

# CEWELD Powder PTA DUR 21

TYPE	Gas atomized spherical CoCrMo alloy powder.														
APPLICATIONS	<p>CEWELD PTA DUR 21 Powder has been developed for Plasma Transfer Arc (PTA) welding and laser cladding.</p> <p>Areas of application are: Metal to metal sliding surfaces, hot working tools with thermal cycling, sealing surfaces on gas, water, steam and acid valves, high pressure and temperature valves, valve seats, chemical and petrochemical valves, steam valves, valve screws, hot shears, pump impellers, rings, hot cutting dies, hot forging dies, hot stamping dies, cavitation repair.</p>														
PROPERTIES	<p>CEWELD PTA DUR 21 powder is particularly suitable for hardfacing of parts exposed to a combination of corrosion, impact and abrasion, high temperatures up to 900°C, oxidation in corrosive environments at high temperatures.</p> <p>The powder has excellent sliding properties, good polishability, high toughness, non-magnetic. Can be machined with cutting tools.</p> <p>At 20 °C: approx. 35 HRC in the second layer welded by PTA process</p> <p>At 600 °C: approx. 280 HB in the second layer welded by PTA process</p>														
CLASSIFICATION	AWS	636-A: P Z Co1													
SUITABLE FOR	CEWELD Powder PTA DUR 21 is designed for plasma-transferred-arc (PTA) welding processes as well as for laser cladding.														
APPROVALS															
WELDING POSITIONS															
TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)	C	Si	Mn	Cr	Ni	Mo	Fe	Co							
	0.3	1.6	1	27	2.5	5.5	1.4	Rem.							
MECHANICAL PROPERTIES	Heat Treatment		$R_{P0,2}$ (MPa)		$R_m$ (MPa)		A5 (%)	Hardness							
	As Welded						35 HRc								
REDRYING	Not required														
MELTING RANGE	1295 – 1435 °C														
GAS ACC. EN ISO 14175															