



## MIG 24/12M

### Classification

AWS A5.9 : ~ER309LMo

ISO 14343-A : G 23 12 2 L

### Description & Applications

Low carbon solid wire for GMAW of stainless steels with similar chemical composition like 309LMo, 309 and 309L. Well adapted for welding of dissimilar steels like low alloy steels, ferritic stainless steel like 430, martensitic stainless steel like 410. Molybden content improves corrosion resistance against acids.

Its high ferrite content allows greater dilution without risk of cracking. High Silicon content improves alloy fluidity during welding.

**Main applications:** Boiler making, civil engineering, maintenance and repairs...

### Typical Chemical Composition ( % )

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	N
Min			1.0	21.0	12.0	2.0		-			-	-
Max	0.03	1.0	2.5	25.0	14.0	3.5	0.5	-	0.03	0.02	-	-
Type	0.015	0.55	1.5	21.5	14.5	2.6	0.10	0.01	0.02	0.01	0.06	0.08

### All Weld Metal Mechanical Properties

	R <sub>p0.2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV ( J )
Min	350	550	25	-
Max				-
Type	500	620	30	+20°C 100

### Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters		Shielding Gas
		Current (A)	Voltage (V)	
GMAW = +	0.8	70 - 180	18 - 26	ISO 14175: M12 (Ar+0.5-5%CO <sub>2</sub> ) M13 (Ar+0.5-3%O <sub>2</sub> ) 15-20 l/min
	1.0	80 - 220	18 - 28	
	1.2	150 - 320	22 - 32	
	1.6	220 - 380	24 - 34	

Back shielding with Argon or Nitrogen gas or with copper backing support to avoid "back end" rust phenomena.

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[www.fsh-welding.com](http://www.fsh-welding.com) - [info@fsh-welding.fr](mailto:info@fsh-welding.fr)