

# DURWELD 17Mn10Cr3Nb

Electrodes MMA [SMAW]

Hardfacing and repairing

<b>CLASSIFICATION:</b> EN ISO 14700-A : E Fe9	<b>APPROVALS:</b>	<b>APPLICATION:</b> Hardfacing and repairing
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- Electrode for joining and hardfacing of parts which are subject to metal-metal wear, heavy impact, increased pressure and temperature up to 500°C.
- The deposit is resistant to strikes and medium abrasion.
- We recommend buffer layer made with INOX B 307 if the materials will be mechanically shaped before hardening.

### Recommendations:

For austenitic manganese steels, preheating to 100°C is recommended; tempering is not recommended. For carbon steels, preheating to 250°C is recommended. For thicker elements, it is recommended to temper at 550-650°C - the structure and mechanical properties will remain unchanged.

### Application

Hardfacing of hammers, bucket teeth, furnace bells and armor plates.



### Base material

Austenitic 14% Mn steels  
Carbon steels  
Low alloyed steels

### Typical chemical composition %

C	Mn	Cr	Nb
1,20	17,50	9,50	2,80

### Typical mechanical properties

<b>Hardness</b>	250 HB / 45 HRC (after hardening) / The hardness of the overlay depends on the relevant welding conditions, the number of layers and the chemical composition of the base material. /
<b>Coating type</b>	basic
<b>Wear coefficient</b>	12%
<b>Weld metal recovery</b>	140%
<b>Welding current</b>	
<b>Welding positions</b>	
<b>Redrying</b>	300°C / 2 h

### Welding parameters and packing

∅	Length [mm]	Welding current [A]	Weight of packet [kg]	Weight of carton [kg]	Pcs/1 kg
3,2	450 /	100-140	4,5	13,5	24

4,0	450 /	150-210	4,5	13,5	10
5,0	450 /	190-260	4,5	13,5	7

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