

Dur RU

CATEGORY SMAW Stick Electrodes

TYPE Iron based SMAW electrode filled with tungsten carbides for extreme wear resistant overlays.

APPLICATIONS To be applied on-armor-platings of tools and machine parts in the mining, road construction, well digging, special civil engineering, depression drilling technology, where strongest abrasion by minerals may occur.

PROPERTIES Dur RU is a steel tube filled with fused tungsten carbides. The weld deposit contains a high amount of tungsten carbides embedded in a steel matrix. The extraordinary hardness of the fused tungsten carbides (WSC) of approx. 2300 HV imply the high build-up wear resistance. It is a dip-coated electrode suitable for electrical welding on AC as well as on DC. The carbon content of the base metal should not exceed 0,45 % in order to avoid lack of fusion.

CLASSIFICATION

AWS	A 5.13: no class
EN ISO	14700: E Fe20
DIN	8555: E21-GF-UM-60-GP

SUITABLE FOR Scratchers, mixers, deep drilling, mining, bentonit mixers, cement mixers, stabilisers, impellers, augers etc.

APPROVALS CE approved

WELDING POSITIONS:



FILLER METAL ANALYSIS % (TYPICAL VALUES)

Fe (Matrix)	Fused tungsten carbides (WSC)
Rem	62%

MECHANICAL PROPERTIES

Heat Treatment	Rp0,2 (N/mm ²)	Rm (N/mm ²)	A5 (%)	Impact Energy (J) ISO-V		Hardness	
				-20°C	-40°C	Matrix	Carbides
						>60 HRc	>2300 HV

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) (DC+/AC)	kg / can	kg / 6pack	kg / 1000
3,2	350	70-90	5	30	50.5
4.0	350	80-100	5	30	75.9
5.0	350	100-120	5	30	119.6

REDRYING TEMPERATURE not required

PARTICLE SIZE Tungsten particle sizes are standard 0,2-0,5 mm (other sizes are available on request)