

# Supercore™ 16.8.2

## TOP FEATURES

- Suited to the most demanding vertical and overhead welding applications, including fixed pipework for ASME

## CLASSIFICATION

EN ISO 17633-B TS16-8-2-F C1/M21 1\*

\* Nearest classification

## CURRENT TYPE

DC+

## SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ 15-25% CO<sub>2</sub>

C1 Active gas 100%

Flow rate 20-25 l/min

Proprietary gases may be used but argon should not exceed 85%.

## CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo*	Cu	FN
Min.	0.04	0.5				14.5	7.5	1.0		1
Max.	0.08	2.0	0.70	0.03	0.04	17.0	10.0	2.0	0.5	8
Typical	0.05	1.2	0.5	0.01	0.02	16.2	9.2	1.1*	0.1	4

\*Mo controlled around 1.0 – 1.3% unless requested otherwise.

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded	Min.	Typical	High Temperature		
			650°C	732°C	816°C
<b>Tensile strength (MPa)</b>	560	620	290	224	160
<b>0.2% Proof strength (MPa)</b>		410	207	180	134
<b>Elongation (%)</b>	<b>4d</b>	35	42		
	<b>5d</b>	25	42	30	44
<b>Reduction of area (%)</b>		50	66	68	79
<b>Impact ISO and LE*-V(J) (mm)</b>	<b>+ 20°C</b>		100 (1.8)		
	<b>-130°C</b>		50 (0.8)		
	<b>-196°C</b>		45 (0.7)		

\*LE = Charpy lateral expansion, mm (0.38mm = 15 mils)

## PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.6	SPOOL (S300)	15.0	SC1682-12

## 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](http://www.lincolnelectric.eu) for any updated information.