



## **PT-MAT™ NIFD**

### **General Information :**

PT-MAT™ NIFD is a cored wire filled with angular cast tungsten carbide particles in a NiBSi matrix.

PT-MAT™ NIFD is generally used as a hard facing when the most severe abrasion conditions are expected. The coating also have a good corrosion resistance behavior.

The coating contains solid particles of tungsten carbide (50-60% depending on diameter) in a low melting temperature Ni-B-Si alloy.

This matrix is specially formulated to generate low heat input welding operation and allow the coating to be repaired on itself which makes it an ideal candidate for parts subjected to repeated wear cycles such as oil drilling tools, stabilizers, kick pads, bent subs, conveying screws, pump parts, mining and dredging equipment.

### **Applications :**

PT-MAT™ NIFD is used extensively for severe wear applications in oil drilling, mining, cement, power generation, pulp and paper and other industrial processes.

### **Hardness (outside dilution):**

Matrix : 45-52 HRC.

cast tungsten carbide (FTC) : 2100-2400 HV<sub>0.1</sub>

### **Welding Parameters.**

| Wire diameter mm | Wire diameter inch | FTC % | Voltage (V) | Amperage (A) |
|------------------|--------------------|-------|-------------|--------------|
| 1.2              | 0.045              | 40    | 16-21       | 100-140      |
| 1.6              | 1/16               | 55    | 17-22       | 110-150      |
| 2.0              | 5/64               | 59    | 18-22       | 120-170      |
| 2.4              | 3/32               | 63    | 20-24       | 150-220      |
| 2.8              | 7/64               | 63    | 20-25       | 150-240      |

### **Packaging:**

Spools "S" = 15 kg (33lbs)

Spools "B" = 33kg (55lbs)

Other packaging available on request (larges spools, drums etc...)

