

HA 7050-1

Ni Self Fluxing Alloy

Product Code: 257050-1
Technical Data Sheet

Revision: # 003
Dated: 01/01/11

CHEMICAL AND PHYSICAL REQUIREMENTS

1.1. CHEMICAL PROPERTIES

1.1.1. Table 1 Typical Chemical Composition

Table 1

Element	Ni	Cr	Fe	Si	B	C	Others
% max	Balance	20	6	5	5	1.3	0.7
% min		13	3	3	2.75	0.6	0.2

1.2. PHYSICAL PROPERTIES

- 1.2.1. Hall Flow per ASTM B213 12 – 25 [s/50g]
1.2.2. Apparent Density per ASTM B212 3.8 – 4.8 [g/cm²]

PARTICLE SIZE AND POWDER MORPHOLOGY REQUIREMENTS

1.3. REQUIRED PARTICLE SIZE DISTRIBUTION

1.3.1. Sieve Analysis per ASTM E11 and ASTM B214 (Table 2)

Table 2: Cumulative Volume Percentage

Mesh Size	Particle Size	Maximum Percentage	Minimum Percentage
-325	-44 μ m	100	99.9

1.3.2. Microtrac Particle Analysis per ASTM B822 (Table 3)

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Table 3: Typical Microtrac Analysis

Percentile	Particle Size		Mean	Required Particle Size
0.01 %	6.56 μm		D ₁₀	10 - 15 μm
5 %	11.01 μm			
10 %	12.99 μm			
16 %	14.55 μm		D ₅₀	20 - 25 μm
50 %	20.26 μm			
84 %	27.98 μm			
90 %	31.04 μm		D ₉₀	30 - 35 μm
95 %	35.72 μm			
99.9 %	52.21 μm			
100 %	52.21 μm			