Elgaloy Mix 18B

REPAIR & MAINTENANCE

Other

Date:	2013-11-01
Revision:	7

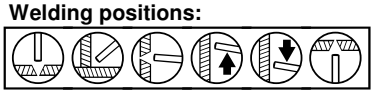
Description:

Elgaloy Mix 18B is an all positional basic-coated electrode which deposits a 19% Cr / 9% Ni / 6% Mn fully austenitic stainless steel weld metal with excellent toughness and crack resistance. It is intended for joining hardenable steels, armour plate, 13% Mn steels 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. Welds produced with Elgaloy Mix 18B can be PWHT without risk of sigma-phase formation and consequent loss of ductility. The deposit work hardens from 200 HV to 450HV.

Applications:

Buffer layers on 13% Mn steels used in rock crushing and earth moving equipment, prior to hardfacing. Reclaiming 13% Mn steels. Surfacing of rails, rail crossings, frogs etc. Buffer layers in highly restrained repair work.

Welding positions:



Coating type:

Basic

Metal recovery:

110%

Redrying temperature:

200 °C, 1h

Hardness as welded:

200 HV

Hardness work hardened:

450HV

Ferrite content:

0

Welding current:

DC+

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			4,5			17,0	7,0
Typical	0,09	0,5	5,5	0,02	0,02	18,5	9,3
Max	0,14	0,9	7,5	0,035	0,035	20,0	10,0

	Mo
Min	
Typical	0,1
Max	0,5

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	>350N/mm2	440N/mm2
Tensile Strength, Rm:	>590N/mm2	650N/mm2
Elongation, A5	>30%	40%
Impact energy, CV:		20C 80J

Classification:

EN ISO 3581-A	E 18 8 Mn B 12
AWS A5.4	~E 307-15

Approvals:

Note

AWS A 5.4: Mn 3,3-4,75%; Mo 0,5-1,5%

Product data:

Dim.mm	Product code	Current A	Voltage V	
3,2x350	70413210	80-110	24	
4,0x350	70414010	110-150	25	