

# MEGAFIL<sup>®</sup> 736 B



AWS A5.29: E80T5-B2M H4

EN ISO 17634-A: T CrMo1 B M21 3 H5

WELDING POSITIONS:



FEATURES	BENEFITS	APPLICATIONS
<ul style="list-style-type: none"> <li>Extremely low diffusible hydrogen weld deposit</li> <li>Extremely clean weld puddle</li> <li>Ideal for repair welding</li> <li>Low spatter loss</li> <li>Easy slag removal</li> </ul>	<ul style="list-style-type: none"> <li>Minimizes risk of hydrogen-induced cracking</li> <li>High reserve of toughness and crack resistance</li> <li>High flexibility</li> <li>No additives needed</li> <li>Reduced cleaning time</li> </ul>	<ul style="list-style-type: none"> <li>Construction of containers</li> <li>Boiler and machinery parts</li> <li>Steam boiler and turbines (CrMo steels up to 550 °C (1022 °F))</li> <li>Pipelines</li> <li>Single and multi-pass welding</li> </ul>

<b>WIRE TYPE</b>	Gas shielded basic flux-cored wire
<b>SHIELDING GAS</b>	75-85% Argon (Ar) / Balance Carbon Dioxid (CO <sub>2</sub> ); Gas Flow 12-18 l/min (25-38 cfh)
<b>TYPE OF CURRENT</b>	Direct Current Electrode Positive (DCEP)
<b>STANDARD DIAMETERS</b>	Ø 1.2 - 1.6 mm (0.045 - 1/16")
<b>TYPICAL DIFFUSIBLE HYDROGEN*</b>	< 3.0 ml / 100 g; Guaranteed for the total processing time < 4.0 ml / 100 g maximum (AWS Spec)
<b>RE-DRYING</b>	Not required due to seamless wire design.
<b>STORAGE</b>	The same conditions as for solid wire. Product should be stored in a dry, enclosed environment, in its original undamaged packaging

\*Measurement technique is the carrier gas method according to AWS and ISO

## MATERIALS TO BE WELDED\*

Boiler steels	Rel ≤ 460 MPa	13CrMo4-5
Pipe steels	Rel ≤ 460 MPa	G17CrMo5-5, G22CrMo5-4
Similar alloyed heat treatable steels and similar alloyed cementation and nitrited steels.		
*) The specified base materials are not complete and should only be seen as examples. The selection of the appropriate combination of steel and welding consumable should follow the specific mechanical strength and toughness requirements		

## ALL WELD METAL CHEMISTRY (%) (typical values for mixed gas 82% Ar / 18% CO<sub>2</sub>)

Carbon ( C )	0.05	Nickel (Ni)	-
Manganese (Mn)	1.0	Molybdenum (Mo)	0.5
Silicon (Si)	0.3	Chromium (Cr)	1.1
Sulphur (S)	0.015		
Phosphorus (P)	0.015		

## ALL WELD METAL MECHANICAL PROPERTIES (for mixed gas 82% Ar / 18% CO<sub>2</sub>)

Mechanical tests	Typical values MPa (ksi)	ISO Specification MPa (ksi)
Tensile Strength Rm	620 (90)	550 - 690 (80 - 100)
Yield strength Rp0.2	540 (78)	> 470 (68)
Expansion A5	25%	20%
The specified values apply to the stress-relieved condition (690 °C / 60 min)		

## CHARPY V-NOTCH IMPACT VALUES (for mixed gas 82% Ar / 18% CO<sub>2</sub>)

Mechanical Tests	Typical values [J] (ft.lbf)	ISO Specification [J] (ft.lbf)
RT	160 (118)	> 47 (35)
-40 °C	70 (52)	> 47 (35)
The specified values apply to the stress-relieved condition (690 °C / 60 min)		

## APPROVALS: CE, TÜV

Please contact the manufacturer to learn the present scope of approvals

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