

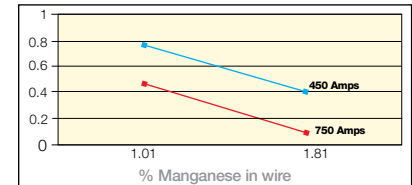


OK Flux 10.72 is a neutral, bonded aluminate-basic flux. It is primarily used for applications with toughness requirements down to -50°C in high dilution joints. It also provides excellent slag removal in narrow V-joints. It is recommended for joining structural steels, fine grained steels and creep-resistant steels. It has proved to be the world's most popular flux for wind tower productions. OK Flux 10.72 features extremely high current carrying capacity and is intended for single or multiwire procedures using DC and AC power. It can be used for single-layer and multi-layer welding of unlimited plate thickness.

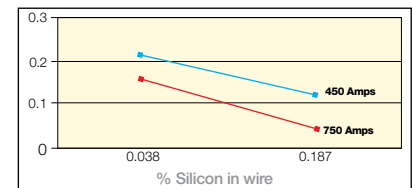
Flux Consumption
(lb. Flux / lb. Wire)

| Voltage | DC+ |
|---------|------|
| 26 | 0.69 |
| 30 | 0.88 |
| 34 | 1.3 |
| 38 | 1.66 |

% Mn pick-up from flux



% Si pick-up from flux



Code and Specification Data:

AWS A5.17; F6P8-EM12K
 AWS A5.23; F8A4-ENi1K-Ni1
 AWS A5.17; F7A8-EM12K
 AWS A5.23; F9A4-ENi4-Ni4
 AWS A5.17; F7P5-EM14K

Basicity Index: 1.9

Chemical Composition:

| | | | |
|-------------------------------------|----|-----------|----|
| SiO ₂ + TiO ₂ | 20 | CaO + MgO | 30 |
| Al ₂ + MnO | 25 | Fluorides | 25 |

Typical Mechanical Properties

| Wire | Weld Condition | Yield Strength | | Tensile Strength | | % Elong in 2" | CVN | | Temp. | | AWS Class |
|---------------|----------------------------------|----------------|-------|------------------|-------|---------------|---------|----------|-------|------|----------------|
| | | ksi | (MPa) | ksi | (MPa) | | (51 mm) | ft.-lbs. | (J) | @ °F | |
| Spoolarc 81 | As Welded | 62 | 425 | 75 | 515 | 30 | 35 | 50 | -80 | -62 | F7A8-EM12K |
| Spoolarc 81 | Stress Relieved 1 hr. @ 1,150°F | 59 | 405 | 74 | 510 | 32 | 35 | 50 | -80 | -62 | F6P8-EM12K |
| Spoolarc 81 | Stress Relieved 8 hrs. @ 1,150°F | 58 | 400 | 74 | 510 | 34 | 120 | 163 | -50 | -46 | F6P8-EM12K |
| Spoolarc 75 | As Welded | 76 | 550 | 89 | 655 | 28 | 110 | 149 | -40 | -40 | F8A4-ENi1K-Ni1 |
| Spoolarc ENi4 | As Welded | 85 | 585 | 96 | 680 | 26 | 115 | 156 | -40 | -40 | F9A4-ENi4-Ni4 |
| Spoolarc 71 | Stress Relieved 1 hr. @ 1,150°F | 72 | 495 | 88 | 605 | 30 | 67 | 91 | -50 | -46 | F7P5-EM14K |
| Spoolarc 71 | Stress Relieved 8 hrs. @ 1,150°F | 71 | 490 | 87 | 600 | 30 | 65 | 88 | -50 | -46 | F7P5-EM14K |

Typical Undiluted Weld Metal Analysis (%)

| Wire | C | Mn | Si | P | S | Cr | Ni | Mo | Cu |
|---------------|------|------|------|-------|-------|----|------|------|------|
| Spoolarc 81 | 0.06 | 1.60 | 0.30 | 0.013 | 0.009 | - | - | - | - |
| Spoolarc 75 | 0.06 | 1.80 | 0.50 | 0.013 | 0.009 | - | 0.90 | - | - |
| Spoolarc ENi4 | 0.07 | 1.60 | 0.20 | 0.012 | 0.006 | - | 1.80 | 0.15 | 0.15 |
| Spoolarc 71 | 0.08 | 1.90 | 0.50 | 0.018 | 0.009 | - | - | - | - |

OK flux 10.72 is well established in wind tower fabrication, as well as the manufacturing of pressure vessels, penstocks and in general fabrication.

