

MILL TEST CERTIFICATE



Contract No.	
Customer	GERDAU GTL MEXICO SA DE CV
L/C No.	DPCMXH403842
P/O No.	32201410C221
Commodity	HOT ROLLED WIDE FLANGE BEAMS
Specification	ASTM A572 G50/A992/CSA 350W

Head Office	63, Jungbong-daero, Dong-gu, Incheon, 401-712, S. Korea
Certificate No.	IH20141103199 - 11
Class Cert. No.	
Date of Issue	2014-11-17

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
			x100			x1000		x100		x1000			x100	N/mm ²		%		()	C			
18X11X76 40.00 FT	N 025995	89 95,151	20	14	64	26	10	34 9	2 16	5 13	6	13	37	539 532	410 406	25.5 26.0	0.76 0.76					
18X11X76 40.00 FT	N 025997	50 68,950	19	14	64	28	10	30 8	2 12	6 12	7	13	35	543 537	402 400	26.5 27.0	0.74 0.74					
18X11X76 40.00 FT	N 025998	54 74,466	18	15	67	31	10	35 9	2 14	5 11	5	13	36	551 547	409 406	26.0 28.5	0.74 0.74					
18X11X76 40.00 FT	N 025999	60 82,740	20	16	66	28	10	35 9	2 10	6 14	5	13	37	528 523	402 400	26.5 27.0	0.76 0.76					
18X11X76 40.00 FT	N 026000	48 66,192	20	17	65	27	11	30 9	2 10	6 13	6	11	36	531 533	411 417	25.0 24.5	0.77 0.78					
18X11X76 40.00 FT	N 026001	24 33,096	18	17	67	32	12	31 8	2 13	5 14	6	13	35	537 536	406 402	26.0 28.5	0.76 0.75					
18X11X86 40.00 FT	N 025800	1 1,561	18	21	67	19	10	18 8	2 10	6 25	4	9	34	537 535	427 425	25.0 24.0	0.80 0.79					
18X11X86 40.00 FT	N 025801	2 3,122	18	16	66	22	13	20 8	2 15	4 22	5	12	35	544 540	425 421	24.0 24.5	0.78 0.78					
18X11X86 40.00 FT	N 025988	12 18,732	20	15	67	31	8	28 10	3 16	6 12	6	12	38	527 523	399 393	25.0 26.0	0.76 0.75					
SUB TOTAL		320 444,010																				

(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

J. C. Ahn

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