PT-MAT™ P-6035A.

General Information :

PT-MAT™ P-6035A is a metal powder where very hard particles of angular cast tungsten carbide (FTC) are mixed with a NiCrBSi alloy matrix.
PT-MAT™ P-6035A can be applied through PTA welding (Plasma Transfer Arc)or Laser cladding.

Applications :

PT-MAT™ P-6035A is applied through plasma powder surfacing or laser cladding on low alloy to high alloy steel. Typical applications are equipment submitted 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™ -Ni35 (Ni,Cr,B,Si matrix powder)
60% PT-MAT™ -FTC (Angular cast tungsten carbide)

Physical properties:

Hardness:
PT-MAT™ -Ni35: 35-39 HRC
PT-MAT™ -FTC: 2100-2350 $HV_{0,1}$

Melting point:
PT-MAT™ -Ni35: < 1200°C
PT-MAT™ -FTC 2860°C

Density:
PT-MAT™ -Ni35 8.4 g/cm³
PT-MAT™ -FTC 16.4 g/cm³

Apparent density (Hall): 5-7 g/cm^3
Flow rate (Hall) :10-12 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).