# **PRODUCTS**



Our product are continuously cast iron - bar grey and ductile / spheroidal graphite irons. Our competitiveness is not simply just price and quality. We seek continuous improvement and innovation to ensure a world class product.

#### **Homogenous & Defect Free**

We have a uniform dense microstructure which virtually eliminates the risk of any internal defects.

#### **Strong & Dense**

Due to the dense microstructure, the pressure tightness and fatigue properties, our product is superior to sand cast material made to the same standard specification.

#### **Better Machinability**

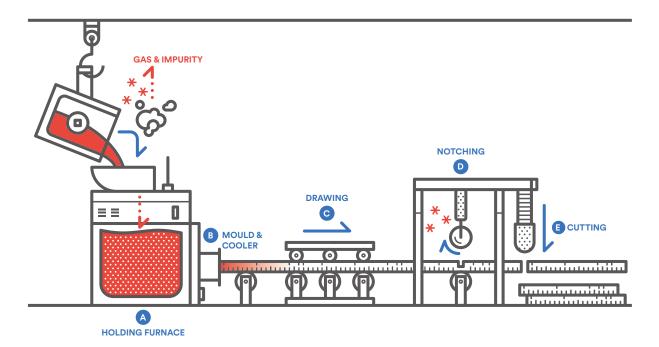
Our product has an excellent smooth surface finish with a uniformly distributed matrix thereby ensuring superior machinability.

#### **Silent & Durable**

Our product exhibits low noise and vibration characteristics compared to steels with similar mechanical properties.

# 1. PROCESS

The molten iron held in the concast holder provides a large head of iron above the graphite die, suppressing the risk of internal shrinkage defects in the pulled bar, while also allowing the lighter impurities in the iron to float upwards in the holder. This ensures homogenous material properties in the finished product.



#### A. Holding Furnace

The holding furnace has its own inductor to maintain the liquid iron at a constant temperature while also preventing impurities from entering the product.

# D. Notching

The solidified bar is notched at the most effective length to ensure minimum material loss in subsequent processes.

#### **B. Mould & Cooler**

Uniform and efficient cooling is critical to the products characteristics guaranteed by the specially designed graphite die encased in a water cooled jacket.

#### E. Cutting

Our product is cut into individual lots of the optimum length desired by the customer to ensure optimum quality and delivery.

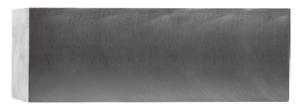
#### C. Drawing

The practice of pulling the solidified bar from the cooling unit is as equally important. Our know-how is unique.

# 2. PRODUCTS

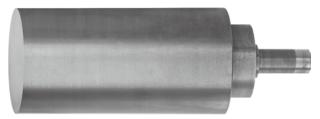
Our product is produced as round, square or rectangular shapes. We can produce and supply to material properties and sizes required by the customer.

Our technical team will suggest the optimum solutions to your problems.



## **Peeled or Milled Bar**

After peeling or milling the bars, the fine surface is optimally suited to further processing with precision and automated equipment.



## **Partially Machined Bar**

To reduce the cost of customers machining, we supply partially machined (turned) products to the individual customer's requirements at a very reasonable price.



#### **As-cast Surface Finish**

After being drawn through the graphite mould, the surface finish of the bar is far superior to that of sand cast material.



#### **Large Bar Sizes**

In the case of large sized bars (up to  $\Phi$ 510 mm or 450×500), we produce these in separate metal moulds, guaranteeing the same quality as continuously cast.

# MECHANICAL PROPERTY

CHARACTERISTICS	H2	Н3	HD5	HD6
TENSILE STRENGTH (MPa)	160-230	200-270	480-580	580-680
HARDNESS (HB)	170-240	190-260	170-240	200-290
ELONGATION (%)	•		7	3
GRADE	GRAY		SPHEROIDAL GRAPHITE (DUCTILE)	
			GCD500/	GCD600/
	GC250	GC300	65-45-12 /	80-55-06/
			EN-GJS-500	EN-GJS-600

# STOCK STANDARD

SHAPE	SIZE(mm)			
ROUNDS	Continous Casting: Φ25 - Φ260 Mould Casting: Φ260 - Φ510 (Max Length: 1000)			
RECTANGLES	Continous Casting: □34 × 64 - □190 × 250  Mould Casting: □220 × 220 - □450 × 500 (Max Length: 700)			