



# MIG F609

Old reference: MIG 80SB8

## Classification

AWS A5.28 : ER80S-B8

ISO 21952-A : G CrMo9Si

## Description & Applications

GMAW rods for welding creep resisting steels of similar chemical composition used at service temperatures up to 600°C. Deposit resisting to temperature and creep up to 600°C. Highly resistant to hot gas and overheated steam.

**Main applications:** For power plants, heat exchangers, tubes, steam boilers...

### Base materials

Mat. No.	EN	ASTM
1.7386	X12CrMo9-1	A187 Gr F9;A336 Gr F9
1.7386	X12CrMo9-1	A 335 Gr P9
1.7386	X12CrMo9-1	A119/ A200/ A213 Gr T9
1.7389	GX12CrMo10-1	A 217 C 12

## Typical Weld Metal Composition ( % )

C	Si	Mn	Cr	Mo	Cu	P	S	Fe
0.07	0.4	0.5	9.0	1.0	0.2	<0.015	<0.015.	Rem.

## All Weld Metal Mechanical Properties

R <sub>p0,2</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	KV (J)
580	690	23	+20°C 150

After PWHT 760°C/2h

## Welding Current & Instructions

Welding Mode	Wire ø (mm)	Welding Mode		Shielding Gas ISO 14175
		(A)	(V)	
MIG = +	1.0	150-170	25-28	M21 (Ar/CO ) 2 15 - 18 l/min
	1.2	180-250	26-28	
	1.6	190-300	26-32	

Pre-heating and interpass temperature: 200-300°C. Post weld heat treatment is advised at 760°C during 2 hours and then cooled slowly (55°C/h) up to 580°C, following by air cooling to room temperature..

ind.1

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