

Exaton 22.12.HT (GTAW)

22.12.HT is an austenitic filler material for welding the high temperature steel grade 253 MA*, UNS S30815. It is characterized by high creep strength, good resistance to oxidation and good weldability. It is used for TIG-welding.

Specifications	
Classifications	EN ISO 14343-A : W 21 10 N EN 10088-1 : 1.4835
Approvals	CE : EN 13479 UKCA : EN 13479

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

Alloy Type	Austenitic (with appr. 9 % ferrite) - 21% Cr - 10% Ni - Low C
Shielding Gas	I1 (EN ISO 14175)

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
@ 20°C			
As Welded	560 MPa (81 ksi)	725 MPa (105 ksi)	40 %
@ 900°C			
As Welded+	140 MPa (20 ksi)	165 MPa (24 ksi)	38 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	135 J (100 ft-lb)
As Welded	-60 °C (-76 °F)	60 J (44 ft-lb)
As Welded	-110 °C (-166 °F)	30 J (22 ft-lb)

Typical Weld Metal Analysis %									
C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.07	0.6	1.6	0.0007	0.023	9.9	20.8	0.08	0.003	0.06

Typical Weld Metal Analysis %							
N	Nb	Ti	Co	B	FN deLong	Ce	
0.14	0.005	0.002	0.04	0.0003	10	0.04	

Typical Wire Composition %									
C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
0.07	0.5	1.6	0.0007	0.020	10.2	21.0	0.1	0.01	0.1

Typical Wire Composition %							
N	Nb	Ti	Co	B	FN deLong	Ce	
0.17	0.01	0.005	0.05	0.0008	9	0.04	