



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 - 4	
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 <sup>(1)</sup>	Tensile Strength	Yield point	Elongation <sup>(2)</sup>	Yield Ratio	AVG	1	2		3		
			×100		×1000		×100		×1000		×100		×100		N/mm <sup>2</sup>		%		(°)	°C				
12X12X72 40.00 FT	E 183242	6 7,836	18	16	97	30	6	28 9	2 18	3 15	2 15	3 15	2 15	12	41	553 549	403 396	26.0 26.5	0.73 0.72					
12X12X72 40.00 FT	E 183243	15 19,590	18	16	97	27	7	23 8	2 17	3 14	2 14	3 14	2 11	11	40	552 546	410 402	26.0 26.5	0.74 0.74					
14X6-3/4X30 40.00 FT	D 128138	95 51,680	20	19	59	22	9	26 10	1 7	2 6	2 6	3 6	18 11	11	34	542 545	405 406	23.5 24.0	0.75 0.74					
14X6-3/4X30 40.00 FT	D 128185	25 13,600	16	14	60	22	8	25 9	3 19	3 6	3 6	3 6	17 13	13	33	517 520	369 371	25.0 24.5	0.71 0.71					
14X6-3/4X30 40.00 FT	D 128201	30 16,320	18	16	57	27	8	26 11	2 19	3 6	3 6	3 6	17 12	12	34	526 530	383 385	24.0 23.5	0.73 0.73					
18X6X35 40.00 FT	E 182784	1 635	13	16	54	24	11	23 9	2 13	3 12	3 12	3 12	2 17	17	27	470 468	384 379	27.0 28.0	0.82 0.81					
18X6X35 40.00 FT	E 182786	3 1,905	13	17	54	27	9	26 11	2 17	3 13	3 13	3 13	3 12	12	29	475 472	384 380	26.5 27.5	0.81 0.80					
18X6X35 40.00 FT	E 182787	13 8,255	13	14	53	25	8	28 10	2 18	3 12	3 12	3 12	2 12	12	29	477 471	382 379	27.5 28.0	0.80 0.80					
18X6X35 40.00 FT	E 182788	68 43,180	13	15	50	24	7	32 11	2 15	3 12	3 12	3 12	1 13	13	28	479 484	390 392	26.5 26.0	0.81 0.81					
SUB TOTAL		256 163,001																						

(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