



PT-MAT™ P-NM40S.

General Information :

PT-MAT™ P-NM40S is a metal powder where very hard particles of spherical cast tungsten carbide (SFTC) are mixed with a NiCrBSi alloy matrix specially designed for applications on non-magnetic austenitic stainless steel used in the petroleum industry..

PT-MAT™ P-NM40S can be applied through PTA welding (Plasma Transfer Arc) or Laser cladding.

Applications :

PT-MAT™ P-NM40S is applied through plasma powder surfacing or laser cladding on low alloy to high alloy steel. Typical applications are equipment submitted to abrasive wear with moderate impact and corrosion.

Very efficient coating for mining applications, industrial fans and downhole drilling equipment (non mag drill collars, stabilizers, radial bearing, kick rings etc...).

This material is also ideal for repair work of previously hard faced equipments..

Composition (weight)

60 % (Ni,Cr,B,Si matrix powder)

40% PT-MAT™ -SFTC (Spherical cast tungsten carbide)

Physical properties:

Hardness:

(Ni,Cr,B,Si matrix powder)

30-35 HRC

PT-MAT™ -SFTC:

2650-3000 HV_{0,1}

Melting point:

(Ni,Cr,B,Si matrix powder)

< 1200°C

PT-MAT™ -SFTC

2860°C

Density:

(Ni,Cr,B,Si matrix powder)

8.4 g/cm³

PT-MAT™ -SFTC

16.4 g/cm³

Apparent density (Hall):

6.9 g/cm³

Flow rate (Hall) :

9-10 seconds

Typical sizing available : 45-150 microns (+325-100 mesh) or 53-180 microns (+270-80 mesh).

Packaging:

10 lbs plastic bottles.

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

Plasma Technology Automation & Materials

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