

OA WC2Ni

CATEGORY FCAW Flux-Cored

TYPE Nickel based flux cored wire for hardfacing containing a high amount of tungsten carbides.

APPLICATIONS This Ni-based alloy provides an excellent corrosion resistance combined with extreme abrasion resistance. OA WC2 (Ni) can be applied on all sorts of steels except on cast iron or Mn-steel. This alloy is the most wear resistant type in most hardfacing applications. In case of very fine dust abrasion It might happen that the matrix will be washed out and loses the imbedded Tungsten carbides, in this case another hardfacing product should be considered.

PROPERTIES 2400 HV nickel based corrosion resistant hardfacing alloy containing 60% tungsten carbides. OA WC2 (Ni) has excellent flow and wetting characteristics. Multi-layer deposits are possible and worn parts can be rebuild without removing the old material. Crushed cast carbide will guaranty a long life for several wear applications. Best to be used with shielding gas M13 (Argon with 1% Oxygen) approx. 15 litres per minute.

CLASSIFICATION

AWS	A 5.21:
EN ISO	14700: T Ni 20
DIN	8555: MF-21-65-CGTZ

SUITABLE FOR Rebuilding of stabilisers and other oilfield tools where maximum protection is required. Also for augers, impellers, mixer plates in the brick and clay industry and on decanter screws or hardfacing deep drilling equipment.

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

WC2	Ni-Cr-B-Si
62	bal

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V		Hardness	
				-20°C	-40°C	matrix HRc	Carbides HV
AW						55	2400

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters				Packing
D (mm)	Voltage (V)	Current (A)	spooling type	kg / spools / drums
1.2	18-21	150-190	K-300 / Drum	15 / 250
1.6	20-22	160-200	K-300 / Drum	15 / 250
2.4	22-24	180-220	K-300 / Drum	15 / 250

REDRYING TEMPERATURE 150°C / 24hr (normaly not required)