



PART OF BIRN GROUP

## TASSOBAR EN-GJS-500-14C

(According to EN 16482:2024)

### Characteristics

This solution strengthened grade has superior machinability as well as physical properties compared to traditional GJS-500-7C, combined with good impact, fatigue, electrical conductivity and magnetic permeability. Noise and vibration damping are good in this grade.

Profile and size range	
Round	Diameter 41 – 440 mm
Square	40 x 40 mm – 280 x 280 mm
Rectangle	Upon request
Non-standard	Other sizes/profiles are available or can be produced according to agreement

### Identification

Each TASSO-Bar is labelled with detailed information for full traceability:  
Batch Number – Colour Code - Dimension – Material Grade.

T-011-24  
Ø 110 +  
EN-GJS-500-14C



### Chemistry (main elements)

The chemical composition is subordinate to the mechanical properties and may vary depending on bar size and production flow parameters.

Elements	Typical %
Iron	Balance
Carbon	3.00-3.80
Silicon	2.50-3.20
Manganese	0.25-0.55
Phosphorous	0.04 (guidance)
Sulphur	0.01 (guidance)
Others/Alloying	Residual

**Mechanical Properties:** (Taken from mid-radius of cast bar, not separately cast test bar).

Material Specification	Material Section	0.2% Proof Strength N/mm <sup>2</sup> min.	Tensile Strength N/mm <sup>2</sup> min.	Elongation % min.
TASSOBar EN-GJS-500-14C	20 mm - 60 mm	400	500	14
	>60 mm - 120 mm	390	480	12
	>120 mm - 400 mm	360	470	10

Reference: EN 16482:2024, Table 2

**Brinell Hardness Range (Informative):** 170-215 HB measured as an average of the center and the rim area of the bar (10 mm diameter ball).

**Microstructure (Informative):** Nodular graphite. The matrix is approx. 30% or less pearlitic and may contain minor quantities of free carbides. Annealing heat treatment is recommended for this material grade.

**Heat Treat Response:** EN-GJS-500-14C is not recommended for hardening and tempering.

**Density:** 7.25 g/cc + 3% for oversize and gross length of bar.

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