

Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	40201300C146
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/ CSA 350W

# MILL TEST CERTIFICATE

Head Office	1, Songhyeon-dong, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH77130701909 - 6
Class Cert. No.	
Date of Issue	2013-09-25

Dimensions & Length	Heat No.	Places 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
			x100	x100	x100	x1000	x1000	x100	x100	x1000	x1000	x100	x100	N/mm <sup>2</sup>	%	%	(°)	C				
8X8X40 40.00 FT	H 105200	10 7,260	17	14	60	28	8	28 10	2 17	4	19	15	33	507.0 610.9	402.1 405.0	25.5 25.0	0.79 0.79					
10X5-3/4X22 40.00 FT	H 104829	152 60,648	18	12	60	35	15	32 10	2 19	3	20	15	35	513.9 515.8	380.5 381.5	26.5 26.0	0.74 0.74					
10X5-3/4X22 40.00 FT	D 114611	72 28,728	20	17	60	35	10	31 8	2 15	3	15	13	36	508.0 511.9	367.7 370.7	26.0 25.5	0.72 0.72					
10X5-3/4X22 40.00 FT	D 114631	9 3,192	19	14	60	33	8	27 10	2 18	3	13	15	35	518.0 514.9	372.7 375.6	26.1 26.5	0.72 0.73					
10X5-3/4X22 40.00 FT	D 114633	16 6,384	18	15	60	34	10	31 9	2 17	3	15	16	34	509.0 509.0	372.7 373.6	24.0 24.5	0.74 0.74					
10X5-3/4X30 40.00 FT	D 114821	40 21,760	17	16	62	28	11	32 9	2 16	3	17	14	33	511.0 509.1	367.7 368.7	25.5 25.0	0.73 0.73					
10X5-3/4X30 40.00 FT	D 122632	16 8,704	16	16	59	30	12	28 10	2 15	3	15	17	32	508.0 509.9	365.8 367.7	25.5 25.0	0.72 0.72					
10X10X49 40.00 FT	E 167415	29 25,781	17	11	72	15	16	23 7	2 6	3	12	10	38	512.9 514.8	395.2 389.3	26.0 26.3	0.77 0.76					
10X10X49 40.00 FT	E 167167	6 5,334	18	10	64	19	16	24 6	2 7	3	11	10	32	498.2 500.1	372.7 376.6	27.0 27.9	0.76 0.75					
SUB TOTAL		348 167,791																				

(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

**K. S. Shim**  
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

HMS1102(A)-3a \* 현대제철은 검사증명서를 사본으로 제출하지 않습니다. 사본일 경우, 현대제철 각 영업소로 확인하시기 바랍니다. 문의)02-772-2125 2010044 A4(210x297)