



Mill Test Certificate

**ESAB SeAH Corporation**

51, SEONG JU-DONG, CHANG-WON
 KYUNG-NAM, KOREA 641-120
 TEL:82-55-289-8111 FAX:82-55-289-8864

Certificate No : 07-41-0524

Issued Date : 2007.06.19

Brand Name : DUAL SHIELD 70ULTRA PLUS

Customer Name : PACIFIC INDUSTRIAL SUPPLIES PTY LTD

P/O No. : 40043

This Material conforms to Specification :
 AWS A 5.20-95, ASME SFA 5.20

Diameter Size : 1.2 MM

Weight : 2,805.0 KG

Lot Number : F104A7E500

Shielding Gas : 100% CO2

Type : E71T-1/T-1MT-9M

Chemical Compositions		Specification Requirements		Typical Mechanical Properties As welded		Specification Requirements As welded	
C	0.05	MAX	0.18	Tensile Test			
Mn	1.08	MAX	1.75	Y.S.(0.2%) Mpa (Ksi)	475 (68.9)	MIN	400 (58.0)
Si	0.60	MAX	0.90	T.S. Mpa (Ksi)	558 (80.9)	MIN	480 (69.6)
S	0.004	MAX	0.030	Elongation(2"),%	32	MIN	22
P	0.017	MAX	0.030	Reduction of Area,%	76		N/A
Cr	0.02	MAX	0.20	Impacts test, Joule(ft-lb)			
Ni	0.01	MAX	0.50	(Charpy V-Notch)			
Mo	0.01	MAX	0.30	-18 °C (0 °F)	118 (87.0)	MIN	27 (19.9)
V	0.02	MAX	0.08	-29 °C (-20 °F)	97 (71.5)	MIN	27 (19.9)
Al			N/A	Fillet Weld Test			
Cu	0.01	MAX	0.35	Satisfactory			
Ti			N/A	Radiographic test			
Co			N/A	Satisfactory			
N			N/A				
Cb+Ta			N/A				
Fe			N/A				
Zn			N/A				
Be			N/A				
Pb			N/A				
Sn			N/A				
W			N/A				
Others			N/A				

Remark:

The undersigned certifies that the products supplied will meet the applicable AWS or JIS(if applicable) Filler Metal specification when tested in accordance with those specifications.
 The chemistry and ferrite values (if applicable) are made from actual determinations with this lot of electrodes.

By : Y. C. Kim
 Y.C.Kim, Manager, Q.M.Team