

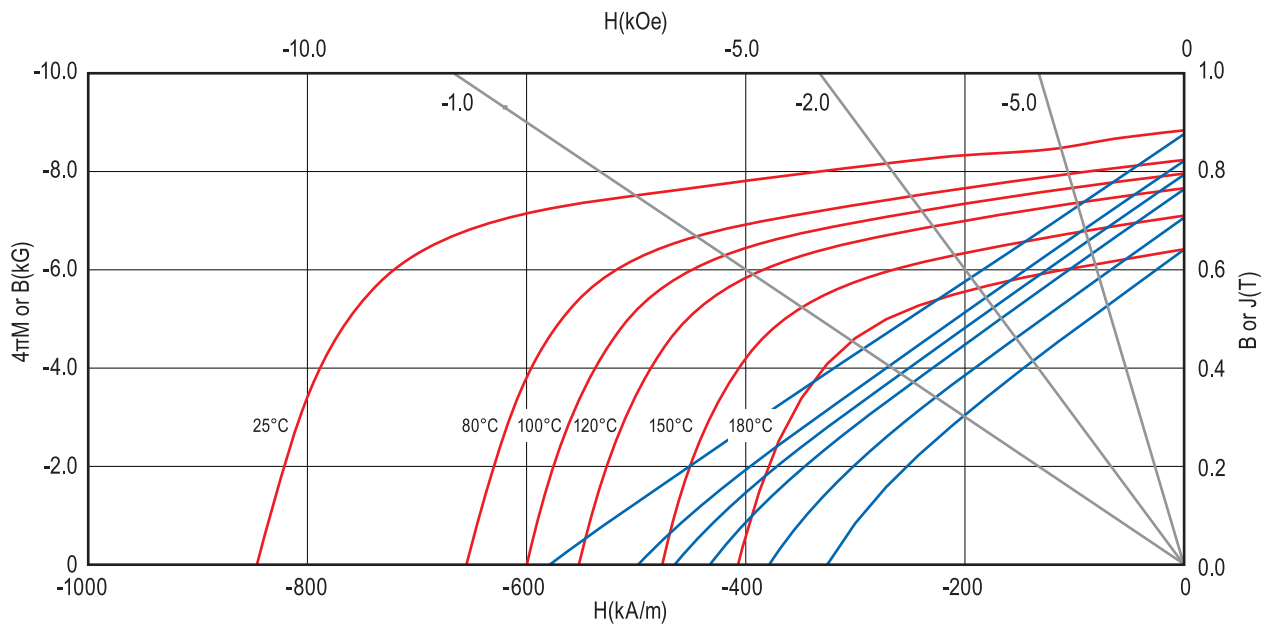
MQP™-B+-20444 Isotropic Powder*

Material Description

MQP-B+-20444-070 is a cobalt free isotropic magnetic powder, designed for the manufacturing of bonded neo magnets. This powder utilizes Magnequench "Advanced Quenching (AQ)" powder production technology. Improving upon the existing MQP-B-20172 material by providing higher energy product and remanence without any change in formulation.

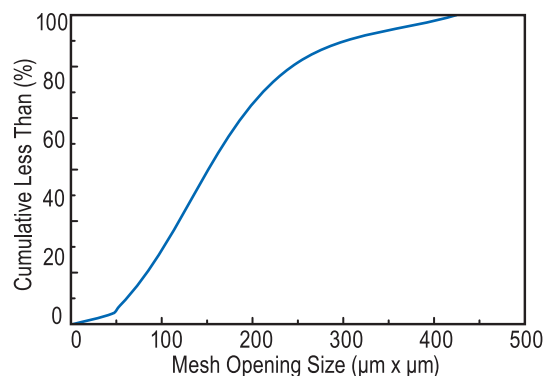
Powder Magnetic Characteristics¹

		SI	CGS	
Specified	Residual Induction, B_r	875-885	mT.....8.75-8.85	kG
	Energy Product, $(BH)_{max}$	123-129	kJ/m ³15.4-16.2	MGOe
	Coercivity Force, H_{ci}	800-860	kA/m.....10.0-10.8	kOe
Typical	Intrinsic Coercivity, H_c	570	kA/m	7.2 kOe
	Magnetizing Field to ≥ 95% Saturation H_s	≥ 1600	kA/m	≥ 20.0 kOe
	Temperature coefficient of B_r , α , to 100° C	-0.14	%/°C	
	Temperature coefficient of H_{ci} , β , to 100° C	-0.39	%/°C	
	Curie Temperature, T_c	305	°C	
	Maximum Operating Temperature ²	130-150	°C	
	Maximum Process Temperature ³	225-250	°C	



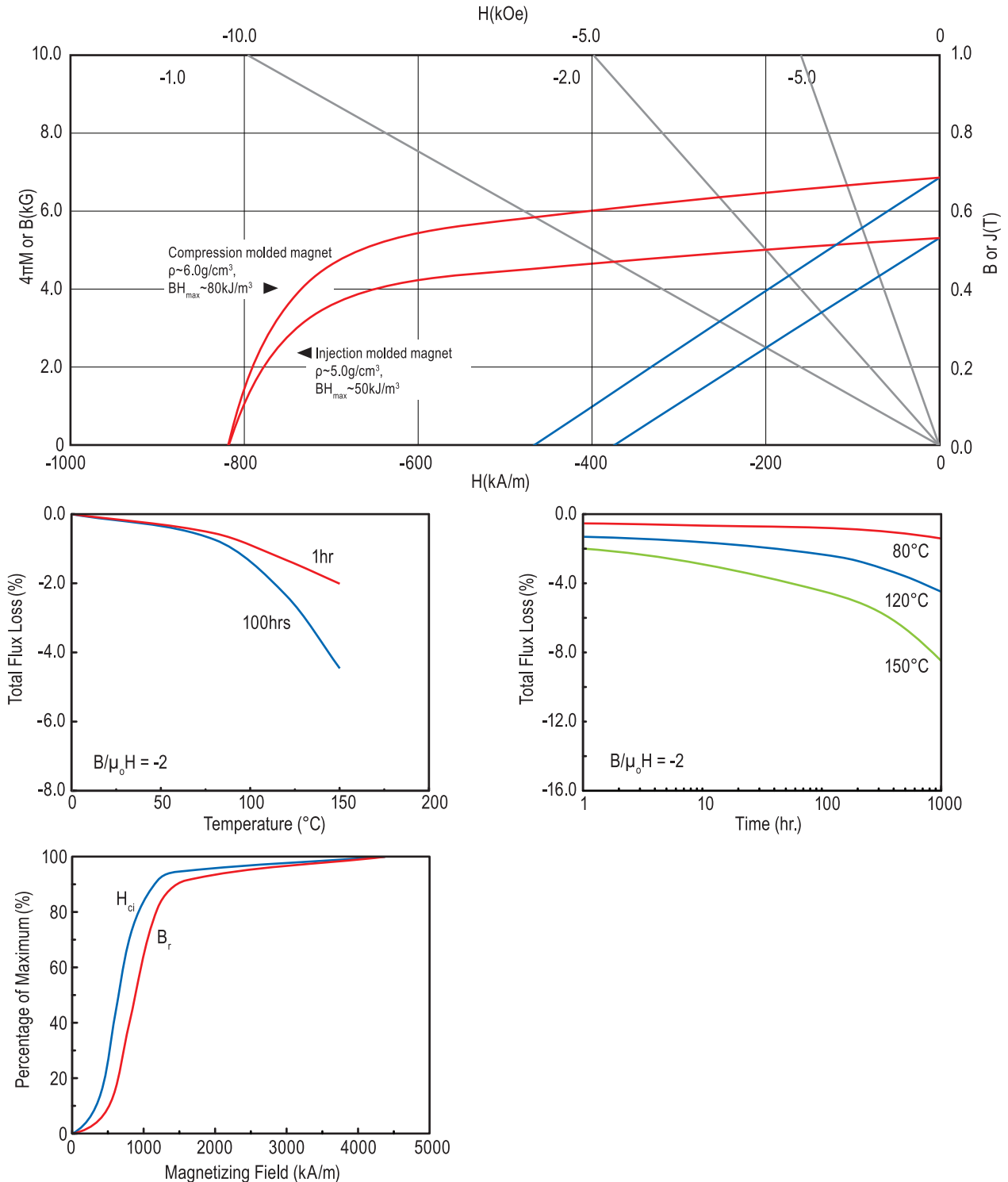
Physical Characteristics

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)	7.59 g/cm ³	
	Apparent Density	2.62 g/cm ³	



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

Bonded Magnet Characteristics⁴



¹ Properties measured at 25°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 25°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.