

# PT-MAT<sup>™</sup> Ni 46 PTA.

#### **General Information:**

PT-MAT<sup>TM</sup> Ni 46 PTA is a Ni,B,Si based metal powder used for Hard facing or as a buffer layer for coating with a higher hardness. The alloy shows good corrosion resistance despite low Cr content, the alloy also contains low level of Fe and Carbon.

### **Applications:**

PT-MAT<sup>TM</sup> Ni 46 PTA is applied through plasma powder surfacing or laser cladding on low alloy to high alloy steel. The powder exhibits excellent weld ability and a very fluid puddle.

The low level of Fe and C makes it a good candidate to overlay stainless steel components even in single pass. The medium range hardness makes the coating suitable for machining.

### **Physical properties:**

Hardness (outside dilution): 35 HRc

Density:  $8.3 \text{ g/cm}^3$  /  $0.30 \text{ lb/in}^3$ 

Apparent density (Hall): 4.6 g/cm<sup>3</sup> Flow rate (Hall): 14-16 seconds

Typical sizing available: 53-150 microns (+270-100 mesh)

### Chemical Composition (in weight %).

Ni	Cr	Fe	С	Si	В
Bal.	<0.1	<0.1	<0.01	3.5	2.0

## **Packaging:**

10 lbs plastic bottles.

Other packaging available on request (plastic or metal pails).

