



## FCW 312P Flux Cored Wire

### Classification

AWS A5.22 : E312T1-1/4  
EN ISO 17633-A : T 29 9 P M1 / C1

Material N° : 1.4337

### Characteristics

Flux cored wire , rutile type flux, for all positional welding , highly alloyed . Designed to weld with shielding gas, for butt welding, for surfacing and for buffer layers with an austenitic - ferritic stainless steel deposit, adapted for welding dissimilar steels (stainless steels with low alloyed steels) and steels difficult to weld as too; steels , Mn steels , spring steels.... Metal deposit highly resistant to cracks.

### Applications

Buffer layer before hard facing, Armor plates, Exhaust systems, High Manganese austenitic Steel, Heterogenous welding, Difficult to weld and Unknown Steels. Armatures and Wire lattice for reinforced concrete.

#### Base Materials

Stainless steels ; Tool steels ; low alloyed steels ; Screening steels	
Austenitic steels with Mn	Z 120 M 12 type , X 120 Mn 12 , 1.3401
Spring steels	45 Cr 4 , 1.7035 , 46 Si 7 , 1.5024 , 51 Si 7 , 1.5025 , 56 Si 7 , 1.5026

### Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Ni	Mo	Cu	P	S	Fe
0.10	0.80	1.40	29.00	8.90	0.30	0.10	0.020	0.001	base

### All Weld Metal Mechanical Properties (Typical)

Conditions	UTS R <sub>m</sub> (MPa)	YS R <sub>e</sub> (MPa)	% Elg A <sub>5</sub>
AW	870	655	25

### Welding Current & Instructions

Welding Mode	Ø Wire (mm)	Welding Mode			Shielding Gas ISO 14175
		Current (A)	Voltage (V)	Stick-out (mm)	
FCAW = +	1.2	120 - 250	23 - 30	15 - 20	M21 (Ar+10-20 %CO <sub>2</sub> ) or CO <sub>2</sub> 18 - 20 l/min

Welding Positions : 1G/PA ; 2G/PC ; 2F/PB

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