

CEWELD DUR R (Ni)

TYPE	Flexible extruded acetylene-oxygen rod consisting of spherical tungsten carbide castings and a nickel-based alloy.																			
APPLICATIONS	CEWELD®DUR R (Ni) offers the highest available wear resistance of all hardfacing alloys in most applications. The deposit offers excellent corrosion resistance combined with tungsten carbides for long life span in extreme applications. The main areas of application are the coating and rebuilding of stabilizers and other oilfield tools where maximum protection is required. Also for screws, impellers, mixer plates in the brick and clay industry and on decanter screws in the food and chemical industry where corrosion resistance is required																			
PROPERTIES	CEWELD® DUR R (Ni) is a newly developed product for hardfacing. It is an extruded acetylene-oxygen rod consisting of spherical tungsten carbide castings and a nickel-based alloy. Crushed cast carbide guarantees a long service life. In addition, the nickel-based alloy offers excellent corrosion resistance. CEWELD® DUR R (Ni) has excellent flow and wetting properties. It is easy to use, so even inexperienced welders can easily achieve smooth deposits without cracks. Multi-layer deposits are possible and worn parts can be restored without removing the old material. The surface should be free of grease, oil, rust, and other foreign matter. Use a larger tip than is generally recommended for mild steel of the same diameter. Also, use a slightly excessive acetylene spring. The deposit is not machinable or forgeable. Only grinding with diamond tools is possible. CEWELD® DUR R (Ni) is available as a 500 mm long flexible rod or endless on coils. Matrix: ~43 HRc Special carbides (SC): ~3000 HV0.1																			
CLASSIFICATION	EN ISO	14700: T Ni20																		
SUITABLE FOR	Scratchers, Mixers, Deep drilling, Bentonit mixers, Cement mixers, Stabilisers, Impellers, Augers etc.																			
APPROVALS																				
WELDING POSITIONS	PAPBPC																			
TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)	<table><tr><th colspan="5">WSC</th></tr><tr><td colspan="5">65</td></tr></table>					WSC					65									
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MECHANICAL PROPERTIES	<table><tr><th>Heat Treatment</th><th>R_{P0,2} (MPa)</th><th>R_m (MPa)</th><th>A₅ (%)</th><th>Hardness</th></tr><tr><td>As Welded</td><td></td><td></td><td></td><td>45 HRc</td></tr><tr><td>As Welded</td><td></td><td></td><td></td><td>3000 HV</td></tr></table>					Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness	As Welded				45 HRc	As Welded				3000 HV
Heat Treatment	R _{P0,2} (MPa)	R _m (MPa)	A ₅ (%)	Hardness																
As Welded				45 HRc																
As Welded				3000 HV																
REDRYING	Not required																			
HARDNESS	Ni-matrix: ± 480-520 HV, WSC (carbides) ± 2350 HV																			
GAS ACC. EN ISO 14175	R1																			