

# Exaton Ni56

Exaton Ni56 is a low carbon nickel-chrome-molybdenum alloy of type alloy C-276. It is a versatile alloy with excellent wet corrosion resistance in oxidizing and especially in reducing media. However, in oxidizing chloride containing environments alloy UNS N06022 (2.4602) is preferred where Exaton Ni56 is a better matching welding consumable. Applications for Exaton Ni56 are found in aggressively corrosive media such as chemical processing plants, pollution control, pulp and paper production, waste treatment and for the recovery of sour natural gas.

Exaton Ni56 is used for joining alloy UNS N10276 (2.4819) and other nickel-chrome-molybdenum alloys. It can also be used for dissimilar metal joining of nickel alloys, stainless steels and low-alloy steels. Exaton Ni56 can be used for surfacing low alloyed steels.

Applications for Exaton Ni56 are found in cryogenics, components in pulp and paper plants such as bleaching vessels, flue gas scrubber systems, components in sour-gas service, sulphuric acid coolers, chlorine gas, hypochlorite and chlorine dioxide atmosphere. Exaton Ni56 is also used in combustion-resistant components for high pressure oxygen service.

|  |   |
|--|---|
| <b>Классификация сварочной проволоки</b> | SFA/AWS A5.14 : ERNiCrMo-4<br>EN ISO 18274 : S Ni 6276 (NiCr15Mo16Fe6W4)<br>Werkstoffnummer : ~2.4819 |
| <b>Одобрения</b>                         | CE EN 13479   |

Одобрения на материалы выдаются с привязкой к заводу изготовителю. Подробную информацию можно получить в представительствах ESAB.

|                     |  |
|---------------------|--|
| <b>Тип сплава</b>   | Nickel alloy - 16% Cr - 16% Mo - 5% Fe - 3.5 % W - Low C |
| <b>Защитный газ</b> | M12 (EN ISO 14175)                                       |

### Механические свойства при растяжении

| Состояние    | Предел текучести | Предел прочности при растяжении | Удлинение |
|--------------|------------------|---------------------------------|-----------|
| После сварки | 500 MPa          | 735 MPa                         | 43 %      |

### Типичные свойства образца с V-образным надрезом по Шарпи

| Состояние    | Температура испытания | Работа удара |
|--------------|-----------------------|--------------|
| После сварки | 20 °C                 | 170 J        |
| После сварки | -110 °C               | 150 J        |
| После сварки | -196 °C               | 140 J        |

### Хим. состав наплавленного металла

| C    | Mn  | Si   | S     | P     | Ni | Cr | Mo | V    | Cu   |
|------|-----|------|-------|-------|----|----|----|------|------|
| 0.01 | 0.5 | 0.04 | 0.001 | 0.005 | 58 | 16 | 16 | 0.02 | 0.03 |

### Хим. состав наплавленного металла

| Co   | Fe | W   |
|------|----|-----|
| 0.01 | 6  | 3.6 |

### Хим. состав проволоки

| C     | Mn  | Si   | S     | P     | Ni | Cr | Mo | V    | Cu   |
|-------|-----|------|-------|-------|----|----|----|------|------|
| 0.007 | 0.5 | 0.02 | 0.002 | 0.005 | 58 | 16 | 16 | 0.03 | 0.02 |

### Хим. состав проволоки

| Co   | Fe  | W   |
|------|-----|-----|
| 0.02 | 5.8 | 3.7 |

### Данные наплавки

| Диаметр проволоки | Current   | Voltage | Wire Feed Speed |
|-------------------|-----------|---------|-----------------|
| 0.8 mm            | 40-120 A  | 15-19 V | 4.0-8.0 m/min   |
| 1.2 mm            | 150-260 A | 24-29 V | 3.0-10.0 m/min  |
| 1.6 mm            | 230-350 A | 25-30 V | 3.0-5.0 m/min   |