

Meehanite GC-40 Flake Graphite Cast Iron

Category : Metal , Ferrous Metal , Cast Iron , Gray Cast Iron

Material Notes:

Type GC-40 combines good strength with low coefficient of friction and self lubricating properties. It is easily machinable with a fine, dense, close grain structure. Recommended for heavy brake drums and pressure castings up to 2 1/2" thick. General Meehanite information - Meehanite metal is first melted to a definite degree of undercooling or constitution which is related to the section of the casting to be poured and the range of physical properties such as tensile strength and hardness required. Nucleation with patented mixtures of graphitizing agents results in the removal of undercooling, in the controlled precipitation of graphite and in a fine grained eutectic cell structure which determines the density and physical integrity of the casting. Ordinary cast irons made to chemical specifications which do not include the benefit of controlled undercooling are influenced by mass effect to a maximum degree and for this and other reasons cannot be considered an equivalent to Meehanite metal. Information provided by Meehanite Marketing Association.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Meehanite-GC-40-Flake-Graphite-Cast-Iron.php

Physical Properties	Metric	English	Comments
Specific Gravity	7.25 g/cc	7.25 g/cc	

Mechanical Properties	Metric	English	Comments
Hardness, Brinell	190	190	Nominal
Tensile Strength, Ultimate	276 MPa	40000 psi	
Tensile Strength, Yield	100 MPa	14500 psi	.01% permanent set
Modulus of Elasticity	114 GPa	16500 ksi	
Modulus of Rupture	0.552 GPa	80.0 ksi	
Compressive Strength	1030 MPa	150000 psi	
Poissons Ratio	0.30	0.30	
Fatigue Strength	121 MPa	17500 psi	
Machinability	47 %	47 %	Dalcher
Shear Modulus	50.0 GPa	7250 ksi	
Shear Strength	276 MPa	40000 psi	
Izod Impact Unnotched	16.3 - 27.1 J @Diameter 20.3 mm	12.0 - 20.0 ft-lb @Diameter 0.798 in	

Thermal Properties	Metric	English	Comments
--------------------	--------	---------	----------

Thermal Properties <i>CTE, linear</i>	11.9 Åum/m-Å°C Metric	6.60 Åuin/in-Å°F English	Comments
	@Temperature 37.8 - 538 Å°C	@Temperature 100 - 1000 Å°F	
Thermal Conductivity	46.8 W/m-K @Temperature 10.0 - 232 Å°C	325 BTU-in/hr-ftÅ²-Å°F @Temperature 50.0 - 450 Å°F	
Shrinkage	1.0 - 1.3 %	1.0 - 1.3 %	Patternmaker Shrinkage

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China