



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

Customer :		
Product : SWX 120	Customer P.O.# : 2000-009567/PO:ICO-01690827	Certificate No. : F111924-2
Lot No. : 241111	Mesh Size :	Date of Mfg. : 11/11/2024
Specification : --	Classification : --	Date of Issue : 11/20/2024

CHEMICAL ANALYSIS OF FLUX FOR SUBMERGED ARC WELDING

SiO ₂	9.9%
Al ₂ O ₃ + TiO ₂	22.9%
MnO + FeO	6.13%
CaO + MgO + CaF ₂	59.4%



J. M. Wang
Q.C Section 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 Kaifa 4th Rd., Rende Dist., Tainan City 717, Taiwan R.O.C. Hobart Brothers produces welding consumables under continuing quality assurance programs audited and approved by Lloyd's Register Quality Assurance Limited(LRQA)



Certificate No. :B112024-1

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

Customer :

Product : HOBART M12K/SWX 120
 Diameter : 4.0mm
 Classification : F7A6-EM12K
 Specification : AWS A5.17-'19

Customer P.O.# : 2000-009567/PO:ICO-01690827
 Lot No. : 240115061S40/241111
 Date Tested : 11/17/2024
 Date of Issue : 11/20/2024

Part Number :
 Lot Classification :
 Level of Testing :

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 #2DL17

Item	Ult. Tensile Strength		Yield Strength		Elong % in 2"	Impact Test Temp.	Charpy V-Notch Values ft.lbf		
Requirement	70000 ~ 95000 490 ~ 660	psi MPa	58000 Min. 400 Min.	psi MPa	22 Min.	-60 °F -51 °C	20 ft.lbf Min. 27 J Min.		
AS WELDED	79080 545	psi MPa	65284 450	psi MPa	33	-60 °F -51 °C	Average 63	70	80 (96 J)

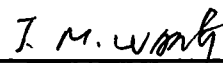
Radiographic		Fillet Weld Test					Moisture %	
Inspection:	Conforms	Horizontal:	N/A	Vertical:	N/A	Overhead:	N/A	N/A
Bending Test								

Chemical Composition of Wire and Rod (%)

Elements	C	Mn	Si	S	P	Cu								
Requirement	0.05 0.15	0.80 1.25	0.10 0.35	Max. 0.030	Max. 0.030	Max. 0.35								
Filler Metal	0.08	1.08	0.23	0.006	0.014	0.001								

Remarks

Production Date :11/11/2024


 Q.C Section J. M. WANG

Manufacturing, Certification and Limited Warranty Agreement

Data for the above supplied product are those obtained when welded and tested in 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 were manufactured by Tien Tai Electrode an ITW Co. located at: No.6 Kaifa 4th Rd., Rende Dist., Tainan City 717, Taiwan R.O.C Hobart Brothers produces welding consumables under continuing quality assurance programs audited and approved by Lloyd's Register Quality Assurance Limited(LRQA)