

Coating : Spherical Tungsten Carbide

Lase Spherical Tungsten carbide is an extremely dense fully welded overlay containing large solid spherical carbides fully embedded and wetted into a strong hard Nickel based matrix. It is extremely resistant to wear by abrasion under heavy load at low to medium temperatures with good resistance to impact. The Spherical carbides have superior hardness and abrasion resistance compared to our standard angular coarse carbide. This alloy represents the highest performance in terms of abrasive wear resistance

Typical applications include:

Down hole tooling

Security coatings

Coating Properties

Hardness

Matrix: 500 – 600 Hv

Carbide 2500 – 3000 Hv

Porosity:

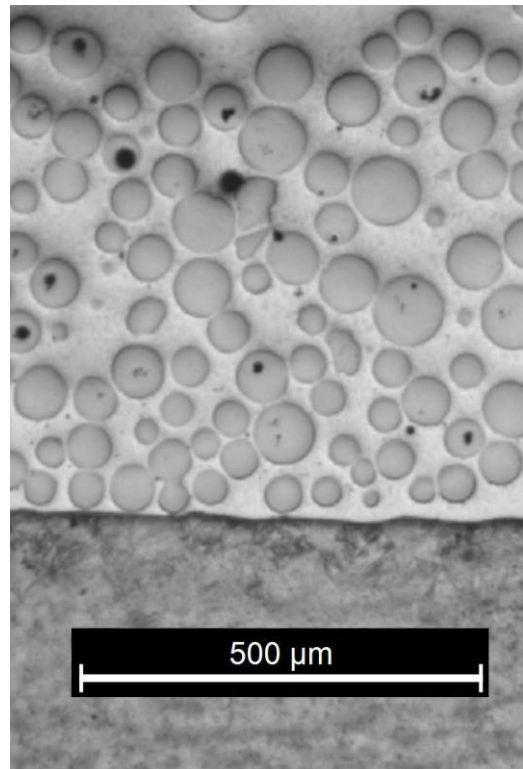
< .1%

Typical application rate

70 gm/min

Coverage

13kg/m²/mm



Process Considerations

If, for the particular application, a crack free deposit is required it will probably be necessary to pre-heat the substrate to 300 degrees Celsius prior to applying the coating. Such applications might include situations where corrosion and fatigue are involved. Where no such problems exist the presence of cracks would not be expected to affect the abrasion resistance since the particles are so well embedded.