



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

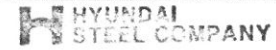
MILL TEST CERTIFICATE

EN 10204(2004) TYPE 3.1

		
Head Office	63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea	
Certificate No.	IH20150305391 - 1	
Class Cert. No.		
Date of Issue	2015-03-30	

Dimensions & Length	Heat No.	Pieces Weights (kg)	Chemical Composition (%)											Tensile Test			Yield Ratio	Impact Test (V-notch)				Remarks (Impact Specimen Size)		
			C	Si	Mn	P	S	Cu	Mo	Al	Nb	Sn	CE ⁽¹⁾	Tensile Strength	Yield point	Elongation ⁽²⁾		AVG	1	2	3			
			×100		×1000		×100		×1000			×100		N/mm ²	%	()		C						
10X10X68 40.00 FT	E 181235	11 13,574	20	16	97	23	10	25	1	3	1	15	42	569	407	22.5	0.72							
10X10X68 40.00 FT	E 181236	13 16,042	19	13	101	30	9	24	2	2	1	11	43	569	416	24.0	0.73							
12X4X14 40.00 FT	D 125183	24 6,096	19	16	61	33	12	36	2	5	2	18	16	37	539	449	24.0	0.83						
12X4X14 40.00 FT	D 125188	12 3,048	16	13	59	28	10	32	2	5	2	17	16	32	524	421	24.0	0.80						
12X4X14 40.00 FT	D 125189	8 2,032	16	14	58	29	7	32	1	6	2	19	18	32	511	395	22.5	0.77						
12X4X14 40.00 FT	D 125809	84 21,336	18	20	59	25	10	33	2	4	2	17	15	34	555	438	26.0	0.79						
12X4X14 40.00 FT	D 125884	87 22,098	17	15	59	27	7	38	2	3	2	18	20	35	551	433	25.0	0.79						
12X6-1/2X26 40.00 FT	D 126218	8 3,776	18	14	60	33	5	34	2	3	2	16	15	35	521	379	24.0	0.73						
12X6-1/2X26 40.00 FT	D 126219	48 22,656	19	16	61	26	4	28	2	4	2	19	12	36	519	376	23.0	0.72						
SUB TOTAL		295 110,658																						

(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 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

[Signature]
20150330 15:10:11