Continuously Cast Iron

Unibar 250 + *(Guidance only)*

Characteristics:

Unibar 250 PLUS complies with the specification GJL-250 (EN-1561) or GJL-250-C (EN-16482). Pearlitic structure (70-90% depending on the diameter), with ferritic rim, typical of concast bar, indicated in EN-16482. Hardness (175/215HB) lower than GJL-250 or UB250 standard.

Size Range:

UNIBAR STANDARD SIZES AND SUPPLY.	
Round	25mm – 360mm
Standard length	3080mm (other lengths available)
Supply condition	As-cast, turned and peeled

Chemistry:

ELEMENT	TYPICAL %
Carbon	3.00 - 3.55
Silicon	2.10 - 2.80
Manganese	0.50 - 0.70
Sulphur	0.04 - 0.07
Phosphorous	0.2 max
Others/Alloying	Residual

Typical Ranges: (Subordinate to Mechanical Properties)

Mechanical Properties:

(Taken from mid-radius of cast bar, not separately cast test bar)

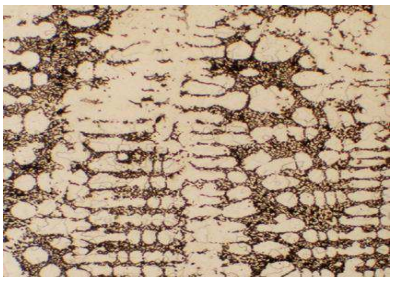
MATERIAL GRADE	MATERIAL SECTION	ANTICIPATED TENSILE VALUES	HARDNESS (BHN)	MATRIX
Unibar 250+	20 < D ≤ 50	195	175 - 215	Pearlitic - Ferritic
	50 < D ≤ 100	180		
	100 < D ≤ 200	165		
	200 < D ≤ 360	155		

Grade colour code

Microstructure: Contains type 'A' graphite flakes in accordance with ISO 945. The rim contains Type 'D' and 'E' interdendritic graphite. The matrix (core) is greater than 70% pearlitic. The rim is predominantly ferritic.

(Photo 100x magnification)

RIM



By optimisation of the critical processes and the full absence of carbides in the rim, this quality has excellent machinability and excellent surface finish. The material satisfies mechanical characteristics indicated, with hardness values of 215 HB max.

CORE