



Mill Test Certificate

**ESAB SeAH Corporation**

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Certificate No : 07-41-0466
 Issued Date : 2007.06.05

Brand Name : DUAL SHIELD 7100S

Customer Name : WESTERN WELDING SERVICES

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

P/O No. : 40261

Diameter Size : 1.6 MM

Weight : 4,575.0 KG

Lot Number : F102A7F133

Type : E71T-1

Shielding Gas : 100% CO2

<u>Chemical Compositions</u>		<u>Specification Requirements</u>		<u>Typical Mechanical Properties</u> As welded		<u>Specification Requirements</u> As welded	
C	0.03	MAX	0.18	Tensile Test			
Mn	1.52	MAX	1.75	Y.S.(0.2%) Mpa (Ksi)	491 (71.2)	MIN	400 (58.0)
Si	0.60	MAX	0.90	T.S. Mpa (Ksi)	567 (82.2)	MIN	480 (69.6)
S	0.007	MAX	0.030	Elongation(2"),%	35	MIN	22
P	0.016	MAX	0.030	Reduction of Area,%	74		N/A
Cr	0.02	MAX	0.20	Impacts test, Joule(ft-lb) (Charpy V-Notch)			
Ni	0.01	MAX	0.50	-18 °C (0 °F)	122 (90.0)	MIN	27 (19.9)
Mo	0.01	MAX	0.30	Fillet Weld Test Satisfactory			
V	0.02	MAX	0.08	Radiographic test Satisfactory			
Al			N/A				
Cu	0.01	MAX	0.35				
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