

## E16.8.2-15

### TOP FEATURES

- Basic pipe welding electrode for 3XXH stainless steel
- Suited to the most demanding vertical and overhead welding applications, including fixed pipework in the ASME 5G/6G positions
- Recovery is about 115%

### TYPICAL APPLICATIONS

- Power Generation
- Process Industries
- Process Piping

### CLASSIFICATION

AWS A5.4 E16-8-2-15

### CURRENT TYPE

DC+

### WELDING POSITIONS

All except vertical down

### CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo*	Cu	FN
Min.	0.04	0.5	not specified	not specified	not specified	14.5	7.5	1.0	not specified	1
Max.	0.08	2.5	0.60	0.025	0.03	16.5	9.5	2.0	0.75	6
Typical	0.05	1.8	0.3	0.01	0.02	15.5	8.5	1.2	0.05	3

\* ISO 3581 E16 8 2 B 4 2 has Mo 1.50 – 2.50%

Mo controlled around 1.0 – 1.3% unless requested.

### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As-welded	Min.	Typical	High Temperature		
			650°C	732°C	816°C
Tensile strength (MPa)	550	> 660	294	230	165
0.2% Proof strength (MPa)	320	430	216	187	132
Elongation (%)	4d	35	-	-	-
	5d	25	27	36	57
Reduction of area (%)	not specified	35	61	70	75
Impact ISO-V (J)	+20°C	110 (1.8)	-	-	-
	-20°C	95 (1.6)	-	-	-
	-100°C	50 (1.0)	-	-	-

Charpy lateral expansion, mm (0.38mm = 15 mils)

### OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 300	60-90
3.2 x 350	75-120
4.0 x 350	100-155

### PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 300	CAN	200	3.5	E168215-25-1
3.2 x 350	CAN	122	4.1	E168215-32-1
4.0 x 350	CAN	80	4.2	E168215-40-1

## 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.  
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