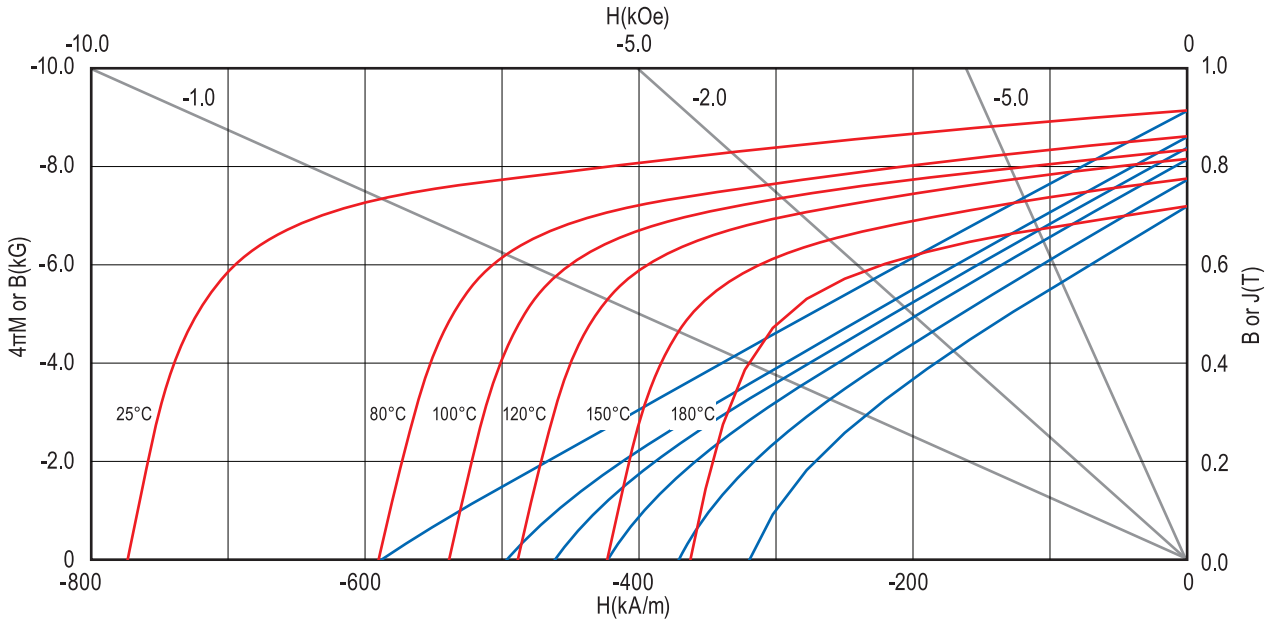
MQP™-17-9-20440 Isotropic Powder*

Material Description

MQP-17-9-20440-070 is an isotropic magnetic powder with the highest magnetic properties in the bonded neo magnetic industry. Designed for the production of bonded neo magnets. This powder utilizes Magnequench "Advanced Quenching (AQ)" powder production technology. Improving upon existing MQP-B+-10118 by providing higher energy product and remanence without any change in formulation.

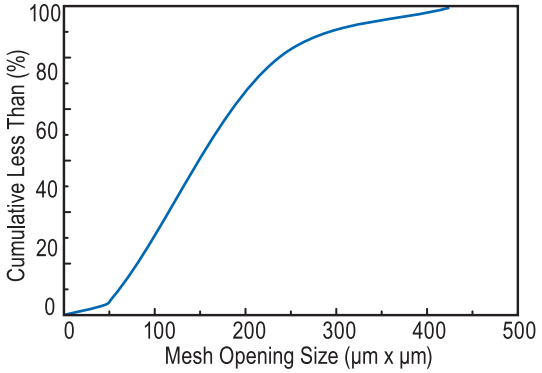
Powder Magnetic Characteristics[1]

		SI		CGS	
Specified	Residual Induction, B_r	905-915	mT	9.05-9.15	kG
	Energy Product, $(BH)_{max}$	132-138	kJ/m³	16.6-17.3	MGOe
	Intrinsic Coercivity, H_{ci}	745-785	kA/m	9.4-9.8	kOe
Typical	Coercive Force, H_c	575	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	-0.11	%/°C		
	Temperature coefficient of H_{ci}, ß, to 100° C	-0.39	%/°C		
	Curie Temperature, T_c	381	°C		
	Maximum Operating Temperature[2]	120-130	°C		
	Maximum Process Temperature[3]	200-225	°C		



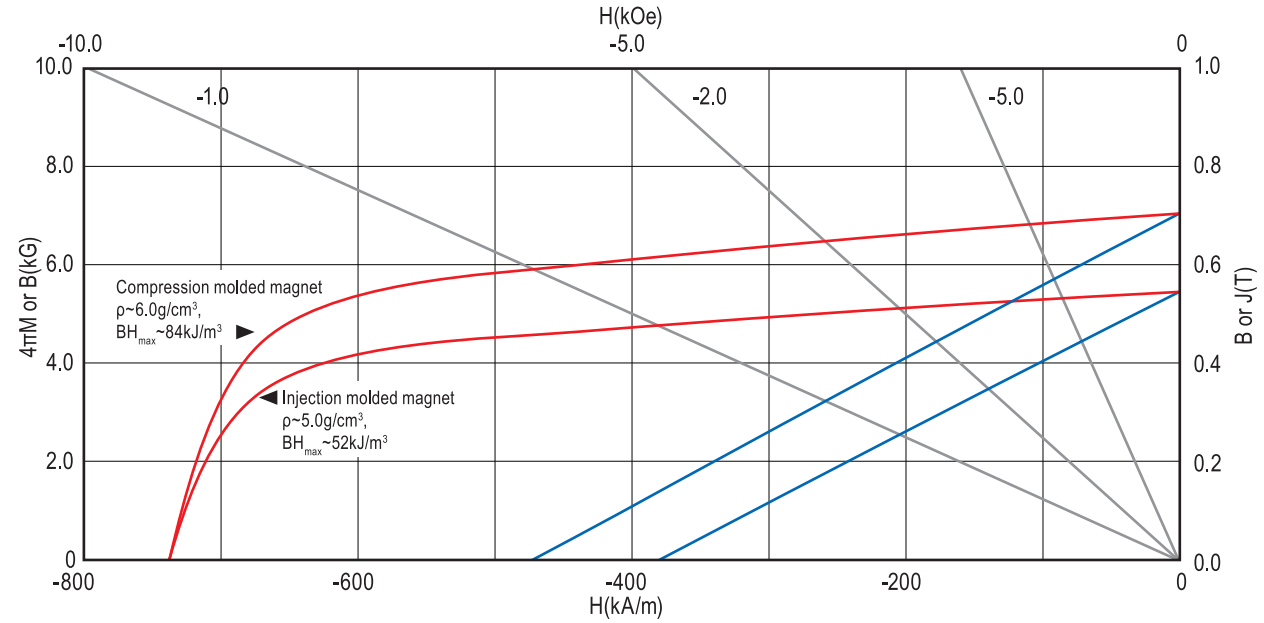
Physcial Characteristics

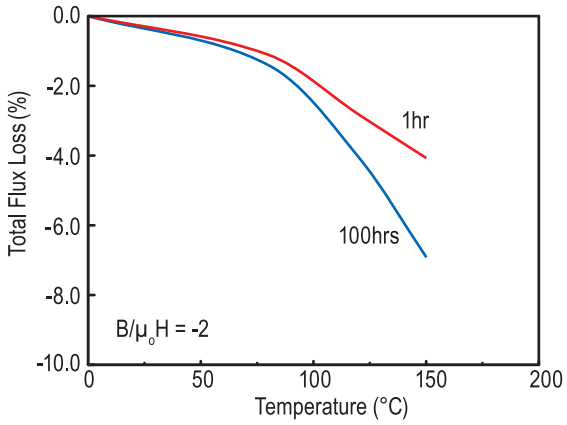
Specified	Sieve Screen Analysis:	
	Total > 40 Mesh (420x420µm opening)	< 0.1wt%
	Total > 60 Mesh (250µmx250µm opening)	< 25wt%
	Total < 270 Mesh (53µmx530µm opening)	< 12wt%
Typical	Density (theoretical)	7.64 g/cm³
	Apparent Density	2.62 g/cm³

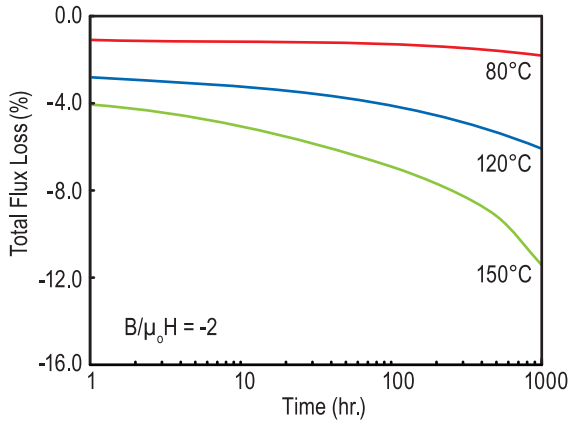


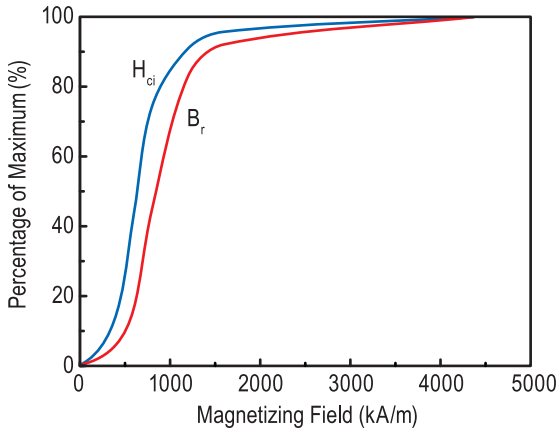
*Contact Magnequench to obtain up-to-date product specifications.

Bonded Magnet Characteristics[4]









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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.