Supercore™ F91

TOP FEATURES

- High deposition rates.
- Fast freezing slag for out of position welding

TYPICAL APPLICATIONS

- Power Plants
- Piping
- Turbine Castings
- Oil Refineries

CLASSIFICATION

AWS A5.29	E91T1-B9C/M-H4

CURRENT TYPE

DC+

WELDING POSITIONS

All

SHIELDING GASES (ACC. EN ISO 14175)

M21	Mixed gas Ar+ 15-25% CO_2
C1	Active gas 100% CO_2
Flow rate	15-25 l/min

CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	V	N	Cu	Al	Mn +Ni
Min.	0.08	0.40				8.0		0.85	0.02	0.15	0.02			
Max.	0.13	1.00	0.50	0.01	0.01	10.0	0.50	1.2	0.07	0.25	0.07	0.15	0.04	1.00
Typical	0.1	0.7	0.3	0.008	0.008	9.0	0.2	1.0	0.04	0.2	0.05	0.05	0.01	0.9

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Properties after PWHT		Min.	Typical (760°C/2h)				Typical (760°C/4h)
			20°C	+566°C	+600°C	+650°C	20°C
Tensile strength	**(MPa)**	690	745	450	420	396	720
0.2% Proof strength	**(MPa)**	565	620	360	288	245	600
Elongation (%)	**4d**	17	20	21	27	29	23
	5d	14	18	20	25	26	20
Reduction of area			60	73	81	85	62
Impact ISO-V (J)	**+20°C**		45				55
Hardness (HV)			260				250

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S300)	15.0	SCF91-12

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.