# SPECIAL ALLOYS

# ER90S-B3 MIG

# **TOP FEATURES**

- Solid wire for MIG welding 2½Cr-1Mo creep resisting steels
- Copper coated
- Precision layer wound

#### CLASSIFICATION

AWS A5.28 ER90S-B3 EN ISO 21952-B G 2C1M

# SHIELDING GASES (ACC. EN ISO 14175)

M12 (Ar-5% CO<sub>2</sub>) or M21 (Ar-20%CO<sub>2</sub>)

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

	С	Mn	Si	S	Р	Cr	Мо	Cu	Ni
Min.	0.07	0.40	0.40			2.30	0.90		
Max.	0.12	0.70	0.70	0.020	0.020	2.70	1.20	0.35	0.20
Typical	0.1	0.5	0.5	0.010	0.015	2.4	1	0.1	< 0.1

# MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Properties after PWHT	590°C/1h	Min.	Typical	
Tensile strength	(MPa)	620	680	
0.2% Proof strength	(MPa)	540	560	
Elongation (%)	4d	17	23	
	5d	15	20	
Impact ISO-V (J)	-10°C		> 95	
Hardness	(HV)		220	
	(HB)		215	

# PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	ltem number
1.0	SPOOL (S300)	15.0	MER90SB3-10
1.2	SPOOL (S300)	15.0	MER90SB3-12

#### 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 <u>www.lincolnelectric.eu</u> for any updated information.





