EN36 / 655M13

15NiCr13 1.5752

MATERIAL DATA SHEET

Parkside Steel

(Stockholders) Ltd

ISO 9001 | BSI FS 86692

Est. 1977 | Co. 01325509

01623 687 660

OVERVIEW

EN36 is a Ni-Cr case hardening steel providing a hard carburised case (58-63 HRC) with a tough ductile Ni-Cr core. Designed for heavily loaded gears, cams and bearing components where EN32M or 8620 core toughness is insufficient.

TYPICAL APPLICATIONS

- Heavy-duty gearing
- Camshafts and cams
- Bearing races
- High-load drive components
- Aerospace gearing

SUPPLY & PROCESSING

Supply: Bright round bar 16-100mm. Black round bar.

Condition: As-rolled or annealed. Carburise and harden after machining.

Weldability: Possible with care. Low hydrogen. Preheat 150-200C.

Machinability: Good in soft condition.

Certification: 3.1 Inspection Certificate standard.

GRADE EQUIVALENTS

Standard	Designation
BS EN 10084:2008	15NiCr13 / 1.5752
BS 970:1991 (withdrawn)	655M13
AISI/SAE	3415 / 3316
DIN	15NiCr13 / 1.5752
ISO	15NiCr13

CHEMICAL COMPOSITION (% by weight)

Designation	C	Si	Mn	P max	S max	Cr	Ni
655M13	0.08–0.16	0.10–0.35	0.35–0.70	0.04	0.04	0.60–1.00	3.00–3.75
15NiCr13	0.11–0.17	0.17–0.37	0.30–0.60	0.025	0.035	0.50–0.80	3.00–3.75

MECHANICAL PROPERTIES

Condition	Core Tensile (N/mm²)	Core Yield (N/mm²)	Case HRC	Core HB
After case hardening	~930–970	~700–720	58–63	~280–300

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