



**GMAW / GTAW DUPLEX STAINLESS STEEL**  
**MIGINOX 2209 / TIGINOX 2209**

DUPLEX STAINLESS STEEL ALLOY FOR HIGH STRENGTH AND PITTING RESISTANCE



**CLASSIFICATION :** EN ISO 14343-A    AWS A/SFA 5.9    **APPROVALS :**

Miginox 2209:	G 22 9 3 N L	ER2209	-
Tiginox 2209:	W 22 9 3 N L	ER2209	-

**KEY FEATURES :**

- An extra low carbon 22Cr/9Ni/3Mo/N type duplex stainless steel wire
- Austenitic-ferritic type weld deposit
- Can be applied for operating temperature upto 200°C
- Excellent combination of high strength and resistance to chloride induced SCC and pitting
- Radiographic quality welds

**WELDING POSITION :**



**GMAW: DCEP**  
**GTAW: DCEN**

Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
GMAW: 98Ar/2O <sub>2</sub> or Ar/1-5CO <sub>2</sub>	15-22	10-20
GTAW: Ar	10-15	-

**TYPICAL APPLICATIONS :**

- Welding of 2205, 2209 type duplex stainless steels and similar grades
- Pipelines transporting chloride bearing products and sour gases
- Cladding on carbon and low alloy steels
- Cast pumps, Valve bodies and sea water handling equipment
- For chemical equipments, heat exchangers, off-shore platforms

**STORAGE / HANDLING :**

Keep dry and follow handling instructions mentioned on the box

**CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :**

	C	Mn	Si	Cr	Ni	Mo	N	Cu	S	P
Specification	0.03 max	0.5-2.0	0.90 max	21.5-23.5	7.5-9.5	2.5-3.5	0.08-0.20	0.75 max	0.03 max	0.03 max

**MECHANICAL PROPERTIES OF ALL WELD METAL :**

	Condition	UTS, MPa	EL%
Specification	As Welded	690 min	20 min

Mechanical properties will vary with the type of shielding gas used.

**PACKING DATA :**

Miginox 2209	Ø, mm		Kg/Spool	
	0.8		12.5	
	1.2		12.5	
	1.6		12.5	
	2.0		12.5	
Tiginox 2209	Ø x L, mm	Primary Box, Kg	No. of Primary Boxes	Net Wt. of Carton, Kg
	2.4 x 1000	5	4	20
	3.2 x 1000	5	4	20

**EQUIVALENT :**

SMAW Electrode: **Betanox 4462**

FCAW Wire: **Miginox FC 2209**