

## **OK Autrod 18.22**

Continuous solid wire suitable for welding of aluminium alloys with more than 3 % Mg, e.g. AlMg4.5Mn, AlMg5Mn and AlMg5Cr, where high tensile strength is required. Can also be used for materials of type AlMgSiCu and AlSi1MgMn and weldable AlZnMg-alloys, like AlZn4.5Mg1. The welding wire has small additions of Zr which increases the finegrained structure of weld deposit and makes it less sensitive to hot cracking during welding.

Alloy Type	AIMgMn
Shielding Gas	I1, I2, I3 (EN ISO 14175)

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
As Welded	160 MPa ( 23 ksi )	330 MPa ( 48 ksi )	25 %

Typical Charpy V-Notch Properties			
Condition	Testing Temperature	Impact Value	
As Welded	20 °C ( 68 °F )	26 J ( 19 ft-lb )	

Typical Wire Composition %						
Mn	Si	Al	Cu	Ti	Zr	Mg
0.8	0.06	92.93	0.03	0.03	0.1	5.8

Recommended Welding Parameters			
Current	Wire Diameter	Voltage	
140-260 A	1.2 mm ( 0.047 in. )	20-29 V	
140-300 A	1.2 mm ( 0.047 in. )	20-29 V	