


012257

MILL TEST CERTIFICATE

Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201305C400
Commodity	H-BEAM
Specification	ASTM A572 G50/A992/ CSA 350W

	
Certificate No.	IH20130701413 - 8
Class Cert. No.	
Date of Issue	2013-07-09

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			
14X14-1/2X90 40.00 FT	N 020345	1 1,632	18	14	68	27	17	24 7	2 10	3	17	10	34	523.7	411.9	24.5	0.79					
14X14-1/2X90 40.00 FT	N 020566	4 6,528	18	13	67	25	17	17 6	2 10	4	15	9	33	509.0	397.2	26.0	0.78					
14X14-1/2X90 40.00 FT	N 020567	2 3,264	17	14	70	26	12	15 7	2 9	4	18	8	32	510.9	412.9	25.5	0.81					
14X14-1/2X120 40.00 FT	N 020551	2 4,354	18	19	69	31	16	20 7	2 13	4	16	8	34	528.6	372.7	25.0	0.70					
14X14-1/2X120 40.00 FT	N 020680	6 13,062	19	14	67	26	19	21 7	2 12	4	17	11	35	503.1	375.6	27.5	0.75					
16X7X36 40.00 FT	D 114969	35 22,855	17	16	70	34	7	25 7	2 14	5	16	12	34	518.8	408.9	25.5	0.79					
16X7X36 40.00 FT	D 115346	24 15,672	18	15	60	23	10	31 8	2 14	4	17	11	34	511.9	390.3	25.0	0.76					
16X7X40 40.00 FT	D 114971	28 20,328	17	14	65	33	7	25 8	2 16	4	17	11	34	528.6	394.2	25.5	0.75					
16X7X40 40.00 FT	D 115333	8 5,808	18	14	60	27	10	32 8	2 16	3	16	16	34	516.8	392.3	26.0	0.76					
SUB TOTAL		110 93,503																				

(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