Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201305C100
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/ CSA 350W

MILL TEST CERTIFICATE

HYUNDAI STEEL

Head Office	1, Songhyeon-dong, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH20130701409 - 7
Class Cert. No.	
Date of Issue	2013-07-09

Dimensions & Length	Heat No.	Pieces / Weights (kg)	Chemical Composition (%) C	Si	Mn	P	S	Cu / Ni	Mo / Cr	Al / V	Nb	Sn	CE(1)	Tensile Test: Tensile Strength	Yield point	Elongation(2)	Yield Ratio	Impact Test (V-notch) AVG	1	2	3	Remarks (Impact Specimen Size)
			×100			×1000		×100		×1000			×100	N/mm²		%		(°)	°C			
18X11X76 40.00 FT	N 019796	2 / 2,758	16	14	104	21	19	26 / 8	2 / 12	4 / 30	21	12	39	541.3 / 542.3	405.0 / 403.1	25.0 / 25.5	0.75 / 0.74					
18X11X76 40.00 FT	N 019817	1 / 1,379	19	16	69	32	16	17 / 11	2 / 17	4	18	8	36	521.7 / 526.6	385.4 / 390.3	26.5 / 26.0	0.74 / 0.74					
18X11X76 40.00 FT	N 019852	3 / 4,137	20	16	67	25	18	20 / 7	2 / 12	4	17	10	36	539.4 / 540.3	402.1 / 404.0	25.0 / 25.5	0.74 / 0.75					
18X11X76 40.00 FT	N 019856	7 / 9,653	18	18	107	29	15	20 / 8	1 / 13	5	15	9	40	527.6 / 528.6	392.3 / 393.2	27.0 / 26.5	0.74 / 0.74					
18X11X76 40.00 FT	N 019861	3 / 4,137	19	15	69	34	15	20 / 7	2 / 16	5	15	10	36	535.4 / 536.4	398.1 / 396.2	25.5 / 26.0	0.74 / 0.74					
18X11X76 40.00 FT	N 019863	3 / 4,137	19	14	64	24	14	20 / 6	2 / 11	5	13	9	34	530.5 / 532.5	395.2 / 395.2	26.0 / 26.5	0.74 / 0.74					
18X11X76 40.00 FT	N 019865	6 / 8,274	19	14	64	26	20	24 / 7	2 / 10	4	13	10	34	556.0 / 551.1	418.7 / 414.8	24.0 / 24.5	0.75 / 0.75					
18X11X76 40.00 FT	N 019867	5 / 6,895	19	17	69	35	20	19 / 7	2 / 12	5	19	9	35	538.4 / 535.4	398.1 / 395.2	25.5 / 26.0	0.74 / 0.74					
18X11X76 40.00 FT	N 020094	10 / 13,790	18	18	67	29	17	17 / 7	3 / 14	4	14	9	34	541.3 / 547.2	408.9 / 414.8	25.5 / 25.0	0.76 / 0.76					
SUB TOTAL		40 / 55,160																				

(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

HMS I 102(A)-3a ※ 현대제철은 검사증명서를 사본으로 제출하지 않습니다. 사본일 경우, 현대제철 각 영업소로 확인하시기 바랍니다. 문의)02-772-2125 2010044 A4(210×297)