



**Certificate of Conformance
to Requirements for Welding Electrode
EN 10204 3.1**

Customer :		
Product : SWX 120	Customer P.O.# : 119692	Certificate No. : F040621-2
Lot No. : 210316	Mesh Size :	Date of Mfg. : 03/16/2021
Specification : --	Classification :-	Date of Issue : 04/20/2021

CHEMICAL ANALYSIS OF FLUX FOR SUBMERGED ARC WELDING

SiO ₂	10.4%
Al ₂ O ₃ + TiO ₂	22.1%
MnO + FeO	6.45%
CaO + MgO + CaF ₂	59.6%



J. M. Wang
J. M. WANG

Manufacturing, Certification and Limited Warranty Agreement

Data for the above supplied product are those obtained when welded and tested accordance with the above specification. All tests for the above classification were satisfied. Other tests and procedures may produce different results. The above supplied product are manufactured by Tien Tai Electrode an ITW Co. located at: No.6 Kefa 4th Rd, Daxda Dist, Taipei City 107, Taiwan, R.O.C. Hobart Brothers produce welding consumables under continuing quality assurance programs audited and



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Customer :

Product : SDX S2Si-EM12K/SWX 120	Customer P.O.# : 119692	Part Number :
Diameter : 4.0mm	Lot No. : 8297/2018;210316	Lot Classification :
Classification : F7A6-EM12K	Date Tested : 03/29/2021	Level of Testing :
Specification : AWS A5.17-'19	Date of Issue : 04/20/2021	

Test Settings

Amps DCEP	Volts	WFS	Shielding Gas	Electrode Stickout	Temperature		Travel Speed
					Preheat	Interpass	
500	28	43 ipm	NONE	35 mm	85±25°F 30±15°C	300±25°F 150±15°C	16±1 ipm

6 Layers, 2 passes on each layer 1 through 6; 7th Layer, 3 passes on cap layer; Direction reversed on each layer.

Mechanical Properties Lab Test #2AC29

Shielding Gas	Testing Conditions	Ult. Tensile Strength	Yield Strength	Elong % in 2"	Impact Test Temp.	Charpy V-Notch Values ft.lbf		
NONE	AS WELDED	82778 psi 571 MPa	67559 psi 466 MPa	33	-60 °F -51 °C	52	57	65
						Average	58	(78 J)


Radiographic		Fillet Weld Test					Moisture %	
Inspection:	Conforms	Horizontal:	N/A	Vertical:	N/A	Overhead:	N/A	N/A
Bending Test								

Chemical Composition of Wire and Rod (%)

Elements	C	Mn	Si	S	P	Cu								
Filler Metal	0.10	1.11	0.19	0.007	0.015	0.10								

Remarks

Production Date :03/16/2021


 Q.C Section:J.M. Wang

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