



WELDING

**UP 307**

## Classification

AWS A5.9 : ~ER307

ISO 14343-A : S 18 8 Mn

## Description & Applications

Solid wire for submerged arc welding (SAW) of austenitic steels alloyed with high Manganese. Nonmagnetic weld deposit, highly resistant to cracks and self hardenable. Specially designed to homogenous and heterogeneous welding of Mn-Steels like Hadfield steels (13% Mn) and difficult to weld materials. Also used for cushion layers prior hardfacing, for repairing of pieces submitted to shocks or wear.

**Main applications:** Civil engineering, railways repairs, cemeteries, mines...

## Typical Chemical Composition ( % )

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	Fe
Min			5.0	17.0	7.0							
Max	0.20	1.2	8.0	20.0	10.0	0.5	0.5	-	0.03	0.03	-	Rem.
Type	0.09	0.90	7.0	19.0	8.5	0.10	0.08	0.01	0.02	0.01	0.05	Rem.

## Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters				Flux
		Current (A)	Voltage (V)	Stick out (mm)	Speed (cm/min)	
SAW	2.4	200 - 400	25 - 30	18 - 25	40 - 60	WP380
=+	3.2	300 - 500	28 - 32	20 - 30	40 - 60	WP380M