

## OK Autrod 13.13

A copper-coated, low-alloy, chromium-nickel-molybdenum (0.5% Cr, 0.5% Ni, 0.2% Mo), solid wire for the GMAW of high tensile strength steels with a minimum yield strength (0.2% offset) of less than 610 MPa and a minimum tensile strength exceeding 710 MPa. Also suitable when welding steels where good impact strength at lower temperatures is required. OK Autrod 13.13 is usually welded with Ar/20CO<sub>2</sub> as the shielding gas. The mechanical properties are given in the as welded condition. After stress relieving, the mechanical properties decrease by about 30 MPa in the case of yield and tensile strength. OK Autrod 13.13 in the unique ESAB Octagonal Marathon Pac™ is excellent in mechanised welding applications.

### Specifications

#### Classifications

SFA/AWS A5.28 : ER100S-G

EN 12534 : GMn3NiCrMo

### Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	690 MPa	770 MPa	20 %

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	0 °C	80 J
As Welded	-20 °C	75 J
As Welded	-30 °C	65 J
As Welded	-40 °C	60 J
As Welded	-50 °C	50 J
As Welded	-60 °C	50 J

### Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm	120-350 A	20-33 V	2.7-12.4 m/min	1.5-6.6 kg/h
1.6 mm	225-480 A	26-38 V	3.5-12.0 m/min	3.3-11.6 kg/h
0.8 mm	40-170 A	16-22 V	2.0-10.8 m/min	0.4-2.6 kg/h
1 mm	80-280 A	18-28 V	2.7-14.7 m/min	1.0-5.4 kg/h