

FILARC PZ6000

Copper coated, manganese-silicon alloyed solid wire for GMAW of unalloyed steels, such as general structural, pressure vessel, ship building and for fine-grained carbon-manganese steels for the same purpose with a minimum yield strength of max 420 MPa. The electrode can be welded with Ar/20CO₂ or with pure CO₂ as the shielding gas. PZ 6000 delivered in the unique Esab Octagonal Marathon Pac is excellent in mechanised welding applications.

Specifications

Classifications

EN ISO 14341-A : G 38 3 C1 3Si1
 EN ISO 14341-A : G 42 4 M21 3Si1
 EN ISO 14341-A : G 3Si1
 SFA/AWS A5.18 : ER70S-6

Approvals

CE : EN 13479
 DB : 42.105.01
 UKCA : EN 13479
 VdTÜV : 06309

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type

Carbon-manganese steel (Mn/Si-alloyed)

Shielding Gas

M20, M21, C1 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
EN C1			
As Welded	430 MPa	520 MPa	25 %
EN M21			
As Welded	450 MPa	560 MPa	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
EN C1		
As Welded	-29 °C	98 J
As Welded	20 °C	110 J
EN M21		
As Welded	20 °C	130 J
As Welded	-30 °C	70 J
As Welded	-40 °C	70 J

Typical Wire Composition %

C	Mn	Si
0.078	1.46	0.85

Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.06	1.06	0.72	0.012	0.013

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.6 mm	30-100 A	15-20 V	5.5-13.0 m/min	0.7-1.7 kg/h
0.8 mm	60-200 A	18-24 V	3.2-10.0 m/min	0.8-2.3 kg/h
0.9 mm	70-250 A	18-26 V	3.0-12.0 m/min	0.9-3.5 kg/h
1.0 mm	80-300 A	18-32 V	2.7-15.0 m/min	1.0-5.5 kg/h
1.2 mm	120-380 A	18-35 V	2.5-15.0 m/min	1.3-8.0 kg/h