

## CONTINUOUS CAST GREY IRON (Flake Graphite cast iron)

### RELATED SPECIFICATIONS:

Australia	AS 1830-1986 T260
Germany	DIN 1691 GG35
Great Britain	BS 1452 Grade 17
Japan	JIS FC 25
U.S.A.	ASTM A48 Class 40

### DESCRIPTION:

Grey Iron with fully pearlitic structure that provides high mechanical properties, good surface finish and good hardenability. Bars are continuously cast to produce an iron free from casting shrinkage. The typical microstructure is predominantly pearlitic, with a maximum of 10% ferrite. The rim consists of graphite type D, size 6 – 8 in a ferritic/pearlitic matrix with approximately 5% of well dispersed carbides. This provides the product with high pressure tightness and has good leakage resistance. It is well suited for pressure applications such as hydraulic components. Heat treatment can be applied when hardness is critical for the component. The most usual heat treatments are induction and flame hardening and oil quenching process.

### APPLICATIONS:

It is very suitable in applications that are subjected to wear, such as: pistons, hydraulic valves, dies, pattern plates, couplings, spacers, etc.

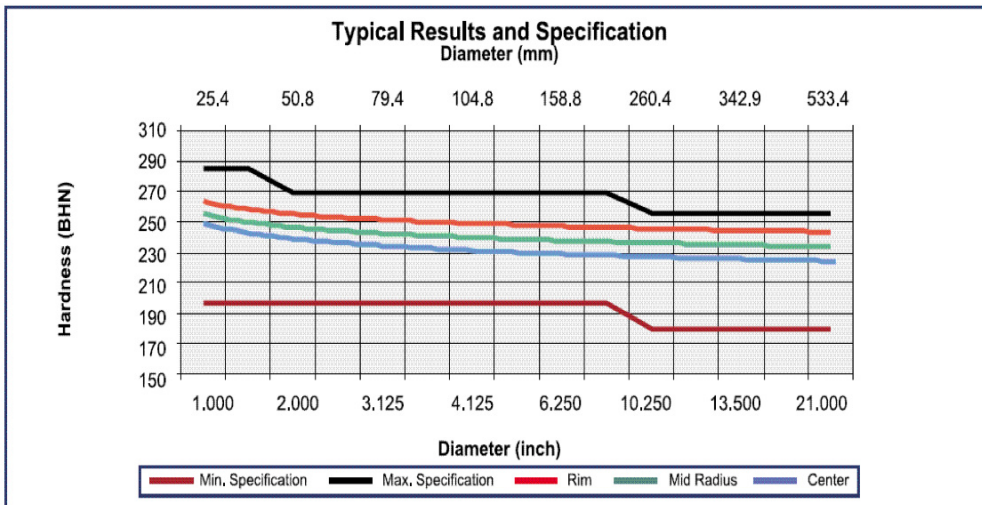
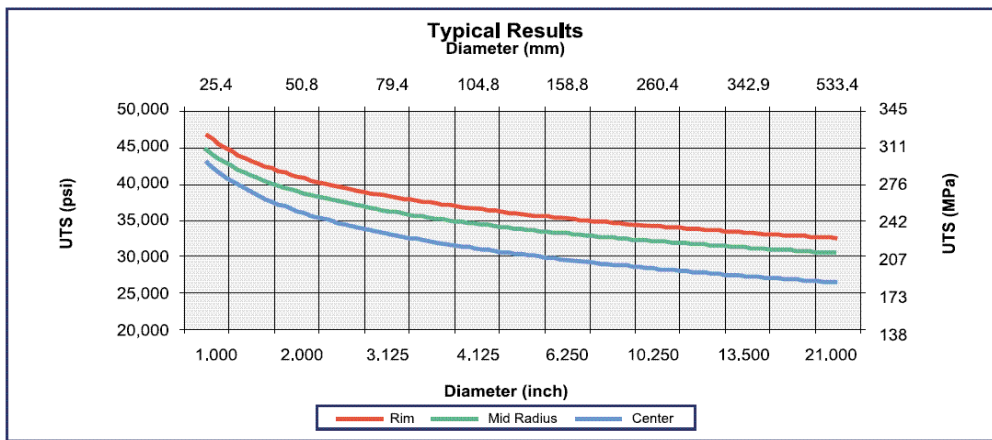
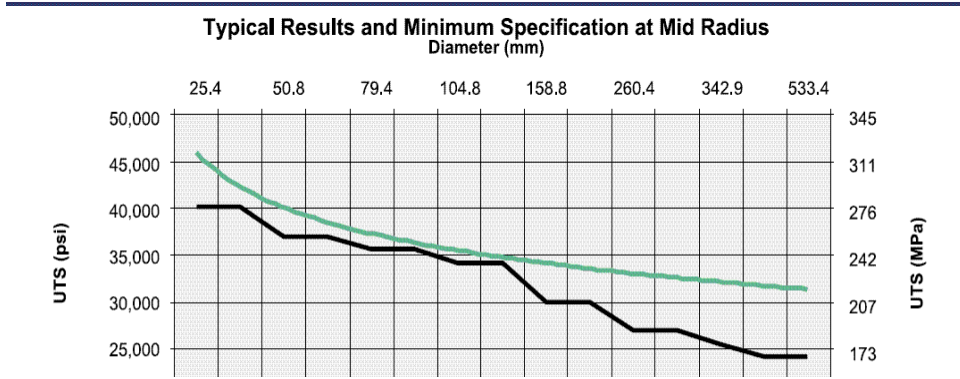
### CHEMICAL ANALYSIS:

	C %	Si %	Mn %	P %	S %
Min.	2.80	2.30	0.50	-	-
Max.	3.70	2.70	0.80	0.10	0.20

### MECHANICAL PROPERTIES:

DIMENSION (mm)	HARDNESS (BH)	UTS MPA (Min)
>25.4	197-285	275
25.4 - 50.8	197-269	255
50.8 - 79.4	197-269	245
79.4 - 104.7	197-269	235
104.8 - 158.7	197-269	207
158.7 - 260.3	179 – 255	186
260.3 - 345.0	179 – 255	176
345 - 533.40	179 – 255	166

The bigger the bar diameter the lower the UTS because of the different solidification and cooling rates. Refer to tables for further information.



**COLOUR CODE: BLACK**



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