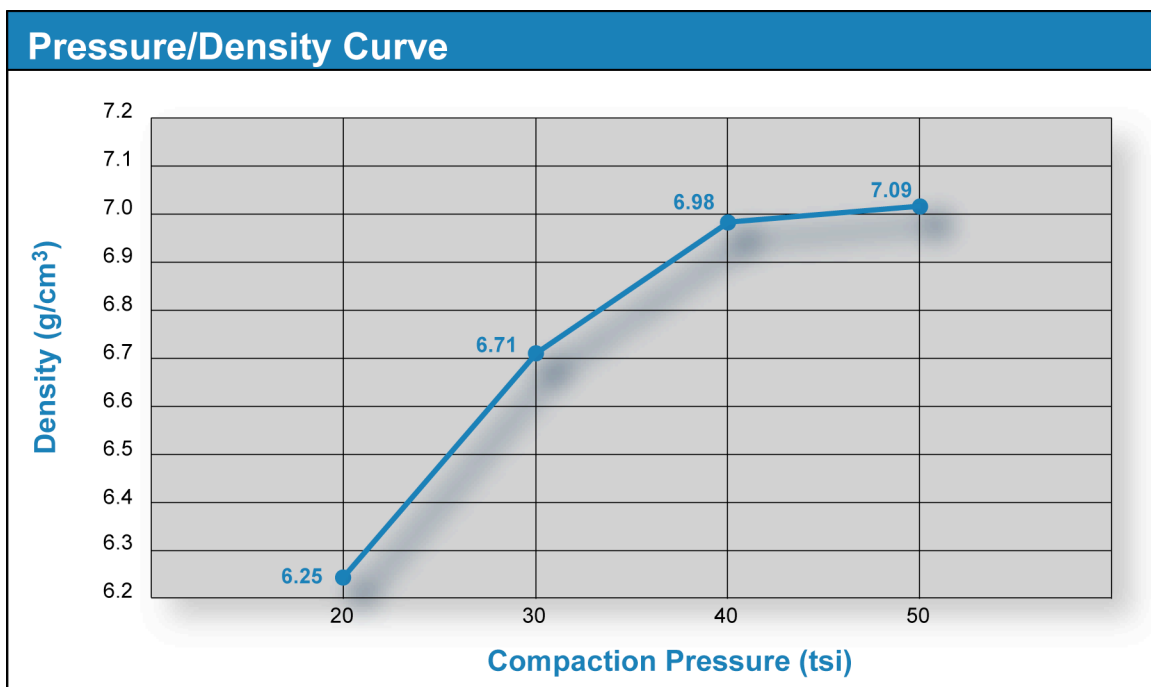


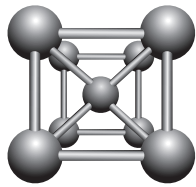
The Rapid Response Premix Facility for the Powdered Metal Industry

ARC-42 (FC-0208) Remill Data Sheet

ARC-42 remill is an iron based mix meeting MPIF FC-0208 chemistry requirements and produced mainly from recycled green powder metal compacts. ARC-42 is a press ready mix containing 0.75% lubricant and slightly more copper than ARC-4. Common uses include net-shape lawn and garden, light industrial and household goods. ARC-42 may be machined, but some applications may not machine as well as new powder mixes. Additions of MnS are common for applications requiring machining.

Typical Blend Chemistry (%)	
Chemistry	Typical
Iron	Balance
Copper	2.25
Carbon	0.80
Lubricant	0.75
Others	1.07





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ARC-42 (FC-0208) Remill Data Sheet

Typical Blend Properties		
	ARC-42	Virgin Blend ¹
Hall Apparent Density (g/cm ³)	3.19	2.88
Hall Flow Rate (seconds per 50g.)	30.4	32.5

Typical Compacted Properties		
	ARC-42	Virgin Blend ¹
Compacting Pressure to 6.8 g/cm ³ (tsi)	32.3	31.5
Green Strength at 6.8 g/cm ³ (psi)	1255	2085

Typical Sintered Properties ²		
	ARC-42	Virgin Blend ¹
Dimensional Change (%)	0.44	0.46
Apparent Hardness (HRb)	82	74
Transverse Rupture Strength (psi)	114,800	123,200

1) A-1000B, 2.00% Copper, 0.80% graphite, 0.75% EBS

2) Compacted to 6.8 g/cm³ and sintered in 90%/10% N₂/H₂