

HA 7050

Ni Self Fluxing Alloy

Product Code: 257050
Technical Data Sheet

Revision: # 003
Dated: 01/01/13

CHEMICAL AND PHYSICAL REQUIREMENTS

1.1. CHEMICAL PROPERTIES

1.1.1. Table 1 Typical Chemical Composition

Table 1 – Nominal Chemistry

Element	Ni	Cr	Fe	Si	B	C
% max	Balance	17	4	4	3.5	1

1.2. PHYSICAL PROPERTIES

1.2.1. Hall Flow per ASTM B213 12 – 20 [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

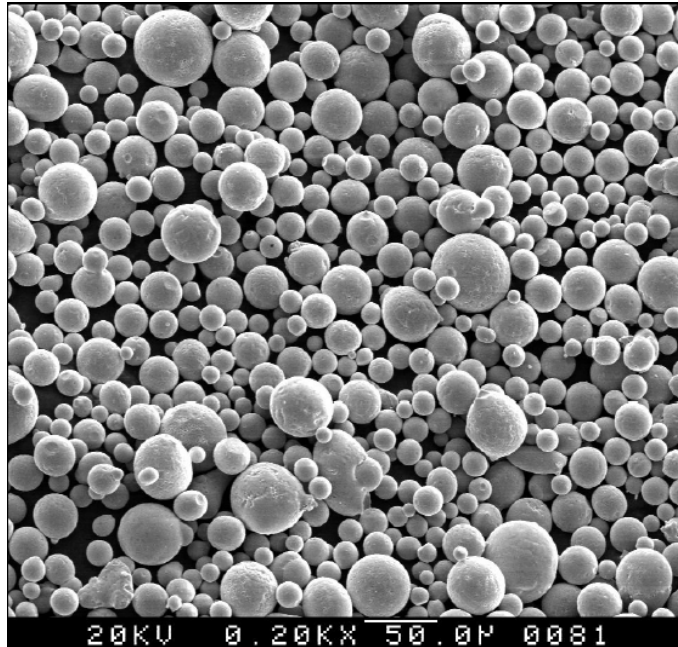
Mesh Size	Particle Size	Maximum Percentage	Minimum Percentage
-325	-44 μm	100	98

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

Table 3: Typical Microtrac Analysis

Percentile	Channel	Mean	Nominal Particle Size
0.01 %	6.56 μm	D ₁₀	15 μm
5 %	11.01 μm		
10 %	12.99 μm		
16 %	14.55 μm	D ₅₀	34 μm
50 %	20.26 μm		
84 %	27.98 μm		
90 %	31.04 μm	D ₉₀	45 μm
95 %	35.72 μm		
99.9 %	52.21 μm		
100 %	52.21 μm		