# Product Data Sheet

**BRAND NAME** VJ 2209

**AWS/ASME Class** E 2209-16

**SPECIFICATION** SFA A5.4

**Features and Applications :**

VJ 2209 (22.5% Cr, 9.5% Ni, 3% Mo, 0.15% N) is ideal for welding duplex stainless steels like UNS S31803 and S32205. It offers high tensile strength, excellent resistance to pitting and stress corrosion cracking, especially in hydrogen sulfide and chloride environments. Post-weld annealing requires a higher temperature than the base metal. Suitable for pressure vessels, heat exchangers, pipelines, and nuclear equipment.

**CHEMICAL COMPOSITION :**

| All Weld Metal (%) | | | |
|---|---|---|---|
| **TYPICAL** | **Max** | **TYPICAL** | **Max** |
| C | 0.04 | Mn | 0.50-2.0 |
| Cr | 21.50-23.50 | Si | 1.00 |
| Ni | 8.50-10.50 | S | 0.03 |
| Mo | 2.50-3.50 | P | 0.04 |
| Cu | 0.75 | N | 0.08-0.20 |

**MECHANICAL PROPERTIES OF WELD METAL**

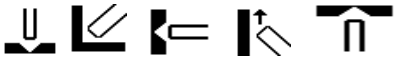
| All Weld Metal - As Welded | |
|---|---|
| **Properties** | **Typical** |
| UTS (MPa) | 690 Min |
| El (%) | 20 Min |

**DIMENSIONS & CURRENT DATA**

| Dimension (mm) | Current (A) | | Packing (Pcs) |
|---|---|---|---|
| **Dia x Length** | **Min** | **Max** | **Qty / Pkt** |
| 2.50 x 350 | 50 | 80 | 150 |
| 3.15 x 350 | 80 | 130 | 100 |
| 4.00 x 350 | 130 | 170 | 75 |
| 5.00 x 350 | 170 | 220 | 50 |

**CURRENT : AC/DC (+)**

**WELDING POSITION:**



**OTHER DATA:**

**Redrying:** The electrodes should be redried at 250°C for 1 hour.

Use short arc and stringer bead to get better weld quality