



CEWELD Powder PTA DUR 12

TYPE Gas atomized spherical Cobalt-Chromium-Tungsten alloy powder. (P Co3, Stellite 12)

APPLICATIONS CEWELD Powder PTA DUR 12 is a cobalt-base metallic powder with spherical shape designed for plasma-transferred-arc (PTA) welding process. It is especially suited for hardsurfacing of parts subject to a combination of erosion, corrosion, cavitation, pressure, impact and abrasion and high temperatures.
Such as: Internal combustion exhaust valve, Valve plugs & seats, Pump sleeves, Bearing areas, Saw blades and tips, Saw teeth, Chain saw guide bars, and other Wood cutting tools, Knives, Scissor blades, Molten glass cutter
Twist rolls, Hot extrusion dies

PROPERTIES CEWELD Powder PTA DUR 12 weld deposit can be machined with tungsten tool tips and by grinding. It have a Excellent gliding and abrasion characteristics, very good polishability, normalized in hardness, slight-magnetic. Machinable by grinding and tungsten carbide tools.
Melting temperature: 1200 – 1365 °C Density: 8.5 g/cm³
Hardness of the weld deposit (approx.) approx. 50 HRC in the second layer welded by PTA process
Hot hardness at 500 °C (approx.) approx. 42 HRC in the second layer welded by PTA process

CLASSIFICATION EN ISO 14700: P Z Co3

SUITABLE FOR CEWELD Powder PTA DUR 12 is a cobalt-base metallic powder with spherical shape designed for plasma-transferred-arc (PTA) welding process.

APPROVALS

WELDING POSITIONS

**TYPICAL CHEMICAL
ANALYSIS OF WELD METAL
(%)**

Co	C	Si	Cr	W	Fe	Ni	Mo
Rem.	1.5	1.1	30	9	1.4	2	0.9

MECHANICAL PROPERTIES

Heat Treatment	R _{P0.2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness
As Welded				48 HRc

REDRYING Not required

GAS ACC. EN ISO 14175