

SUPRANEL Ni1 is a basic-coated MMA electrode for welding pure nickel components and for joining these materials to unalloyed or low-alloyed steels, dissimilar joints.

Typical specifications for this nickel base metal are ASTM B160, B161, B162, and B163, all of which have UNS Numbers N02200 or N02201. Suitable for buffer layers on corrosion-resistant, unalloyed or low alloy steels, before joining to nickel or copper alloys.

Pure nickel is used for its corrosion resistance in the chemical industry – particularly for its resistance to alkalis.

Low-hydrogen electrode suitable for all position welding of pure nickel and nickel alloys

### Classification

EN ISO 14172: E Ni 2061

AWS A5.11: E Ni-1

### Chemical analysis (Typical values in %)

| C    | Mn  | Si  | P     | S     | Ni  | Fe  | Ti  |
|------|-----|-----|-------|-------|-----|-----|-----|
| 0,01 | 0,3 | 0,8 | 0,005 | 0,005 | Rem | 0,2 | 1,5 |

### All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength<br>(MPa) | Tensile Strength<br>(MPa) | Elongation<br>A5 (%) | Impact Energy ISO - V (J) |
|----------------|-------------------------|---------------------------|----------------------|---------------------------|
|                |                         |                           |                      | -196 °C                   |
| As Welded      | ≥ 200                   | ≥ 410                     | ≥ 35                 | ≥ 100                     |

### Materials

2.4066; 2.4068; 2.4061; 2.4060

UNS N02200; UNS N02201; UNS N02205

### Storage

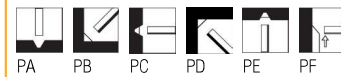
Keep dry and avoid condensation.

Re-drying not generally required.

Re-dry at 300-350 °C for 1 hour, 5 times max.

### Current condition and welding position

DC+



### Packaging data

| Diam.<br>(mm) | Length<br>(mm) | Current<br>(A) | Approx. weightn(kg/1000) | VPMD |            |
|---------------|----------------|----------------|--------------------------|------|------------|
|               |                |                |                          | PC   | Code       |
| 2,5           | 300            | 50-70          | 18,0                     | 100  | W000288090 |
| 3,2           | 350            | 65-100         | 33,5                     | 60   | W000288091 |
| 4,0           | 350            | 85-120         | 50,9                     | 40   | W000288092 |