

Exaton 50SW

Exaton 50SW is a basic agglomerated flux with low silicon pickup. It gives good slag removal, good tie-ins and a finely rippled surface. It is suitable for welding with either wire or strip electrodes of nickel alloy type. It is particularly suitable for surfacing with Exaton Ni72HP strip electrodes (EQNiCr-3 type). Typical applications for flux Exaton 50SW are found in nuclear and chemical equipment fields. It is also suitable for dissimilar material welding of nickel alloy grades to stainless steel grades.

Specifications

Classifications	EN ISO 14174 : S A AF 2
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Welding Current	900 A (Using 60x0.5 mm strip)
Slag Type	Fluoride basic CaF ₂ -Al ₂ O ₃ -(TiO ₂)-(MnO)
Density	nom: 1.2 Kg/l
Basicity Index	nom: 2.4

Classifications

Wire	AWS/EN
Exaton Ni41Cu	A5.14:ERNiFeCr-1/ 18274:S Ni 8065
Exaton Ni72HP	A5.14:ERNiCr-3/ 18274:S Ni 6082 (NiCr20Mn3Nb)

Approvals

Combined with Wire

*Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details.

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
Exaton Ni41Cu									
<=0.030	0.8	0.3	<=0.010	<=0.02	40.0	21.5	2.8	2.1	-
Exaton Ni72HP									
0.01	3.0	0.4	0.005	0.009	72.0	19.6	0.1	0.02	-

Typical Weld Metal Analysis %

Ti	Co	Fe	Nb+Ta
Exaton Ni41Cu			
-	-	30.0	-
Exaton Ni72HP			
0.15	0.02	1.0	2.2

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
Exaton Ni41Cu									
<=0.025	1.0	<=0.3	<=0.010	<=0.025	>=42.0	23.0	3.0	2.3	-
Exaton Ni72HP									
<=0.03	3.0	0.1	<=0.010	<=0.010	72.5	20.0	<=0.2	<=0.05	<=0.05

Typical Wire Composition %

Ti	Co	Fe	Nb+Ta
Exaton Ni41Cu			
-	-	>=22.0	-
Exaton Ni72HP			
0.4	<=0.10	<=1.0	2.6

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Typical Mechanical Properties					
Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
Exaton Ni72HP	As Welded	320 MPa (46 ksi)	600 MPa (87 ksi)	40 %	120 J @ 20 °C (89 ft-lb @ 68 °F) 110 J @ -196 °C (81 ft-lb @ -320.8 °F)