

CEWELD Powder PTA DUR 21

TYPE Gas atomized spherical CoCrMo alloy powder.

APPLICATIONS CEWELD PTA DUR 21 Powder has been developed for Plasma Transfer Arc (PTA) welding and laser cladding.
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.

PROPERTIES 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.
The powder has excellent sliding properties, good polishability, high toughness, non-magnetic. Can be machined with cutting tools.
At 20 °C: approx. 35 HRC in the second layer welded by PTA process
At 600 °C: approx. 280 HB in the second layer welded by PTA process

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