Exaton 10SW

Exaton 10SW is a chromium-compensating agglomerated flux giving good slag removal and a fine bead appearance. It is suitable for welding with wire and strip electrodes of the chromium & chromium-nickel and chromium-nickel-molybdenum steel types either with or without niobium. Exaton 10SW is an all round flux which can be used for many applications varying from surfacing continuous caster rolls to large components in chemical plants.

Specifications	
Classifications	EN ISO 14174 : S A CS 2 Cr

Welding Current	1200 A (Using 60x0.5 mm strip)
Slag Type	Calcium silicate SiO2-MgO-Al2O3-(CaF2)
Density	nom: 1.0 kg/l
Basicity Index	nom: 1.0

Flux Consumption	
Volts	**kg Flux / kg Wire DC+**
34 V	0.7 kg
30 V	0.55 kg
26 V	0.4 kg
38 V	0.9 kg

Condition : Dimension 4.0 mm , Amps 580 A , Travel speed 33 m/h

Classifications		
Wire	**AWS/EN**	**AWS - As Welded**
Exaton 19.12.3.L	A5.9:ER316L/ 14343-A:S 19 12 3 L	A5.39: F80A10-ER316L/316L
Exaton 19.12.3.L	A5.9:EQ316L/ 14343-A:B 19 12 3 L	-
Exaton 19.13.4.L	A5.9:EQ317L/ 14343-A:B 19 13 4 L	-
Exaton 19.9.L	A5.9:ER308L/ 14343-A:S 19 9 L	-
Exaton 19.9.L	A5.9:EQ308L/ 14343-A:B 19 9 L	-
Exaton 19.9.LNb	A5.9:EQ347/ 14343-A:B 19 9 Nb	-
Exaton 19.9.Nb	A5.9:ER347/ 14343-A:S 19 9 Nb	-
Exaton 21.13.3.L	A5.9:EQ(309LMo)/ 14343-A:B 21 13 3 L	-
Exaton 22.8.3.L	A5.9:EQ2209/ 14343-A:B 22 9 3 N L	-
Exaton 24.13.L	A5.9:EQ309L/ 14343-A:B 23 12 L	-
Exaton 24.13.LNb	A5.9:EQ?309LNb?/ 14343-A:B 23 12 Nb	-

Approvals	
Combined with Wire	**VdTÜV**
Exaton 19.9.L	•
Exaton 19.9.LNb	•
Exaton 19.9.Nb	•
Exaton 22.8.3.L	•

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
Exaton 19.12.3.L (Layer 1 with "24.13.L" & Layer 2 with "19.12.3.L")									
0.02	0.8	0.7	-	-	11.5	19.0	2.2	-	0.06
Exaton 19.13.4.L Layer 1 with "21.13.3.L"									
<=0.04	-	-	-	-	13	18.5	3.3	-	-
Exaton 19.9.L 1st layer with "24.13.L"									
<=0.03	-	-	-	-	10.0	19.7	-	-	-

Exaton 10SW

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
Exaton 19.9.LNb (Layer 1 with "24.13.LNb")									
0.02	0.8	0.6	-	-	10.4	21.0	0.0	-	0.05
Exaton 19.9.Nb Layer 1 with "24.13.LHF" & 2 layers with "19.9.Nb"									
0.04	0.6	1.0	0.01	0.01	9.2	19.0	0.01	0.1	0.06
Exaton 22.8.3.L Layer 1 with "24.13.L" & 2 layers with "22.8.3.L"									
<=0.03	-	-	-	-	8.5	22.7	2.9	-	0.16
Exaton 24.13.L Layer 1 with "24.13.L"									
<=0.07	-	-	-	-	10.5	19.2	-	-	-
Exaton 24.13.LNb									
<=0.06	-	-	-	-	9.7	19.2	-	-	-

Typical Weld Metal Analysis %		
Nb	**FN WRC-92**	**Nb+Ta**
Exaton 19.12.3.L (Layer 1 with "24.13.L" & Layer 2 with "19.12.3.L")		
0	-	-
Exaton 19.13.4.L Layer 1 with "21.13.3.L"		
-	5	-
Exaton 19.9.L 1st layer with "24.13.L"		
-	8	-
Exaton 19.9.LNb (Layer 1 with "24.13.LNb")		
0.3	-	-
Exaton 19.9.Nb Layer 1 with "24.13.LHF" & 2 layers with "19.9.Nb"		
0.3	-	0.3
Exaton 22.8.3.L Layer 1 with "24.13.L" & 2 layers with "22.8.3.L"		
-	40	-
Exaton 24.13.L Layer 1 with "24.13.L"		
-	6	-
Exaton 24.13.LNb		
-	6	-

Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
Exaton 19.12.3.L									
<=0.020	1.8	0.4	<=0.020	<=0.020	13	18.5	2.9	<=0.3	-
Exaton 19.13.4.L									
<=0.02	1.5	0.4	<=0.020	<=0.020	14	19	3.6	<=0.3	-
Exaton 19.9.L									
<=0.015	1.8	0.35	<=0.015	<=0.015	10	20	<=0.3	<=0.1	-
Exaton 19.9.LNb									
<=0.02	1.8	0.4	<=0.02	<=0.02	10.5	20	<=0.3	<=0.3	-
Exaton 19.9.Nb									
0.04	1.3	0.35	0.012	0.015	9.5	19.5	0.03	0.11	0.06
Exaton 21.13.3.L									
<=0.015	1.8	0.2	<=0.015	<=0.020	13.5	20.5	2.9	<=0.3	-
Exaton 22.8.3.L									
<=0.020	1.6	0.5	<=0.015	<=0.020	9	23	3.1	-	0.15
Exaton 24.13.L									

Exaton 10SW

Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
<=0.015	1.8	0.35	<=0.015	<=0.015	13	23.5	<=0.3	<=0.1	-
Exaton 24.13.LNb									
<=0.02	2	0.3	<=0.020	<=0.020	12.5	24	<=0.3	<=0.3	-

Typical Wire Composition %					
Nb	**Co**	**FN deLong**	**FN WRC**	**FN WRC-92**	**Nb+Ta**
Exaton 19.12.3.L					
-	-	-	-	8	-
Exaton 19.13.4.L					
-	-	-	-	7	-
Exaton 19.9.L					
-	-	-	-	12	-
Exaton 19.9.LNb					
0.5	-	-	-	11	-
Exaton 19.9.Nb					
0.6	0.1	5	5	-	0.6
Exaton 21.13.3.L					
-	-	-	-	13	-
Exaton 22.8.3.L					
-	-	-	-	50	-
Exaton 24.13.L					
-	-	-	-	15	-
Exaton 24.13.LNb					
0.75	-	-	-	22	-

Typical Mechanical Properties					
Combined with Wire	**Condition**	**Yield Strength**	**Tensile Strength**	**Elongation**	**Charpy V-Notch**
Exaton 19.12.3.L	As Welded	420 MPa (61 ksi)	580 MPa (84 ksi)	32 %	69 J @ 20 °C (51 ft-lb @ 68 °F) 60 J @ -40 °C (44 ft-lb @ -40 °F) 55 J @ -70 °C (41 ft-lb @ -94 °F) 50 J @ -196 °C (37 ft-lb @ -320.8 °F)
Exaton 19.9.L	As Welded	400 MPa (58 ksi)	580 MPa (84 ksi)	38 %	69 J @ 20 °C (51 ft-lb @ 68 °F) 59 J @ -40 °C (44 ft-lb @ -40 °F) 40 J @ -196 °C (30 ft-lb @ -320.8 °F)
Exaton 19.9.Nb	As Welded Joining	440 MPa (64 ksi)	625 MPa (91 ksi)	38 %	72 J @ 20 °C (53 ft-lb @ 68 °F) 61 J @ -40 °C (45 ft-lb @ -40 °F) 34 J @ -196 °C (25 ft-lb @ -320.8 °F)