



Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201506C112
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.	IH20150700675 - 3	
Class Cert. No.		
Date of Issue	2015-07-03	

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 Ni	Mo Cr	Al V	Nb	Sn	CE ⁽¹⁾	Tensile Strength	Yield point	Elongation ⁽²⁾	Yield Ratio	AVG	1	2		3
			×100		×1000		×100		×1000		×100		N/mm ²		%		°C					
12X8X40 40.00 FT	D 128169	90 65,340	18	13	59	26	8	30 9	2 19	3	16	12	35	529 512	368 366	23.6 23.5	0.70 0.72					
12X8X40 40.00 FT	D 128172	24 17,424	17	15	60	33	10	28 10	2 23	3 6	18	13	35	535 520	380 375	22.0 23.0	0.71 0.72					
12X8X40 40.00 FT	D 128173	18 13,068	16	14	58	32	6	28 12	2 22	2 5	16	12	33	528 524	372 370	24.5 25.0	0.70 0.71					
12X8X45 40.00 FT	D 126034	40 32,640	17	15	58	28	6	34 10	2 16	3 3	17	15	33	521 519	373 370	24.5 25.0	0.72 0.71					
12X8X50 40.00 FT	D 128149	32 29,024	19	18	73	33	11	29 10	1 18	3 6	19	16	38	562 558	401 396	25.5 25.0	0.71 0.71					
12X8X50 40.00 FT	D 128151	4 3,628	20	17	75	31	5	28 9	1 19	3 6	21	16	39	553 550	383 381	25.5 26.0	0.69 0.69					
12X12X65 40.00 FT	E 183238	9 10,611	18	18	98	16	7	23 10	2 16	4 15	3	17	40	551 548	407 400	24.0 25.0	0.74 0.73					
12X12X65 40.00 FT	E 183239	17 20,043	18	16	95	14	6	20 9	3 13	3 15	2	10	39	545 540	406 398	25.0 26.0	0.74 0.74					
12X12X65 40.00 FT	E 183240	1 1,179	18	17	99	16	4	22 10	3 21	4 15	2	9	42	550 545	413 409	24.0 24.5	0.75 0.75					
SUB TOTAL		235 192,957																				

(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

