

Continuously Cast Iron

Unibar 200 (EN 16482 EN GJL-200C) (Guidance only)

Characteristics:

Unibar 200 is the softest grade in the Unibar portfolio, offering exceptional machinability and excellent surface finish, but limited strength and wear resistance. Noise, vibration damping and thermal conductivity are excellent in this grade. Conforms to EN-16482:2014 EN-GJL-200C.

Size Range:

UNIBAR STANDARD SIZES AND SUPPLY.	
Round	25mm – 700mm
Square	25mmx 25mm – 550mm x 550mm
Rectangle	Up to 650mm x 520mm
Supply condition	As-cast, turned, peeled, milled, cut.
Length	Standard 3080mm, other lengths available.

Chemistry:

ELEMENT	TYPICAL %
Carbon	2.95 - 3.45
Silicon	2.1 - 2.90
Manganese	0.55 - 0.75
Sulphur	0.04 – 0.07
Phosphorous	0.1 - 0.2
Others/Alloying	Residual
Iron	Balance

Typical Ranges: (Analysis at the discretion of UCB)

Mechanical Properties:

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

MATERIAL GRADE	MATERIAL SECTION	ANTICIPATED TENSILE VALUES N/mm ²	HARDNESS (BHN)	MATRIX
Unibar 200 EN 16482 EN GJL-200C	20 < D ≤ 50	155	120 - 200	Ferritic
	50 < D ≤ 100	140		
	100 < D ≤ 200	125		
	200 < D ≤ 400	115		

Grade
colour code



Density: 7.3 g/cc

Brinell Hardness (BHN): Test 10mm dia Ball 3000Kg load depending on section size. Hardness readings are taken across the entire section of the bar. Hardness values for rectangles depend on the ratio of height to width and can be supplied upon request.

Microstructure: Contains type 'A' graphite flakes in accordance with ISO 945. The rim contains fine type 'D' and 'E' interdendritic graphite. The matrix structure is predominantly ferritic with less than 10% pearlite throughout.

(Photo 100x magnification)



Heat Treat Response: Unibar-200 is not recommended for hardening or Heat treatment applications.