CEWELD Powder PTA DUR 6



TYPE Gas atomized spherical Cobalt-Chromium-Tungsten alloy.

APPLICATIONS CEWELD Powder PTA DUR 6 is a cobalt-base metallic powder with spherical shape and is 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 up to 900 $^{\circ}$ C, such as tight surface of fittings, valve seats and cones for combustion engines, gliding surfaces metal to metal, highly-

stressed hot working tools without thermal shock, milling, mixing and drilling tools

PROPERTIES CEWELD Powder PTA DUR 6 deposit can be machined with tungsten tool tips and by grinding.

The hardness of the deposit will degrease 16% at 300°C and about 30% at 500°C form approx. 45 HRC in the second layer welded by PTA process. CEWELD Powder PTA DUR 6 is a excellent alloy against thermal shock, abrasion, erosion, corrosion and cavitation at high temperature and excellent resistance to many forms of mechanical and chemical degradation over a wide temperature range, and retains a reasonable level of hardness up to 500°C (930°F).

Melting temperature: 1285 - 1410 °C

Density: 8.44 g/cm3

CLASSIFICATION EN ISO 14700: P Z Co2

SUITABLE FOR Examples include valve seats and gates; pump shafts and bearings, erosion shields and rolling

couples. It is often used self-mated.

APPROVALS No Approvals Found

WELDING POSITIONS

 TYPICAL CHEMICAL
 Co
 C
 Si
 Cr
 W
 Fe

 ANALYSIS OF WELD METAL
 Rem.
 1
 1
 28
 4
 1

ALL WELD MECHANICAL

(%)

PROPERTIES

As Welded /				Avg. 45
Treatment	MPa	MPa	(%)	Rockwell C
Heat	R _{P0,2}	Rm	A5	Hardness

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175