI/SAE	1213 / 1215
DIN	—
ISO	11SMn30

CHEMICAL COMPOSITION (% by weight)

Designation	C max	Si max	Mn	P max	S
230M07	0.15	0.05	0.90–1.30	0.09	0.25–0.35
11SMn30/1.0715	0.14	0.05	0.90–1.30	0.11	0.27–0.33

MECHANICAL PROPERTIES

Condition	Size (mm)	Tensile Rm (N/mm²)	Proof Rp0.2 (N/mm²)	A%
CD	≤16 / >16–40 / >40–100	510–810 / 460–710 / 360–630	440 / 375 / 245	6 / 8 / 9

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.

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