

SELECTARC HMn

Highly Resistant to Impact

Classification

DIN 8555 : E7-UM-250-KP AWS A5.13 : EFeMn-C

EN 14700 : E Fe9

Characteristics

Rutile-basic heavy coated electrode with high efficiency (140%), developed to surface component subject to high impact. Sometimes used, instead of selectarc 18/8Mn, for 13% Mn-steel assembling (Hadfield steels). Frequently used as cushion layer before hardfacing in case of heavy reclaiming. Use to build up prior to abrasion resistant final layers, 1 or 2, using HBA or HB63. The deposit is austenitic and is exceptionally resistant to impact and wear combined with it. The addition of Ni and Cr increases the resistance against cracks and abrasion.

Applications

Repairing of used pieces or preventive protection of new pieces. Used in railway applications (Rails, Switches, Crossings, Tongues) in quarries and mines (Crusher jaws, Excavator and Grab teeth, Mill hammers, Rock crusher).

Base materials

Austenitic steels with high Mn:				
DIN 17145 and 17155	X 110 Mn 14			
AFNOR	Z120M12			

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Ni	Fe
0.90	0.60	13.00	3.00	3.50	base

All Weld Metal Mechanical Properties (Typical)

Hardness (HB)

AW (Obtained on pure weld metal)

HB

Hardness (after work hardening)

HB

200 - 250 400 - 500

Welding Current & Instructions

Electrode	ØxL (mm)	3.2 x 450	4.0 x 450	5.0 x 450
Current	(A)	110 - 130	140 - 160	190 - 210

Redrying of electrode at 300° C for 1hr before use. Weld with a minimum heat input (low current, short beads) in order to maintain an interpass temperature of 250° C maximum. Do not preheat the piece to weld. When surfacing other steels than 13% Mn types, apply a cushion layer with selectarc 18/8Mn.



= + ~ 65 V

1G/P

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