# Ancor AM 1.2709

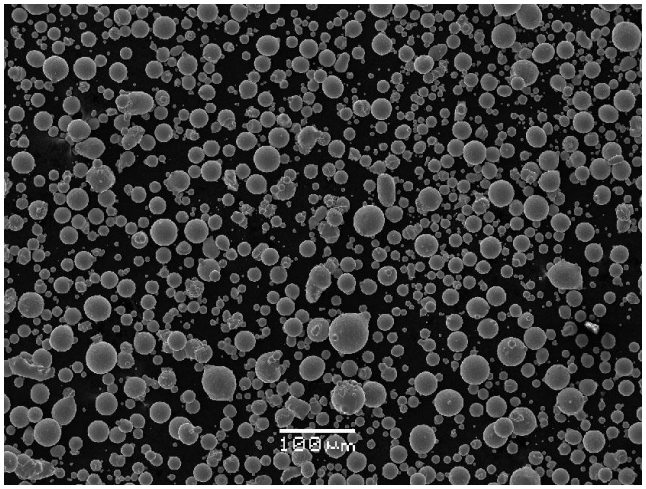
***Ancor AM 1.2709-*** *is a gas atomized maraging tool steel powder. 1.2709 is a 18% nickel, cobalt strengthened steel with excellent properties, workability and heat treatment characteristics. The alloy is very tough, but relatively soft until heat treated, so it can be readily machined. The absence of carbon is a benefit in additive manufacturing processes that use laser melting since rapid cooling generally leads to cracking in normal carbon containing tool steels.*

## *Typical Analysis*

| Chemistry - Typical (%) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Nickel | Aluminum | Cobalt | Titanium | Molybdenum | Iron | Carbon | Sulfur | Oxygen | Nitrogen |
| 17.9 | 0.06 | 8.98 | 0.63 | 4.79 | Bal | .004 | .004 | .043 | .007 |

## *Powder Physical Properties*

| | | Laser Particle Size | | |
|---|---|---|---|---|
| AD | Flow | d10 | d50 | d90 |
| 4.16 | 14.3 | 15.2 | 31.6 | 49.4 |




$x_{10}$ = 15.20 µm $x_{50}$ = 31.56 µm $x_{90}$ = 49.39 µm SMD = 24.83 µm VMD = 32.09 µm
$x_{16}$ = 18.39 µm $x_{84}$ = 45.60 µm $x_{99}$ = 65.86 µm $S_V$ = 0.24 m²/cm³ $S_m$ = 1726.04 cm²/g