



PT-MAT™ P-6040S.

General Information :

PT-MAT™ P-6040S is a metal powder where very hard particles of spherical cast tungsten carbide (SFTC) are mixed with a NiCrBSi alloy matrix.

PT-MAT™ P-6040S can be applied through PTA welding (Plasma Transfer Arc) or Laser cladding.

Applications :

PT-MAT™ P-6040S is applied through plasma powder surfacing or laser cladding on low alloy to high alloy steel. Typical applications are equipment subjected to severe abrasive wear with moderate impact and corrosion. Very efficient coating for mining applications, industrial fans and downhole drilling equipment (stabilizers, radial bearing, kick rings etc...).

Composition (weight)

40 % PT-MAT™ -Ni40 (Ni,Cr,B,Si matrix powder)

60% PT-MAT™ -SFTC (Spherical cast tungsten carbide)

Physical properties:

Hardness:

PT-MAT™ -Ni40: 38-44 HRC

PT-MAT™ -SFTC: 2650-3000 HV_{0,1}

Melting point:

PT-MAT™ -Ni40: < 1200°C

PT-MAT™ -SFTC 2860°C

Density:

PT-MAT™ -Ni40 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).

