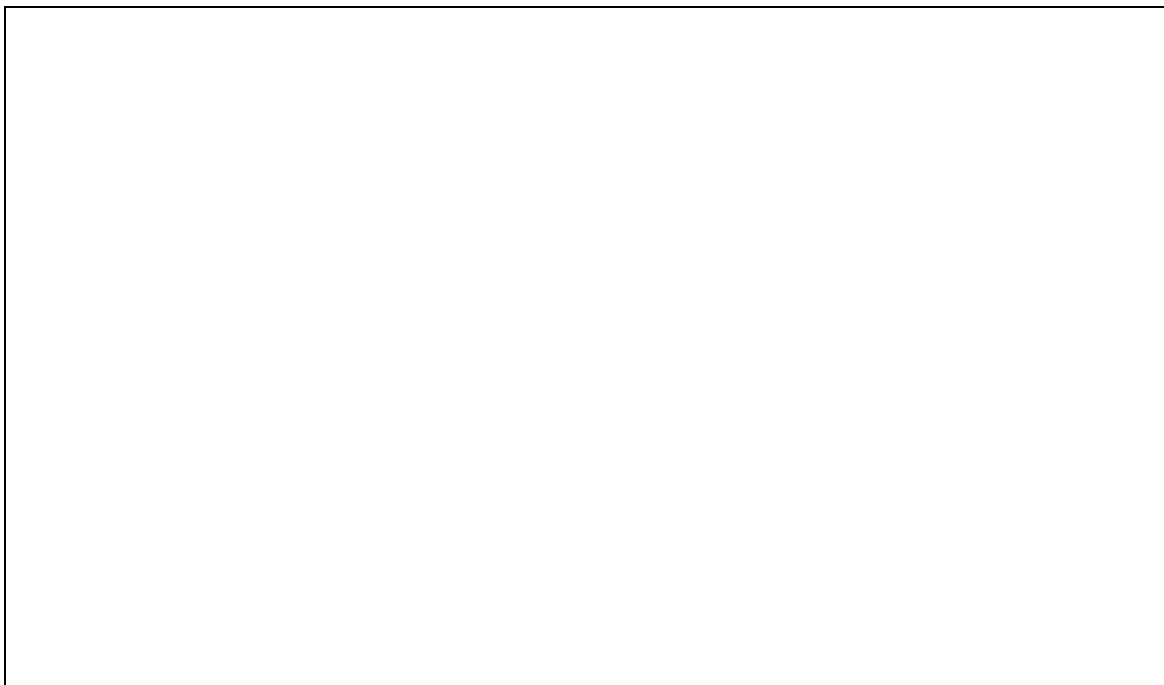


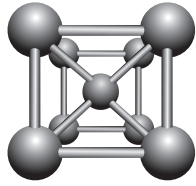
The Rapid Response Premix Facility for the Powdered Metal Industry

ARC-5L (FN-0208) Remill Data Sheet

ARC-5L remill is an iron based mix meeting MPIF FN-0208 chemistry requirements and produced mainly from recycled green powder metal compacts. ARC-5L is a press ready mix containing 0.75% lubricant. It is commonly used to produce net-shape lawn and garden, light industrial and household goods. ARC-5L 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
Nickel	2.00
Carbon	0.80
Lubricant	0.75
Others	0.93





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ARC-5L (FN-0208) Remill Data Sheet

Typical Blend Properties		
	ARC-5L	Virgin Blend ¹
Hall Apparent Density (g/cm ³)	3.22	2.96
Hall Flow Rate (seconds per 50g.)	30.2	34.0

Typical Compacted Properties		
	ARC-5L	Virgin Blend ¹
Compacting Pressure to 6.8 g/cm ³ (tsi)	30.4	31.9
Green Strength at 6.8 g/cm ³ (psi)	1147	2070

Typical Sintered Properties ²		
	ARC-5L	Virgin Blend ¹
Dimensional Change (%)	0.18	0.13
Apparent Hardness (HRb)	79	68
Transverse Rupture Strength (psi)	109,900	103,700

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

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