



Product Code: 246137-3 Technical Data Sheet Revision: # 000 Dated: 08/08/08

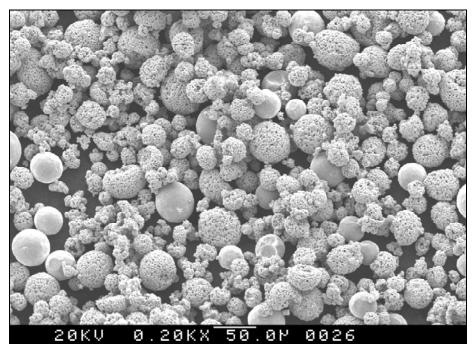


Figure 1: Typical Powder Morphology (SEM 200X)

1. PHYSICAL PROPERTIES

HA 6137-3 is a special blend of fine 75% molybdenum powder and 25% fine self-fluxing, nickelchromium alloy.

Formula	75 Mo / 25 NiCrFeSiB	
Name	Molybdenum / Nickel self-fluxing Alloy	
Product Description	Blended	
Melting Point [°C] Molybdenum Nickel Chromium Alloy	2,610 1,025	
Apparent Density (typical) [g/cm ³] ASTM B212	2.8	
Hall Flow (typical) [sec/50g] ASTM B213	30 - 50	



HA 6137-3 Mo-NiCrFeSiB Blend

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2. CHEMICAL PROPERTIES

2.1. Typical Chemical Analysis

Мо		NiCrFeSiB	
Element	Weight Percent	Element	Weight Percent
Мо	> 99.4 %	Ni	Balance
Fe	< 0.1 %	Cr	13 – 20 %
Si	< 0.1 %	Fe	3-6%
С	< 0. 2 %	Si	3-5%
0	< 0.2 %	В	2.75 – 5 %
		С	0.6 – 1.3 %

3. POWDER MORPHOLOGY AND PARTICLE SIZE DISTRIBUTION

3.1. Powder Morphology

- 3.1.1. Powder has spherical shape as produced by agglomeration and atomization processes.
- 3.1.2. Typical Powder Morphology using SEM is shown in Figure 1.

3.2. Particle Size Distribution

- 3.2.1. The typical powder size range measured with Tyler according to ASTM B214 is -325 mesh +10 μm
- 3.2.2. Table 1 shows the required and typical particle size distribution measured with Microtrac according to ASTM B822
- 3.2.3. Figure 2 shows the typical Microtrac particle size distribution graph



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Percentile	<u>Typical Particle</u> <u>Size</u>	Mean	Required Particle Size
[%]	[µm]		
0.01	6.56		
5.00	11.01	D ₁₀	10 - 15 μm
10.00	12.99		
16.00	14.55		
50.00	20.26	D ₅₀	20 - 25 μm
84.00	27.98		
90.00	31.04		
95.00	35.72	D ₉₀	30 - 35 μm
99.99	52.21		

Table 1: Typical and Required Microtrac Particle Size Distribution

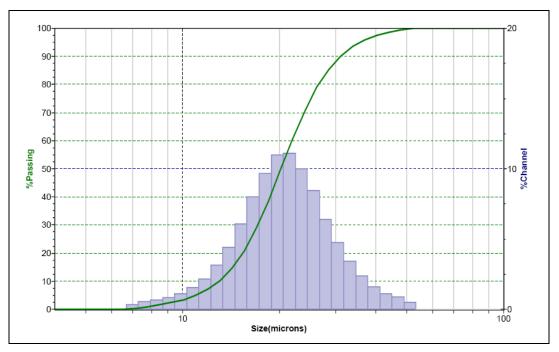


Figure 2: Typical Microtrac Particle Size Distribution