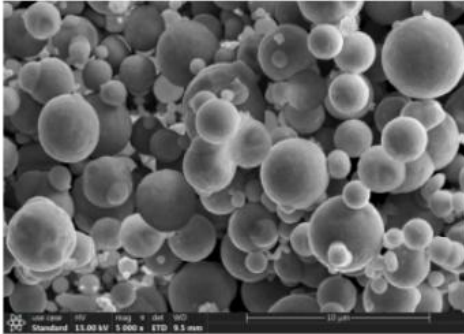


## Grade: **UFN06A**

### SEM-VIEW



- Can replace Co, Ni
- High bending strength
- Ultra-high bonding strength
- Recommendation: Application of transition layer in the medium-high temperature zone (above 800°C).

### Chemical Analysis (%)

| Element | Percentage (%) |
|---------|----------------|
| Fe      | Main Component |
| Ni      | 25.0           |

### Physical Properties

|  |         |         |
|--|---------|---------|
| Particle Size Distribution (µm)          | D10     | 0.8-1.5 |
|  | D50     | 3.0-4.5 |
|  | D90     | 7.0-9.5 |
| Apparent Density (g/cm <sup>3</sup> )    | 1.6-2.2 |         |
| Theoretical Density (g/cm <sup>3</sup> ) | 8.12    |         |

### Sintering Physical Properties

| Sintering Temp (°C) | Density (g/cm <sup>3</sup> ) | Hardness (HRB) | Bending Strength (MPa) |
|---------------------|------------------------------|----------------|------------------------|
| 700                 | 7.67                         | 92.5           | 1379.3                 |
| 750                 | 7.81                         | 99.8           | 1547.5                 |
| 800                 | 7.78                         | 101.2          | 1631                   |
| 850                 | 7.87                         | 103.4          | 1921.7                 |
| 900                 | 7.94                         | 104.5          | 1985.4                 |
| 950                 | 7.89                         | 96.7           | 1820.5                 |

Best Sintering Range: 800-900°C  
 Min. Temperature in Use: 800°C  
 Max. Hardness: 104.5 HRB  
 Max. Bending Strength: 2024.3 MPa

### Sintered Shape: 800°C

