FR80S-G

## **Description**

OK AristoRod™ 13.09 is a 0.5Mo-alloved, bare. solid wire for the GMAW of creep-resistant steels of the same composition, like those used for pipes in pressure vessels and boilers with a service temperature of up to 500°C. OK AristoRod 13.09 is treated with ESAB's unique Advanced Surface Characteristics (ASC) technology, taking MAG welding operations to new levels of performance and all-round efficiency, especially in robotic and mechanised welding. Characteristic features include excellent start properties: trouble-free feeding at high wire speeds and lengthy feed distances; a very stable arc at high welding currents: extremely low levels of spatter: low fume emission: reduced contact tip wear and improved protection against corrosion of the wire.

#### Welding current

DC+

## Classifications

SFA/AWS A5.28 ER80S-G EN 440 G2Mo EN 12070 G MoSi

### Wire composition

| С   | Si  | Mn  | Мо  |  |
|-----|-----|-----|-----|--|
| 0.1 | 0.5 | 1.1 | 0.5 |  |

# Typical mech. properties all weld metal

Yield stress, MPa 540 Tensile strength, MPa 630 Elongation. % 25

## Charpy V

Test temps, °C Impact values, J +20 117 -20 77 -40 57

## **Approvals**

DB 42.039.31 DNV III YMS (M21) DS EN 12070 (M21) Ü 42.039/1 VdTÜV

### **Welding parameters**

| Diameter, mm | Wire feed, m/min | Welding current, A | Arc voltage, V | Deposition rate kg<br>weld metal/hour |
|--------------|------------------|--------------------|----------------|---------------------------------------|
| 0.8          | 2.0-10.8         | 40-170             | 16-22          | 0.4-2.6                               |
| 1.0          | 2.7-14.7         | 80-280             | 18-28          | 1.0-5.4                               |
| 1.2          | 2.7-12.4         | 120-350            | 20-33          | 1.5-6.6                               |
| 1.6          | 3 10-12 0        | 225-480            | 26-38          | 3 3-11 6                              |