

Ni-PTA

Nickel-based hardfacing powders for Plasma Transferred Arc

Ni-PTA powders are designed to **protect new parts and restore worn parts**, in order to extend their service life.

These nickel-based alloys are designed for **Plasma Transferred Arc (PTA) hardfacing**, to produce metallurgically bonded deposits on the substrate.

PROPERTIES & APPLICATIONS

The Ni-PTA range provides protection against **wear and corrosion through Plasma Transferred Arc hardfacing**.

4010, 35 to 40 HRC, combines wear resistance, ductility and the possibility of machining for finishing.
6010, 55 to 61 HRC, is preferred for abrasion resistance with a harder deposit finished by grinding.

Typical applications: mixing and conveying screws, mixer blades and pump bodies, particularly in agriculture, anaerobic digestion, the paper industry and waste treatment.

CHEMICAL COMPOSITION

(% by mass)

References	B	Si	C	Cr	Fe	Ni	Hardness HRC	Melting Temp. °C	Density kg/dm ³	Particle size µm
Ni-PTA 4010	1,8	3,2	0,5	10	2,5	Balance	35-40	1107	4.4	60-180
Ni-PTA 6010	3	4,5	0,7	14	4	Balance	55-61	1015	4.2	

APPLICATION

Ni-PTA powders are applied using **Plasma Transferred Arc hardfacing equipment**, fitted with a powder feeding system. The arc melts the powder and the substrate surface to form a welded deposit.

PACKAGING

5 kg container