

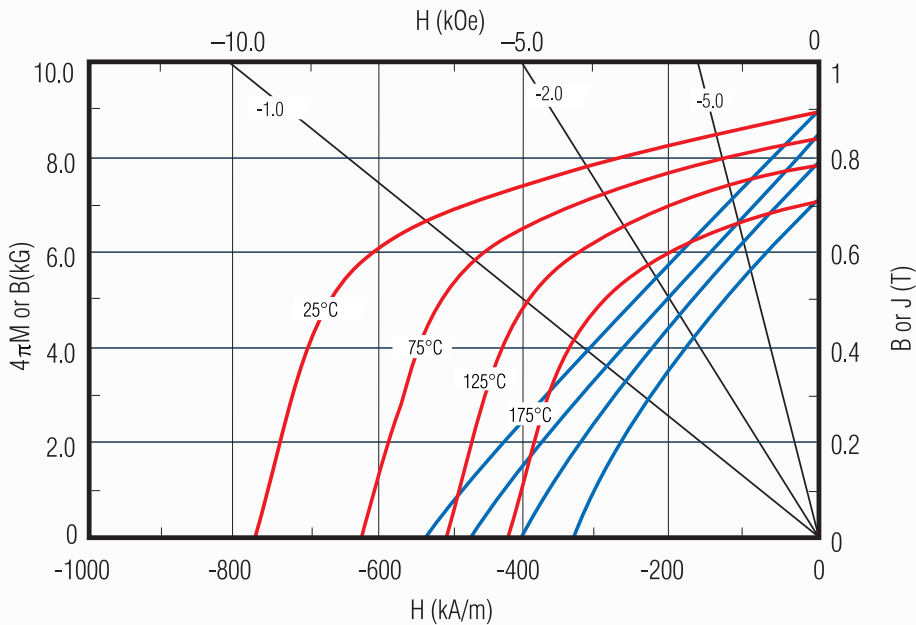
**MQP™ - B+-20056-070** **ISOTROPIC POWDER\***  
Former Name: MQP-B2+

**Material Description**

MQP-B+-20056-070 is the powder grade for high performance magnets and their applications. Numerous applications, such as power seat motors and smaller sized hard disk drives, could benefit significantly by utilizing MQP-B+-20056-070. It is an isotropic magnet powder suitable for the manufacture of bonded magnets. MQP-B+-20056-070 is based on a patented Nd-Fe-Co-B composition that has been designed to include minimum amounts of cobalt. This material is produced by employing a proprietary rapid solidification process followed by a milling process and heat treatment.

**Powder Magnetic Characteristics<sup>1</sup>**

		<b>SI</b>	<b>CGS</b>
<b>Specified</b>	Residual Induction, $B_r$ .....	893-901 mT .....	8.93-9.01 kG
	Energy Product, $(BH)_{max}$ .....	122-128 kJ/m <sup>3</sup> .....	15.3-16.1 MGOe
	Intrinsic Coercivity, $H_{ci}$ .....	750-810 kA/m .....	9.4-10.2 kOe
<b>Typical</b>	Coercive Force, $H_c$ .....	530 kA/m .....	6.7 kOe
	Magnetizing Field to >95% Saturation (Min.), $H_s$ .....	≥1600 kA/m .....	≥20 kOe
	Temperature coefficient of $B_r$ , $\alpha$ , to 100°C .....	-0.11 %/°C	
	Temperature coefficient of $H_{ci}$ , $\beta$ , to 100°C .....	-0.35 %/°C	
	Curie Temperature, $T_c$ .....	330 °C	
	Maximum Operating Temperature <sup>2</sup> .....	130-150 °C	
	Maximum Process Temperature <sup>3</sup> .....	250 °C	



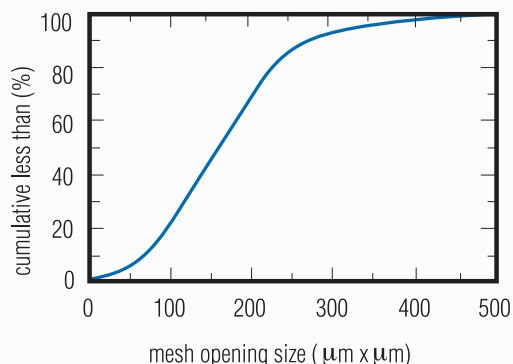
**Physical Characteristics**

**Specified**

Sieve Screen Analysis:  
 Total > 40 Mesh (420x420 μm opening)..... < 0.1 wt. %  
 Total > 60 Mesh (250x250 μm opening)..... < 25 wt. %  
 Total < 270 Mesh (53x53 μm opening) ..... < 12 wt. %

**Typical**

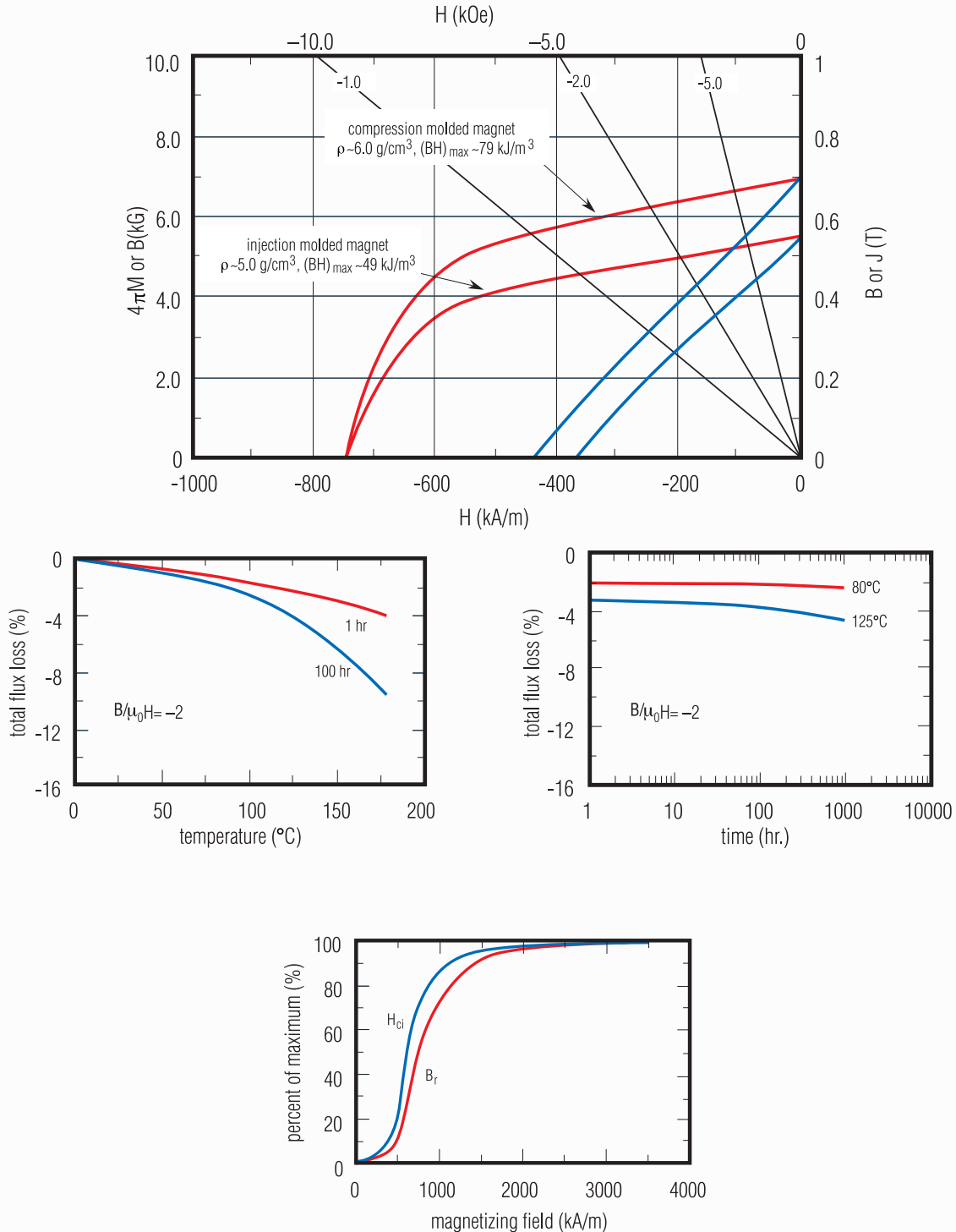
Density (theoretical) .....7.63 g/cm<sup>3</sup>  
 Apparent Density .....2.64 g/cm<sup>3</sup>



\* Contact Magnequench to obtain up-to-date product specifications and for assistance in selecting the ideal product for your application.

**MQP™-B+-20056-070 ISOTROPIC POWDER**

**Bonded Magnet Characteristics<sup>4</sup>**



<sup>1</sup> Properties measured at 25°C, unless otherwise specified.  
<sup>2</sup> The Maximum Operating Temperature for a magnet made from this powder is dependent upon the specific application, the type of magnet, and magnet geometry. Contact your local sales representative for more information.  
<sup>3</sup> Maximum Process Temperature is defined here as <2% reduction in flux (i.e. structural loss) after heating powder 1 hour in air.  
<sup>4</sup> These properties are typical at 25°C and are representative only. Bonded magnet properties are dependent upon powder loading and magnet manufacturing conditions. Contact your local sales representative for information about our products.