

Exaton 16.5.1 (GMAW)

16.5.1 is a filler material for joining EN 1.4418 and similar steels. It is also used for overlay welding. The weld metal has excellent resistance to cavitation and is used typically for shafts, propellers, pumps and valves in for example, hydropower generation.

Specifications

Classifications	EN ISO 14343-A : G 16 5 1
Approvals	CE : EN13479

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

Alloy Type	Austenitic/Martensitic/Ferritic - 16% Cr - 5% Ni - 1% Mo - Low C
Shielding Gas	I3 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
PWHT 4 hour(s) 590 °C (1094 °F)	470 MPa (68 ksi)	850 MPa (123 ksi)	22 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
PWHT	20 °C (68 °F)	80 J (59 ft-lb)

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
0.01	1.4	0.3	0.009	0.015	5.5	16.2	1.0	0.04	0.006

Typical Wire Composition %

Cu	N	Nb	Ti	Co
0.01	0.02	0.01	0.01	0.03

Recommended Welding Parameters

Current	Wire Diameter	Voltage	Wire Feed Speed
150-260 A	1.2 mm (0.047 in.)	24-29 V	3.0-10.0 mm/min (118-394 in./min)