

Date: 2007-10-19

Revision: 13

### Description:

Elgaloy Mix 18 is a rutile-coated, 160% recovery electrode of the 307 type, intended for joining and building up 13% Mn steels and welding armour plate and difficult-to-weld steels, without the need for preheat. It is also recommended for dissimilar joints between stainless and mild or medium carbon steels. In contrast to Elgaloy Mix 29, welds produced with Elgaloy Mix 18 can be stress-relieved without risk of sigma-phase formation and consequent loss of ductility. The deposit work hardens from 200 HV to 450 HV. Also available as a self-shielded flux cored wire, Elgaloy Mix 18 R.

### Applications:

Buffer layer on 13% Mn steels used in rock crushing and earth moving equipment prior to surfacing with Elgaloy 100, and also rails, rail crossings, frogs etc. without preheat.

## Welding positions:



## Shielding gas:

Coating type:

Rutile

Metal recovery:

160%

Hardness:

Hardness as welded:

200 HV

Hardness work hardened:

450 HV

Welding current:

DC +, AC

# Chemical composition, wt.%

	С	Si	Mn	Р	S	Cr	Ni
Min	0,040	0,40	3,30			17,0	9,0
Typical	0,05	0,6	3,6			18,0	9,5
Max	0.14	0.90	4.80	0.035	0.025	20.0	10,0

	Мо
Min	
Typical	<0,3
Max	

### **Mechanical properties**

Specified Typical

Yield strength, Rp0.2%: 475 N/mm²
Tensile Strength, Rm: 660 N/mm²
Elongation, A5 40 %

Classification:

EN 1600 ~E 18 8 Mn R 53 AWS A5.4 ~E 307-26

Approvals:

Note

AWS: Nearest classification

EN: Deviation in Mn

### Product data

Diam.mm	Product code	Current A	Voltage V	Delivery form
2,5	70402510	70-115		
3,2	70403210	90-155		
4,0	70404010	130-210		
5,0	70405010	160-260		