



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 - 1	
Class Cert. No.		
Date of Issue	2015-07-03	

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 Ni	Mo Cr	Al V	Nb	Sn	CE <sup>(1)</sup>	Tensile Strength	Yield point	Elongation <sup>(2)</sup>		AVG	1	2	3		
			×100			×1000		×100		×1000			×100		N/mm <sup>2</sup>			%	( )	C			
8X4X10 40.00 FT	D 127397	108 19,548	13	20	121	28	8	30 10	2 16	3 32		4	17	40	563 559	413 411	23.0 23.5	0.73 0.74					
8X4X10 40.00 FT	D 127930	24 4,344	18	13	57	25	8	28 11	3 17	3 2		18	17	34	530 533	408 405	24.5 24.0	0.77 0.76					
8X4X10 40.00 FT	D 127931	48 8,688	15	12	59	27	5	30 11	3 20	3 2		15	19	32	545 541	428 425	24.0 23.5	0.78 0.79					
8X4X13 40.00 FT	D 127920	132 31,152	18	15	60	23	4	28 15	3 22	3 3		16	13	36	531 535	392 394	25.0 25.5	0.74 0.74					
8X4X15 40.00 FT	D 127918	24 6,528	16	19	59	22	6	27 10	4 22	4 3		14	12	34	541 537	415 413	24.0 24.5	0.77 0.77					
8X4X15 40.00 FT	D 127919	48 13,056	16	15	59	23	4	29 17	5 22	4 3		16	11	34	541 538	407 409	25.5 25.0	0.75 0.76					
8X4X15 40.00 FT	D 127921	48 13,056	16	14	59	18	4	27 15	4 21	4 2		16	17	34	529 525	402 400	25.0 25.5	0.76 0.76					
8X4X15 40.00 FT	D 127930	156 42,432	18	13	57	25	8	28 11	3 17	3 2		18	17	34	537 533	405 401	24.5 24.0	0.75 0.75					
8X5-1/4X21 40.00 FT	D 128267	56 21,336	18	15	59	32	9	22 8	1 18	3 6		16	10	34	543 540	406 401	24.0 24.5	0.75 0.74					
SUB TOTAL		644 160,140																					

(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