



# TIG 8CD12

## Classification

AIR 9117 : 8 CD 12

EN 4332 : 8CrMnMo12-4-9

## Description & Applications

Not copper coated solid rod for GTAW of steels such as 15CrMoV6, 25CrMo4, 35CrMo4, 40CrMoV12 used with service temperature up to +500°C. Product of high purity for welding without micro-porosity. Could also be used for build up of tool steels.

**Main applications:** Hardfacing of fan, tools steels, plastic injection moulds...

## Typical Chemical Composition ( % )

	C	Si	Mn	Cr	Mo	P	S
Min	0.05		0.80	2.5	0.60		
Max	0.10	1.0	1.40	3.5	1.20	0.015	0.010
Type	0.06	0.7	1.1	2.7	1.0	0.010	0.007

## All Weld Metal Mechanical Properties\*

	R <sub>e</sub> ( MPa )	R <sub>m</sub> ( MPa )	A <sub>5</sub> ( % )	Hardness
Min				
Max	-	-	-	-
Type	440	570	24	~36 HRC

\* After PWHT 730°C/2h

## Welding Current & Instructions

Welding mode	Shielding Gas
TIG = -	ISO 14175: I1 (Ar): 6-12 l/min Back shielding : I1 (Ar) / N1 (Nitrogen) : 3-6 l/min

Preheating of work-pieces: ~250°C. Post weld heat treatment: 730°C/2h.

FT En-TE11-210210

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