

## Dur 49

**CATEGORY** SMAW Stick Electrodes

**TYPE** Rutile Fe, Cr, Co and Mo based elektotrode

**APPLICATIONS** Hardfacing of forging presses, hot piercing dies, stretching rolls, pinch rolls, hot strip mill table rolls and back-up rolls

**PROPERTIES** Rutile Fe, Cr, Co and Mo based elektotrode with high hot wear resistance, tensile strenght and a high resistance against sliding wear of metallic objects.  
It has a good retention of hardness up to 650°C and is non scaling up to 900° C thermo shock resistant and resistant to sudden changes of temperature.  
Work hardening. Not crack sensible.  
The number of layers can be done as necessary. The deposit can be additionally treated with cutting tools.

**CLASSIFICATION** EN ISO 14700: ~E Fe3  
DIN 8555: E3-UM-50-CKRTZ

**SUITABLE FOR** 1.2311 40CrMnMo 7  
1.2343 X38CrMoV 5 1  
1.2344 X40CrMoV 5 1  
1.2365 X32CrMoV 3 3  
1.2367 X38CrMoV 5 3  
1.2606 X37CrMoW 5 1  
1.2713 55NiCrMoV 6  
1.2714 56NiCrMoV 7

**WELDING POSITIONS:**



**WELD METAL ANALYSIS %**

Fe	Cr	Co	C	Si	Mn	Mo
Bal.	14	13	0.15	0.6	0.6	2.3

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Hardnes HRC	Hardnes HRC (work hardened)
AW				45-50	Up to 55

AW: as welded

**WELDING PARAMETERS PACKING**

D (mm)	Welding Parameters			Packing	
	Length (mm)	Current (A)	kg / can	kg / 6 pack	
2.5	350	50-90	2.6	15.6	
3.2	350	90-120	2.8	16.8	
4.0	350	110-150	2.8	16.8	

**REDRYING TEMPERATURE** 130°C / 1hr