

Ancorloy® DH-1

Ancorloy DH-1 is a new press-ready, engineered binder-treated premixed ferrous P/M material designed for sinter-hardening. It has comparable performance to a diffusion alloyed product of the same composition. Ancorloy DH-1 is a hybrid alloy based on Ancorsteel 150 HP to which 2 w/o copper has been added during a binder-treated premixing operation. It is designed for use in sinter-hardening applications that do not need the extremely high hardenability of Ancorsteel 737 SH.

Typical Analysis and Properties

Composition (weight %)

Fe	Mo	Mn	Cu
Balance	1.45	0.15	2.0

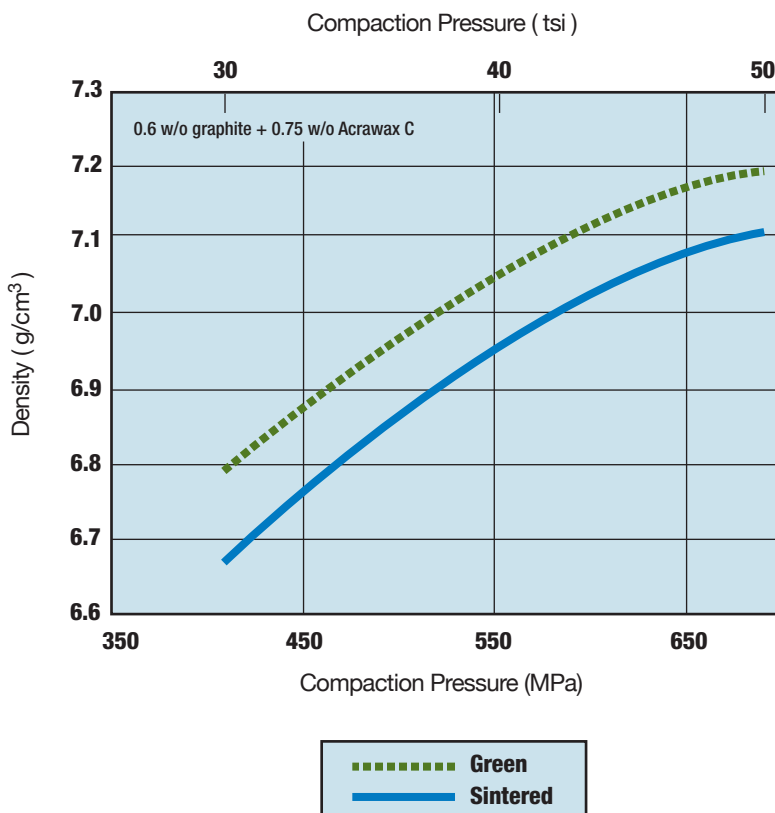
Apparent Density

3.10 g/cm³

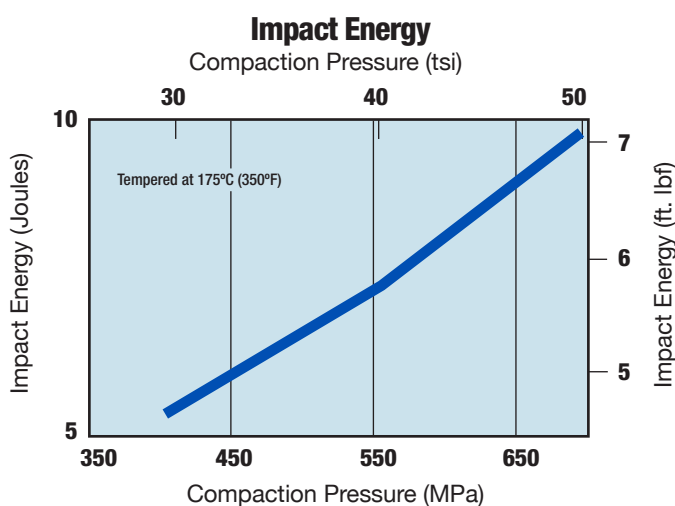
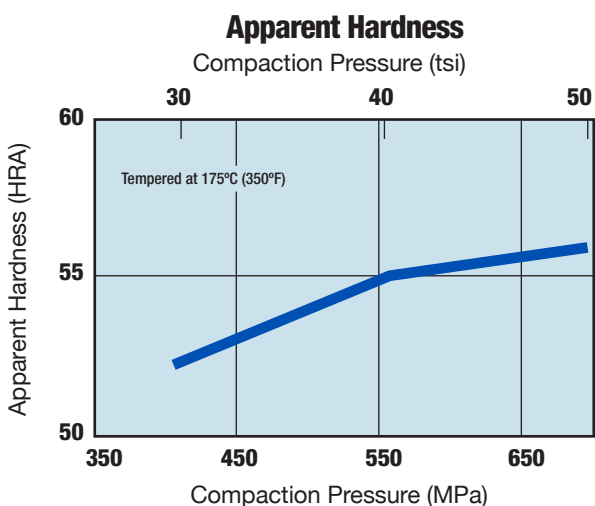
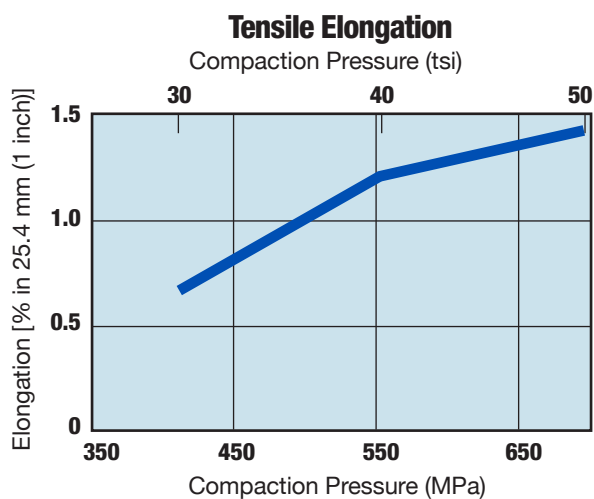
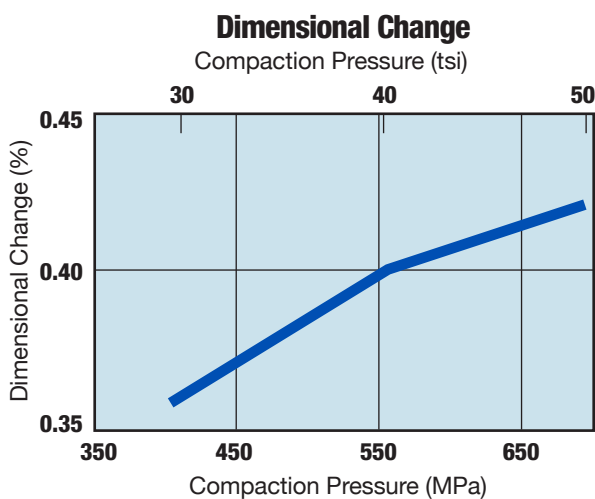
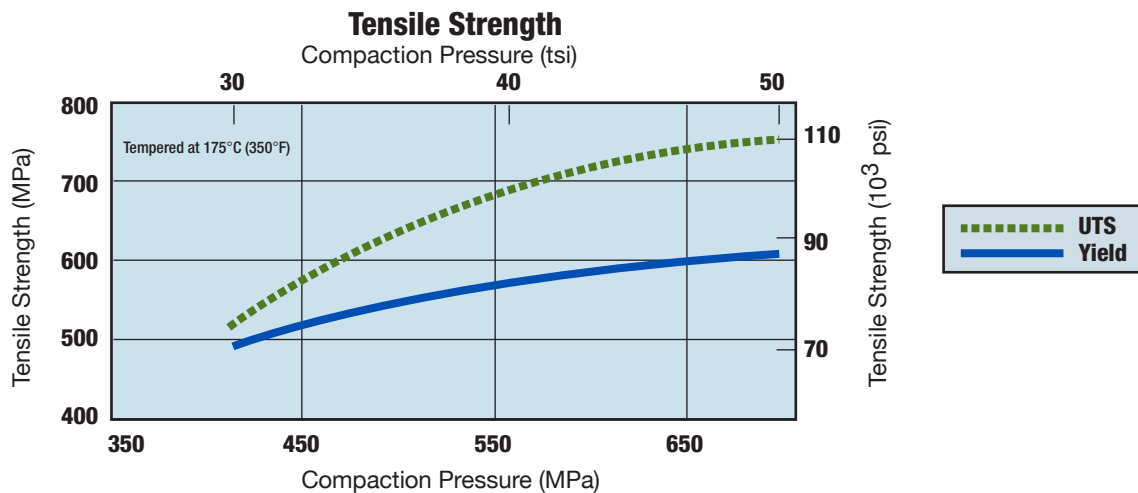
Flow

31 s/50 g

Green and Sintered Density vs Compaction Pressure



Ancorloy DH-1



Specimens were compacted from a premix that contained 0.6 w/o graphite and 0.75 w/o Acrawax C lubricant. Test specimens were sintered for 30 minutes at 1120°C (2050°F) in a 75 v/o hydrogen; 25 v/o nitrogen atmosphere. All as-sintered test specimens were tempered at 175°C (350°F) prior to mechanical property testing.

IMPORTANT NOTICE: The data shown are based on laboratory processing standard test specimens. Results may vary from that obtained in production processing.