

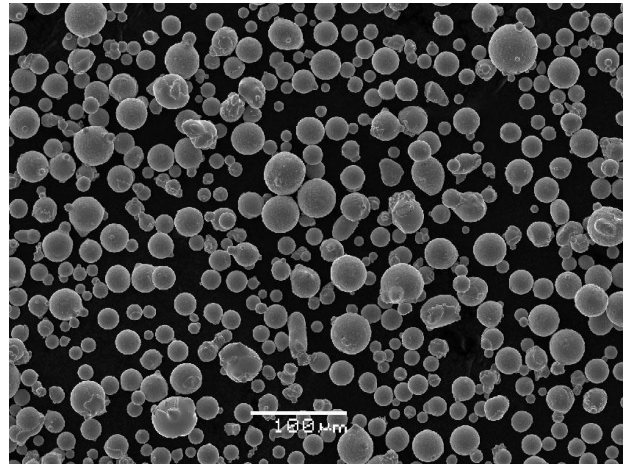
Ancor AM IN718- is a gas atomized austenitic nickel-chromium based superalloy powder. Parts made from this alloy exhibit excellent oxidation and corrosion resistance in aggressive environments. IN718 has excellent high temperature strength and creep resistance due to a combination of solution strengthening and precipitation hardening. Parts made from IN718 can be heat treated to improve strength and hardness.

Typical Analysis

Chemistry - Typical (%)											
Nickel	Chromium	Aluminum	Niobium	Titanium	Molybdenum	Iron	Carbon	Sulfur	Oxygen	Nitrogen	
53.8	18.5	0.51	4.95	1.01	2.97	17.6	.032	.001	.031	.038	

Powder Physical Properties

		Laser Particle Size		
AD	Flow	d10	d50	d90
4.18	2.5C	16.9	30.5	46.0



$x_{10} = 16.97 \mu\text{m}$ $x_{50} = 30.49 \mu\text{m}$ $x_{90} = 46.02 \mu\text{m}$ **SMD = 26.73 μm** **VMD = 31.12 μm**
 $x_{16} = 19.58 \mu\text{m}$ $x_{84} = 42.13 \mu\text{m}$ $x_{99} = 60.12 \mu\text{m}$ $S_v = 0.22 \text{ m}^2/\text{cm}^3$ $S_m = 798.72 \text{ cm}^2/\text{g}$

