

Chesler

3421

Contract No.	
Customer	DUFERCO
L/C No.	
P/O No.	32201207CF01
Commodity	H-BEAM
Specification	ASTM A36/A572 G50/A992/CSA350W

MILL TEST CERTIFICATE

HYUNDAI STEEL	
Head Office	1, Songhyeon-dong, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH20120901287 - 2
Class Cert. No.	
Date of issue	2012-09-11

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	Mo	Al	Nb	Sn	CE(1)	Tensile Strength	Yield point	Elongation(2)	Yield Ratio	AVG	1	2		3	
				x100	x1000	x100	x1000	x100	x1000	x100	x1000	x100	x1000	x100	N/mm ²	%	%	()	C					
8X8X31 40.00 FT	D 109348	3	1,688	20	15	81	31	15	27	11	14	3	15	17	36	548.2	441.3	28.0	0.80					
10X4X12 40.00 FT	D 109936	190	41,420	17	16	62	26	17	26	2	9	22		11	32	543.3	437.4	25.5	0.80					
10X4X12 40.00 FT	D 109937	310	67,580	16	17	62	30	20	22	9			17	31	533.5	411.8	24.5	0.77						
10X8X33 40.00 FT	D 108503	22	13,178	16	15	60	26	19	23	8			16	11	30	453.5	408.9	25.0	0.77					
10X8X33 40.00 FT	D 108504	18	10,782	16	17	61	24	16	22	9			18	11	31	407.0	414.8	24.0	0.76					
10X8X45 40.00 FT	D 109896	24	19,584	16	16	62	34	15	26	9			14	31	404.0	401.1	24.0	0.75						
12X6-1/2X26 40.00 FT	D 109558	80	37,760	15	16	62	28	18	26	2	3	116	12	30	399.1	404.0	26.0	0.76						
12X6-1/2X26 40.00 FT	D 109560	152	71,744	17	16	61	31	19	23	1	2	118	12	32	518.8	384.4	28.0	0.74						
12X6-1/2X26 40.00 FT	D 109561	160	75,520	16	17	60	27	14	26	2	3	16	24	31	512.9	380.5	26.5	0.74						
SUB TOTAL		959	339,254													540.3	411.8	24.5	0.76					
																534.5	408.0	25.0	0.76					
																536.4	387.4	25.0	0.72					
																630.6	383.4	25.5	0.72					

(Note) (1) Ceq: (CE=C+Mn/6+Cr/5+V/50+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