

# OK Autrod 19.85 GMAW

ERNiCr-3

## Description

A nickel-based, corrosion- and heat-resistant, 20% Cr, 3% Mo, 2.5% Nb electrode for the GMAW of high-alloyed steel, heat-resistant steel, corrosion-resistant steel, 9% Ni and similar steels with high notch toughness at low temperatures. It is also suitable for joining dissimilar metals of the type mentioned above. OK Autrod 19.85 is usually welded with pure Ar as the shielding gas.

## Welding current

DC(+)

## Classifications

SFA/AWS A5.14 ERNiCr-3  
EN ISO 18274 S Ni 6082  
(NiCr20Mn3Nb)

## Wire composition

C	Si	Mn	Cr	Ni	Cu	Ti	Fe
<0.1	<0.5	3.0	20.0	>67.0	<0.5	<0.7	<3.0

## Typical mech. properties all weld metal

Yield stress, MPa 440  
Tensile strength, MPa 670  
Elongation, % 40

## Charpy V

Test temps, °C Impact values, J  
+20 150  
-196 100

## Approvals

UDT DIN 1736  
VdTÜV

## Welding parameters

Diameter, mm	Wire feed, m/min	Welding current, A	Arc voltage, V	Deposition rate kg weld metal/hour
0.8	5-18	70-190	20-27	1.3-4.5
1.0	6-13	100-200	21-27	2.3-5.1
1.2	6-10	160-280	24-30	3.4-5.6
1.6	4-8	200-350	25-32	4.0-8.0