

ER90S-B3 MIG

TOP FEATURES

- Solid wire for MIG welding 2¼Cr-1Mo creep resisting steels
- High-performance alloy for refinery applications

TYPICAL APPLICATIONS

- Petro-Chemical
- Power Plants
- Piping
- Turbine Casting
- Steam Chests

CLASSIFICATION

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

SHIELDING GASES (ACC. EN ISO 14175)

M21	Mixed gas Ar+ 15-25% CO ₂
M12	Mixed gas Ar+ 0.5-5% CO ₂

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

	C	Mn	Si	S	P	Cr	Mo	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 690° 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)	Item number
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 www.lincolnelectric.eu for any updated information.