



Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201503C511
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/ CSA 350W

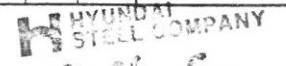
# MILL TEST CERTIFICATE

		
Head Office	63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea	
Certificate No.	IH20150305391 - 5	
Class Cert. No.		
Date of Issue	2015-03-30	

EN 10204(2004) TYPE 3.1

Dimensions & Length	Heat No.	Pieces Weights (kg)	Chemical Composition (%)											Tensile Test			Impact Test (V-notch)				Remarks (Impact Specimen Size)	
			C	Si	Mn	P	S	Cu	Mo	Al	Nb	Sn	CE <sup>(1)</sup>	Tensile Strength	Yield point	Elongation <sup>(2)</sup>	Yield Ratio	AVG	1	2		3
			x100		x1000		x100		x1000		x100		N/mm <sup>2</sup>	%	%	( )	C					
18X7-1/2X71 40.00 FT	E 180710	16 20,624	19	16	97	32	6	28	2	5	4	13	42	549	410	26.0	0.75					
18X7-1/2X71 40.00 FT	E 181191	11 14,179	18	15	97	31	8	31	2	2	4	14	42	548	386	24.5	0.70					
18X7-1/2X71 40.00 FT	E 181192	13 16,757	19	18	96	22	9	28	2	3	2	12	41	568	411	23.5	0.72					
12X8X40 40.00 FT	D 126309	1 726	18	13	60	26	7	35	2	2	13	13	35	550	442	24.5	0.80					
12X8X40 40.00 FT	D 126310	78 56,628	19	14	58	23	8	33	3	2	16	12	36	541	433	24.0	0.80					
12X8X40 40.00 FT	D 126311	36 26,136	18	13	61	21	5	26	2	2	16	13	33	544	447	23.3	0.82					
12X8X40 40.00 FT	D 126312	29 21,054	18	14	61	22	10	34	2	3	16	13	36	549	427	24.0	0.78					
12X8X40 40.00 FT	D 126316	4 2,904	19	16	62	20	10	29	2	3	17	19	36	550	439	24.0	0.80					
12X8X45 40.00 FT	D 126308	75 61,200	19	14	60	25	9	30	3	2	15	14	36	540	424	26.0	0.78					
SUB TOTAL		263 220,208																				

(Note) (1) Ceq: (CE=C+Mn/6+Cr/5+V/5+Mo/5+Ni/15+Cu/15) (2) Gauge length : 200 mm (3) Yield Ratio = YP/TS



*J. C. Ahn*  
GENERAL MANAGER  
OVERSEAS SALES TEAM

**J. C. Ahn**  
General Manager of Q.A Team

WE HEREBY CERTIFY THAT THE MATERIAL HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIREMENTS CALLED FOR THE ABOVE ORDER