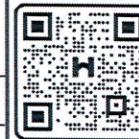


Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201408C33P
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/ CSA 350W

MILL TEST CERTIFICATE



Head Office	6363, Donghaean-ro, Nam-gu, Pohang, 790-707, S. Korea
Certificate No.	IH20140800767 - 1
Class Cert. No.	
Date of Issue	2014-08-07

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					
30X10-1/2X99 40.00 FT	3E5184	11 19,756	17	17	101	26	13	25 13	3 19	4 30	1	20	41	549 546	418 414	25.8 26.3	0.76 0.76							
30X10-1/2X99 40.00 FT	3E5185	2 3,592	18	14	103	22	12	23 8	3 14	3 31	1	20	41	549 545	431 426	26.0 26.6	0.78 0.78							
30X10-1/2X99 40.00 FT	3E5186	6 10,776	16	14	102	14	14	25 9	3 9	3 32	1	20	38	545 541	423 420	26.3 26.7	0.78 0.78							
30X10-1/2X99 40.00 FT	3E5187	5 8,980	17	13	101	14	19	22 8	2 8	3 32	1	19	38	546 550	423 427	26.3 25.8	0.78 0.78							
30X10-1/2X132 40.00 FT	3E5139	6 14,364	18	17	107	19	19	18 7	2 14	3 54	1	14	42	580 575	427 424	24.0 24.6	0.74 0.74							
30X10-1/2X132 40.00 FT	3E5147	10 23,940	18	15	101	20	16	21 8	2 11	2 56	1	16	40	570 565	417 414	23.0 23.6	0.73 0.73							
TOTAL		40 81,408												===== E N D =====										

ORIGINAL

(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

Conditions of supply : As Rolled

김대영
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 * QR마크는 "Qreal" App을 통하여 원본 확인에 사용되는 마크입니다. (QRcode scanner App : 'Qreal')

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