

# CARBOFIL MNMO

## TOP FEATURES

- Suitable for applications in petrochemical process plant where some resistance to hot hydrogen attack is necessary
- Increased deposit strength thanks to Mn content
- For welding 0.5% Mo low-alloy steels and for high strength steels.

## TYPICAL APPLICATIONS

- Nuclear Power generation
- Petrochemical
- Pipelaying
- Cranes

## CLASSIFICATION

AWS A5.28 ER80S-D2  
EN ISO 14341-A G 50 4 M21 4Mo

## SHIELDING GASES (ACC. EN ISO 14175)

M20 Mixed gas Ar+ >5-15% CO<sub>2</sub>  
M21 Mixed gas Ar+ >15-25% CO<sub>2</sub>

## APPROVALS

TÜV	DB	CE
+	+	+

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

C	Mn	Si	P	S	Mo
0.09	1.80	0.60	0.014	0.010	0.40

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) -40°C
Typical values	M21	AW	≥600	≥690	≥20	≥58

\* AW = As welded

## PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.0	SPOOL (B300)	16.0	S10K016PDE11
1.2	SPOOL (B300)	16.0	S12K016PDE11

## TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.