

Supercore™ 625P

TOP FEATURES

- Smooth all position weldability
- Vacuum sealed foil package
- Excellent slag removal

TYPICAL APPLICATIONS

- Furnace Equipment
- Petrochemical
- 9% Ni for LNG storage tanks
- Dissimilar welds between nickel alloys, stainless steels, and mild steel

CLASSIFICATION

AWS A5.34 ENiCrMo3T1-1/4
 EN ISO 12153-A T Ni 6625 P M/C 2

CURRENT TYPE

DC+

WELDING POSITIONS

All

SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ 15-25% CO₂
 Flow rate 15-25 l/min

APPROVALS

ABS	DNV
+	+

CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Cu	Ti	Fe
Min.						20.0	58.0	8.0	3.15			
Max.	0.10	0.50	0.50	0.015	0.02	23.0		10.0	4.15	0.50	0.40	5.0
Typical	0.02	0.3	0.2	0.005	0.005	21	66	8.5	3.4	0.02	0.2	1.0

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded	Min.	Typical
Tensile strength (MPa)	690	770
0.2% Proof strength (MPa)	420	490
Elongation (%) 4d	25	46
5d	22	42
Reduction of area (%)		42
Impact ISO-V (J) + 20°C		95
-196°C		80
Lateral expansion (mm) -196°C		1.00
CTOD (mm) -170°C		0.50
Hardness, cap/mid (HV)		230/230

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S300)	15.0	SC625P-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.