

# CARBOFIL Mo

## TOP FEATURES

- Used for welding low alloy creep resistant ferritic steels and fine grained steels.
- Ideal for low temperature applications in the as welded condition with service temperatures in range -30°C to +500°C.
- Recommended for welding 0.5% Mo low-alloy steels and for high strength steels.

## TYPICAL APPLICATIONS

- Chemical plant construction
- Petrochemical
- Oil & Gas
- Thermal Power

## CLASSIFICATION

AWS A5.28	ER70S-A1
EN ISO 14341-A	G 46 3 M21 2Mo
EN ISO 21952-A	G MoSi

## 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
0.1	1.1	0.6	≤0.020	≤0.020	0.5

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-20°C
Typical values	M21	AW*	≥480	515-620	≥22	≥100	≥47
	M21	PWHT 580°C/15h**	≥380	480-560	≥19	≥100	≥47

\* AW = As welded

\*\* PWHT = Post welding heat treatment

## PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
0.8	SPOOL (B300)	16.0	W000282948
1.0	SPOOL (B300)	16.0	W000282950
1.2	SPOOL (B300)	16.0	W000282952

### 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.