

## Description:

**FT-PO-6035ST-PL** is a metal matrix composite powder for use with plasma transfer arc welding (PTA) and laser cladding. It was developed to provide coatings that exhibit high wear resistance and maintain some ductility and repairability despite high concentration of tungsten carbide.

**FT-PO-6035ST-PL** is composed of 60% spherical fused tungsten carbide in a NiCrBSi metal alloy.

## Application

**FT-PO-6035ST-PL** is designed to repair and hard surface a wide range of ferritic and austenitic steel. It has proven very effective to protect component in the oil and gas industry such as downhole motor components (fixed bend housing, adjusting rings, stators...) as well as industrial processing equipment, mixers, screws, pumps.

The coatings can only be ground (diamond wheel, wet grinding recommended)

## Composition :

Ni	Cr	Si	B	C	Fe	SFTC
Balance	2.4-3.5	1.2-1.8	0.5-0.8	<0.2	0.9-1.5	60%

## Properties:

Hardness matrix : 34-42HRc (outside dilution for PTA welding)

Hardness SFTC : 2,650-3,200 HV<sub>0.1</sub> (average)

Melting point matrix : (1650-1950 °F)

Density : 8-8.2 g/cm<sup>3</sup>

Grain size : 63-150 μm

**Packaging** : 10 lbs bottles (larger containers on request)