

Ultramet™ 2205 (Arosta® 4462)

TOP FEATURES

- Rutile-basic all position electrode for duplex stainless steel welding
- Excellent weldability for filling as well as for root runs
- Applicable up to a service temperature of 250°C
- High resistance to general corrosion, pitting and stress corrosion (PREN ~35)
- High yield strength > 500 N/mm²
- Weldable on AC and DC

CLASSIFICATION

AWS A5.4 E2209-16*
EN ISO 3581-A E 22 9 3 N L R 32

* Nearest classification

CURRENT TYPE

AC / DC+

WELDING POSITIONS

All position, except vertical down

APPROVALS

DNV	TÜV	BV
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	N	PREN
Min.	not specified	0.5	0.3	not specified	not specified	24.0	8.5	3.0	not specified	0.14	36
Max.	0.03	2.0	1.0	0.02	0.03	26.0	10.0	4.0	0.5	0.25	43
Typical	0.02	1	0.7	0.01	0.02	25	9.5	3.4	0.1	0.17	38

PREN = Cr + 3.3Mo + 16N

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded		Min.	Typical	Pipe butt weld	1120°C/ 3h + WQ
Tensile strength	(MPa)	690	850	867	800
0.2% Proof strength	(MPa)	480	650	752	480
Elongation (%)	4d	20	30	25	32
Reduction of area (%)		not specified	40	35	-
Impact ISO*-V (J)	+20°C	not specified	60-73	-	-
	- 20°C	not specified	45-55	45-50	-
	- 30°C	not specified	40-52	42-46	> 90
	- 40°C	not specified	35-47	38-43	> 70
	- 50°C	not specified	30-40	35-40	> 35

OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 350	50-90
3.2 x 350	65-120
4.0 x 350	100-160

PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	VPMD	95	1.9	UM2205SP-25-2
3.2 x 350	VPMD	55	1.9	UM2205SP-32-2
4.0 x 350	VPMD	40	2.0	UM2205SP-40-2

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.