



# Selectarc HMn

*Electrode highly Resistant to Impact*

## Description & Applications

Rutile-basic heavy coated electrode (efficiency ~ 120%), destined to surface all pieces 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. Allows to build up and then to apply 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 impact. The addition of Ni and Cr increases the resistance against cracks and abrasion.

**General 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 : X110Mn14  
 AFNOR : Z120M12

## All Weld Metal Mechanical Properties

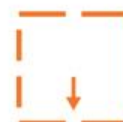
Hardness as welded	Hardness after work hardening
200-250 HB	400-500 HB
Obtained in pour weld metal	

## Welding Current & Instructions

Electrode	ØxL ( mm )	3,2x450	4,0x450	5,0x450
Current	( A )	120	150	200

Redrying 1h at 300°C, if necessary. Weld with a minimum heat input (low current, short beads) in order to respect 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.

ind.13



= +      ~ 65V



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