

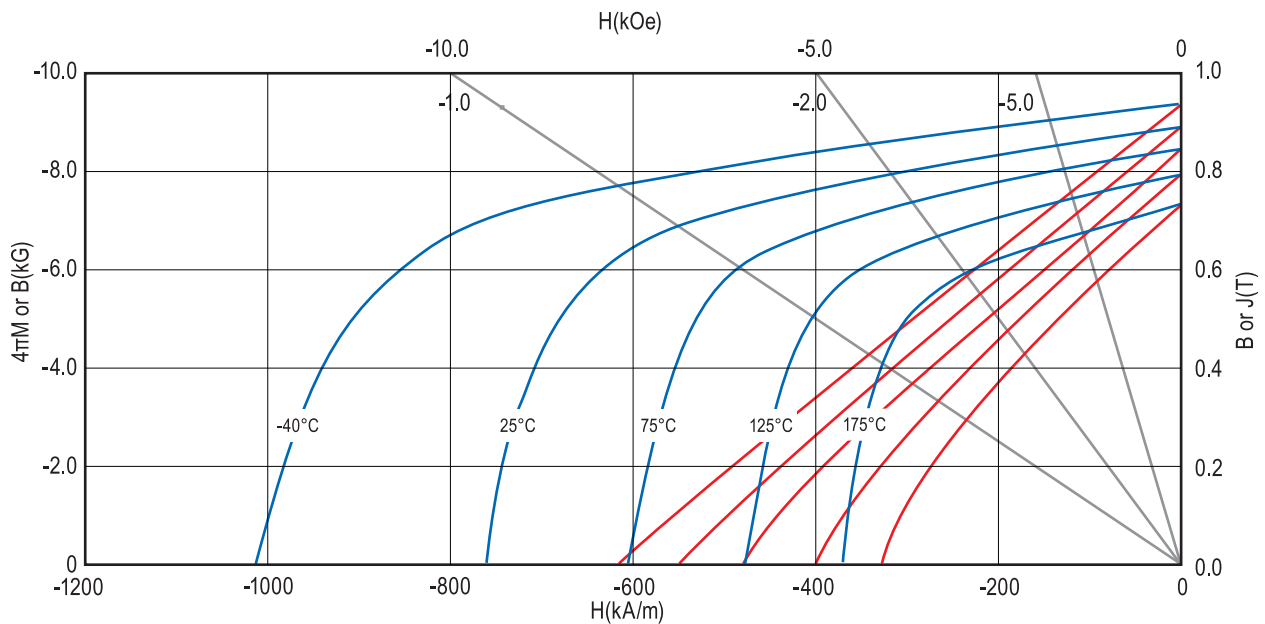
MQP™-B+-10118 Isotropic Powder*

Material Description

MQP-B+-10118-070 is one of Magnequench's earliest developed magnetic powder. MQP-B+-10118-070 can be employed in many applications that require high performance. MQP-B+-10118-070 is an isotropic magnet powder based on a patented Nd-Fe-Co-B alloy that is suitable for manufacture of bonded magnets. This material is produced by employing a proprietary rapid solidification process followed by a milling process and heat treatment.

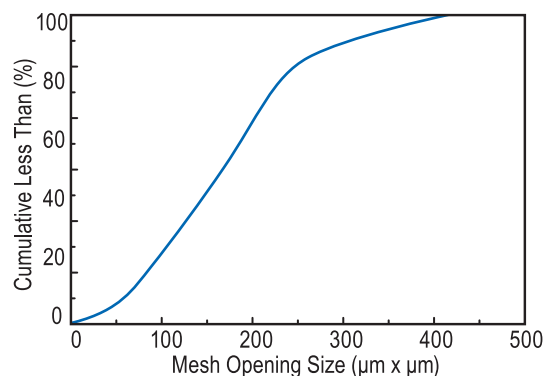
Powder Magnetic Characteristics¹

		SI	CGS	
Specified	Residual Induction, B_r	895-915	mT.....8.95-9.15	kG
	Energy Product, $(BH)_{\max}$	126-134	kJ/m ³15.8-16.8	MGOe
	Coercivity Force, H_{ci}	716-836	kA/m9.0-10.5	kOe
Typical	Intrinsic Coercivity, H_c	540	kA/m 6.8	kOe
	Magnetizing Field to $\geq 95\%$ Saturation H_s	≥ 1600	kA/m ≥ 20.0	kOe
	Temperature coefficient of B_r , α , to 100° C	-0.11	%/°C	
	Temperature coefficient of H_{ci} , β , to 100° C	-0.40	%/°C	
	Curie Temperature, T_c	360	°C	
	Maximum Operating Temperature ²	120-130	°C	
	Maximum Process Temperature ³	200	°C	



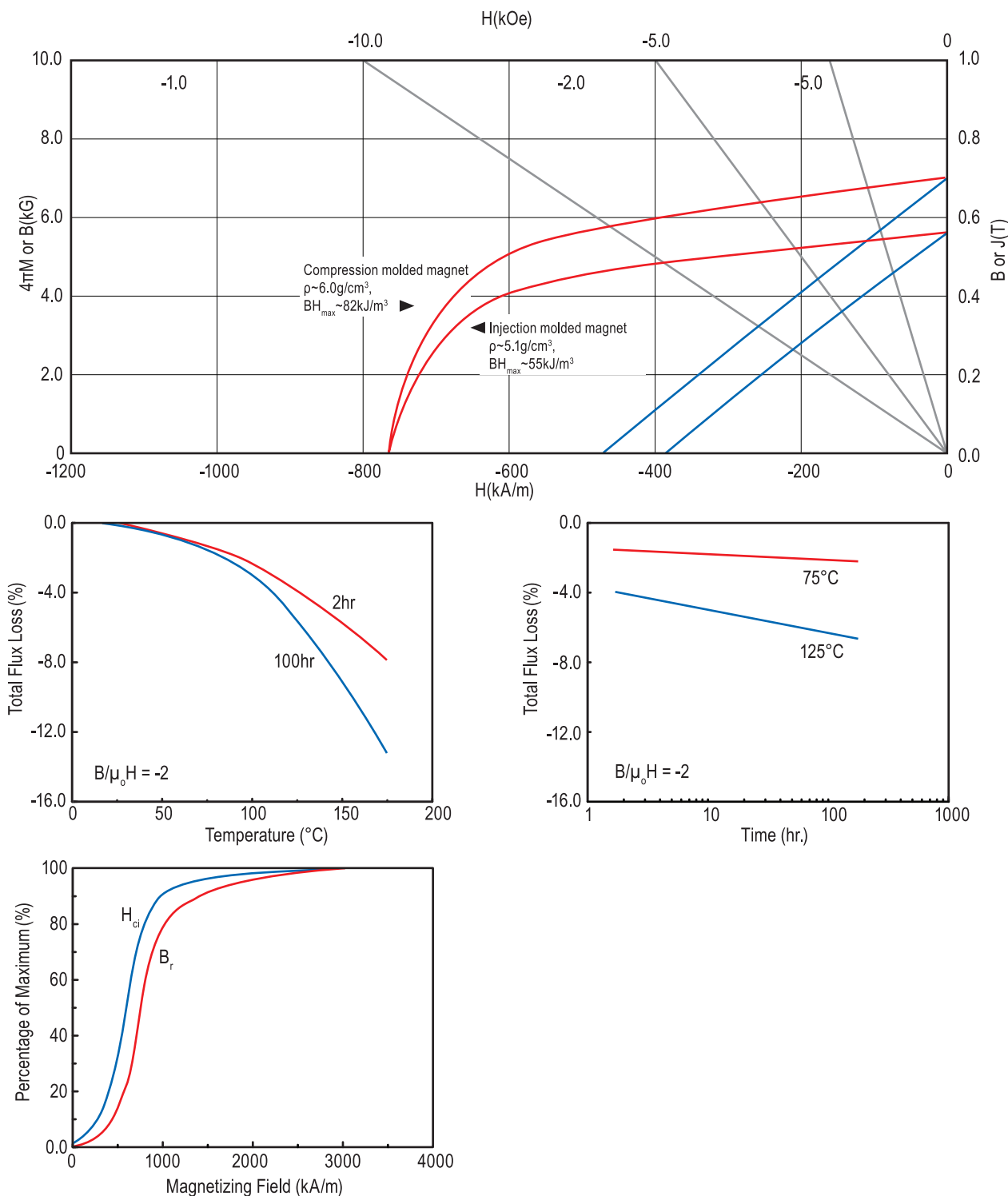
Physical Characteristics

Specified	Sieve Screen Analysis:		
	Total > 40 Mesh (420x420μm opening)	< 0.1wt%	
	Total > 60 Mesh (250μm x 250μm opening)	< 25wt%	
	Total < 270 Mesh (53μm x 530μm opening)	< 12wt%	
Typical	Density (theoretical)	7.64 g/cm ³	
	Apparent Density	2.7 g/cm ³	



*Contact Magnequench to obtain up-to-date product specifications.

Bonded Magnet Characteristics⁴



¹ Properties measured at 23°C, unless otherwise specified.

² 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 our Application Engineers for more information.

³ Maximum Process Temperature is defined here at <2% reduction in coercivity (i.e. structural loss) after heating powder 1 hour in air.

⁴ These properties are typical at 23°C and are representative only. Magnet properties are dependent upon powder loading and magnet manufacturing conditions. Contact our Application Engineers for information about Magnequench magnet products.

* This powder, the products that are made there from, and its manufacturing processes are subject to one or more of the following United States Patents: 6,183,572; 6,478,890; 6,527,875; 6,855,265; 6,979,409; 7,087,185; 7,144,463.