

# TECHNICAL DATASHEET Version S18

#### AI-0220

## **Specifications**

**AWS/ASME** A5.8: E2209-17

### **Description and Applications**

**AI-0220** is a SAF 2209 covered electrode with rutile-acid coating for welding of duplex (ferritic-austenitic) stainless steels of UNS S31803/S32205 type (e.g. Sandvik SAF 2205). It is characterized by very good welding properties and gives an austenitic-ferritic chromium/nickel/molybdenum weld metal with an extremely low carbon content for service temperatures up to 250°C (480°F). Spray transfer gives a bead with a finely rippled surface. There is little spatter and very good slag removal.

#### **Typical Weldmetal Analysis**

С	Mn	Cr	Fe	Ni	Si	Мо	N
0.3	0.8	23	Bal	9	0.9	0.03	0.15

## **Mechanical Properties of Weldmetal**

	As Welded				
Tensile Strength	700MPa				
Yield Strength (0.2%)	500Mpa				
Elongation	40% (4d)				
Charpy	48J				

## **Welding Parameters**

Diameter (mm)	Current type	Amps
2.5	DC /AC	50-80
3.2	DC /AC DC /AC	80-110
4.0	DC /AC	110-140

Also available as TIG: AI-0220T and MIG wire: AI-17220

#### **Welding Positions**

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position, (4G) Overhead position, (3G, 3F, 5G up) Vertical Position Up

#### Disclaimer

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