

**selectarc****Ni276****Nickel base Electrode  
NiCrMo (C-276) type**


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**Classification**

AWS A5.11 : ENiCrMo-4                      EN/ISO 14172: E-Ni6276  
 UNS : W80276                                      NiCr15Mo15Fe6W4  
 Material N° : 2.4887

**Description & Applications**

Basic coated electrode with an alloyed core wire for welding of Nickel-Base alloys ( alloy C-276) and other highly corrosion resistant Ni Cr Mo-alloys as well as special stainless steel types.  
 Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads.  
 Very resistant in sulphurous acid environment, highly concentrated with chlorides and also in the presence of oxidising solutions ( Fe Cl, Cu Cl ).  
 Special applications are: Welding of Off-shore components, boilers, containers, piping systems in the chemical and petrochemical industries as well as components of flue gas desulfurizing plants

| Base materials | UNS    | Alloy  | DIN                | Material N° |
|----------------|--------|--------|--------------------|-------------|
|                | N10276 | C-276  | NiMo16Cr15W        | 2.4819      |
|                | N06455 | C-4    | NiMo16Cr16Ti       | 2.4610      |
|                | N06625 | 625    | NiCr22Mo9Nb        | 2.4856      |
|                | N08825 | 825    | NiCr21Mo           | 2.4858      |
|                | N08926 | 254SMo | X1NiCrMoCuN25 20 6 | 1.4529      |

**Typical Weld Metal Composition ( % )**

| C     | Si  | Mn  | Cr   | Mo   | W   | Fe  | V    | Ni   |
|-------|-----|-----|------|------|-----|-----|------|------|
| <0.02 | 0.2 | 0.6 | 16.2 | 16.0 | 4.0 | 5.0 | 0.15 | base |

**All Weld Metal Mechanical Properties**

| R <sub>p0.2</sub> ( MPa ) | R <sub>m</sub> ( MPa ) | A <sub>5</sub> ( % ) | KV (J)    |
|---------------------------|------------------------|----------------------|-----------|
| >450                      | >720                   | >30                  | +20°C >70 |

**Welding Current & Instructions**

| Electrode | ØxL ( mm ) | 2,5x300 | 3,2x350 | 4,0x350 |
|-----------|------------|---------|---------|---------|
| Current   | ( A )      | 50-70   | 70-100  | 90-120  |

Rebaking :2 h at 250-300°C. Joints to weld must be clean, exempt from grease, cracks .  
 Guide electrodes with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique ( weaving max. 2 times core wire diameter ).



ind.05



1G/PA



2F/PB



2G/PC



3G/PF



4G/PE

