# AKD802

AWS A5.13 ECoCr-A

## Deposited metal hardness: HRC≥40

**Description:** AKD802 is a surfacing electrode with titanium-calcium coating and cobalt-chromium-tungstenalloy core. DC reverse connection should be adopted. Surfacing metal can still maintain good wear resistanceand corrosion resistance at 650℃ .

**Application:** Used in occasions where good wear resistance and certain corrosion resistance are required to work at around 650℃ , such as surfacing high temperature and high pressure valvesand hot shear knives, etc., where impact and cold and heat are interlaced.

### Typical Chemical Compostion(%):

| | C | Cr | W | Mn | Si | Fe | Co | Other |
|---|---|---|---|---|---|---|---|---|
| **Requirement** | 0.7-1.4 | 25.0-32.0 | 3.0-6.0 | 2.0 | 2.0 | 5.0 | Rem | 4.0 |
| **Actual Result** | 1.12 | 29.2 | 4.8 | 1.05 | 0.49 | 3.5 | Rem | 2.02 |

### Recommended welding parameters

| Diameter/ mm | 3.2 | 4.0 | 5.0 | —— |
|---|---|---|---|---|
| **Electrode Length (mm)** | 350 | 350 | 350 | —— |
| **Welding Current(A)** | 120-160 | 140-190 | 150-210 | —— |

**1. The electrode must be baked at about 150C for 1 hour before welding**

**2. According to the size of the workpiece and the type of base metal, it must be preheated at 300-600C. Low current short arc welding should be used.**

**3. After welding, it should be tempered at 600-700C for 1 hour and then slowly cooled, or the workpiece should be placed in a dry and hot sand box or plant ash and cooled slowly to avoid cracks.**