



# 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 : 07-41-0258  
 Issued Date : 2007.03.15

Brand Name : DUAL SHIELD 7100ULTRA

Customer Name : PACIFIC INDUSTRIAL SUPPLIES PTY LTD  
 P/O No. : 31524

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

Diameter Size : 1.2 MM  
 Weight : 645.0 KG  
 Lot Number : F103A7B300  
 Shielding Gas : 100% CO2

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

<u>Chemical Compositions</u>		<u>Specification Requirements</u>		<u>Typical Mechanical Properties</u> As welded		<u>Specification Requirements</u> As welded	
C	0.04	MAX	0.18	<b>Tensile Test</b>			
Mn	1.36	MAX	1.75	Y.S.(0.2%) Mpa (Ksi)	481 (69.8)	MIN	400 (58.0)
Si	0.59	MAX	0.90	T.S. Mpa (Ksi)	546 (79.2)	MIN	480 (69.6)
S	0.006	MAX	0.030	Elongation(2"),%	32	MIN	22
P	0.016	MAX	0.030	Reduction of Area,%	75		N/A
Cr	0.03	MAX	0.20	<b>Impacts test, Joule(ft-lb)</b> <b>(Charpy V-Notch)</b>			
Ni	0.01	MAX	0.50	-18 °C (0 °F)	119 (87.8)	MIN	27 (19.9)
Mo	0.01	MAX	0.30	-29 °C (-20 °F)	78 (57.5)	MIN	27 (19.9)
V	0.02	MAX	0.08				
Al			N/A	Fillet Weld Test	Satisfactory		
Cu	0.01	MAX	0.35	Radiographic test	Satisfactory		
Ti			N/A				
Co			N/A				
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