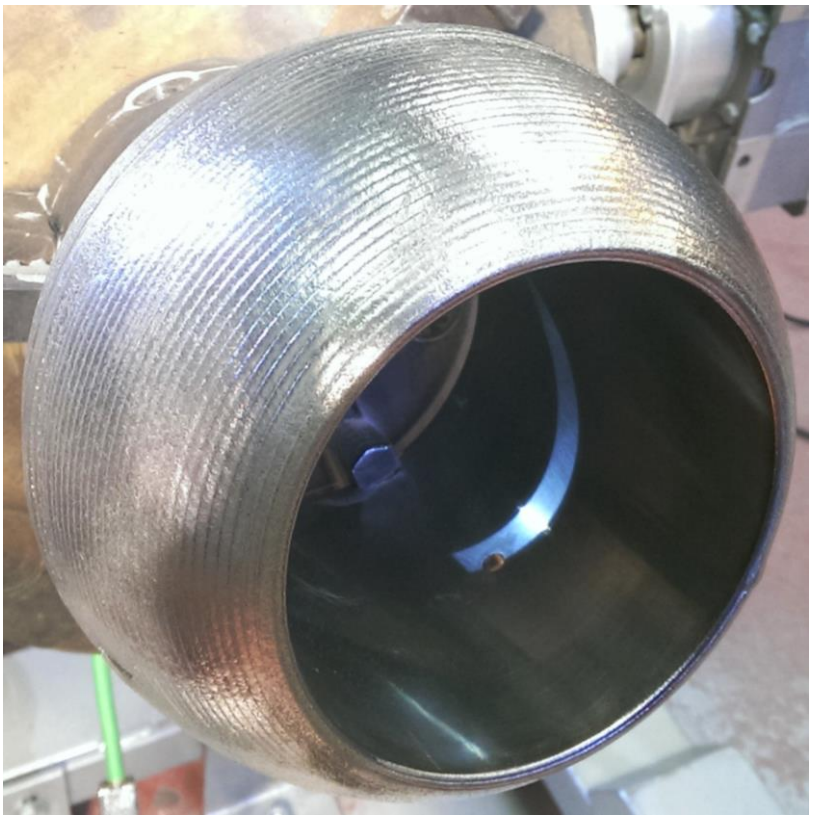
LASE Ltd
15 Milland Road
Neath
Neath Port Talbot
South Wales
United Kingdom
SA11 1NJ

Laser Cladding for Ball Valves

Laser Cladding offers pure and fully dense welded coatings which can be used to protect valve surfaces under high pressure. As the coating is fully dense it can be finished to an excellent standard, just as the base material.

Typical applications include:

- Stellite coatings applied to stainless steel ball surfaces
- Tungsten Carbide coatings applied to ball surfaces where extreme abrasion and erosion resistance is required



Coating Properties:

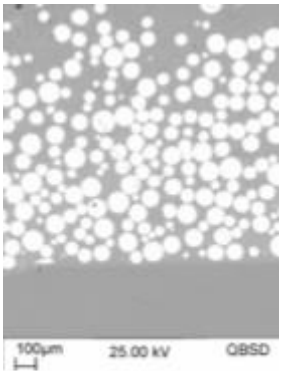
Hardness:

- Stellite 21 Laser clad coating
  480-490 Hv

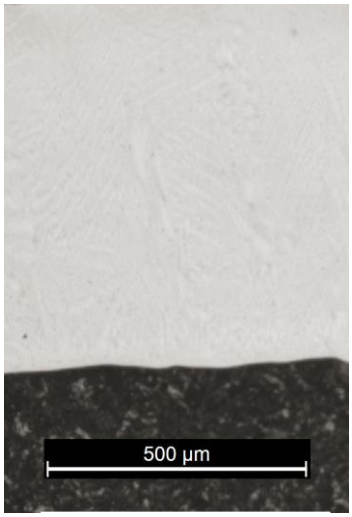
- Tungsten Carbide Metal matrix coating
  2000 Hv (Carbide particle)
  550 Hv (Nickel Based Matrix)

Process Considerations:

- The laser clad coating is typically 1- 1.5 mm thick, it is therefore advised to pre-machine the ball 0.5 mm under size (1.0 mm undersize on the diameter) this will allow plenty of material for machining.
- The Tungsten carbide coating will require the substrate to be preheated prior to laser cladding.
- These Coatings can be applied onto most Steel, Stainless Steel and Inconel base materials.



Laser Clad
Tungsten Carbide



Laser Clad
Stellite 21

Telephone Number +44 1639 697050 Mobile +44 7729281974 E – Mail info@lase.co.uk