



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

Customer :	Customer P.O.# : 2000-005880/PO:ICO-01131814	Certificate No. : F091523-1
Product : HF-N	Mesh Size :	Date of Mfg. : 09/02/2023
Lot No. : 230902	Classification : --	Date of Issue : 09/18/2023
Specification : --		

CHEMICAL ANALYSIS OF FLUX FOR SUBMERGED ARC WELDING

SiO ₂	10.4%
Al ₂ O ₃ + TiO ₂	17.0%
MnO + FeO	0.3%
CaO + MgO + CaF ₂	72.1%



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. :B091523-2

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

Customer :

Product : METALLOY 865-S MOD/HF-N
Diameter : 3.2mm
Classification : -
Specification : -

Customer P.O.# : 2000-005880/PO:ICO-01131814
Lot No. : S614943/230902
Date Tested : 09/14/2023
Date of Issue : 09/18/2023

Part Number :
Lot Classification :
Level of Testing :

Test Settings

Amps DCEP	Volts	WFS	Shielding Gas	Electrode Stickout	Temperature		Travel Speed
					Preheat	Interpass	
425	28	NONE	NONE	35mm	85±25°F 30±15°C	300±25°F 150±15°C	13±1 ipm

Mechanical Properties Lab Test #2CJ13

Shielding Gas	Testing Conditions	Ult. Tensile Strength	Yield Strength	Elong % in 2 "	Impact Test Temp.	Charpy V-Notch Values ft.lbf
NONE	AS WELDED	- psi - MPa	- psi - MPa		- °F - °C	- - - Average - (- J)

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


Weld Metal Chemical Composition (%) Ref. No.CA23091403

Elements	C	Mn	P	S	Si	Cu	Nb	V	Cr	Ni	Mo					
Deposited Metal	0.181	1.48	0.029	0.006	0.753	0.029	0.137	0.15	12.70	2.39	1.13					

Remarks

Production Date :09/02/2023

Hardness Test (HRC): 47


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