

47915

INSPECTION CERTIFICATE

Nippon Steel Corporation

CONTRACT No: 2-820-D3-5-9-NV03
 REFERENCE No: J83-YK71R009
 SHIPPER: MARUBENI-ITOCHU STEEL INC.
 CUSTOMER: FERRE BARNIEDO S.A. DE C.V.
 SHIP No:
 COMMODITY: WIDE FLANGE BEAMS
 SPECIFICATION: ASTM A992-06A

CUSTOMER'S CONTROL No(1):

PROJECT NAME:

HEAD OFFICE: 6-1, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO 100-8071, JAPAN
 SAIGAI WORKS: 1, CHIKKYOAWATA-CHO, SAKAI-KU, SAKAI-SHI, OSAKA-PREF. 590-0901, JAPAN

DATE OF ISSUE: SEP. 21, 2012
 CERTIFICATE No: 20921H045-005

REMARKS:

1) TYPE OF STEEL : FULLY KILLED STEEL

SIZE	CUSTOMER'S CONTROL No (2)	NUMBER OF PRODUCT	MASS KG	CAST No	TEST No	TENSILE TEST						BEND TEST	IMPACT TEST	
						*3 7: GL= 8 INCH (RECT)							*6	
						*4	Y	T	E	YIELD RATIO	REDUCTION OF AREA		*7	
LOCATION OF SPECIMEN SIZE	TEST TEMP	YS	TS	EL	%	%	AVG	INDIVIDUAL						
36"X16-1/2"X231LX40'		4	16768	G87676	GP5310FL7	59	7831	76						
					GP5320FL	60	7831	77						
		3	12576	G87857	GP5210FL	57	7632	75						
					GP5220FL7	59	7631	75						
		32	13414	G87858	GP5110FL	58	7632	76						
					GP5120FL7	57	7632	76						
		4	16768	2K8060	GP5510FL7	59	7631	78						
					GP5520FL	59	7731	77						
		4	16768	2K8127	GP5410FL7	59	7731	77						
					GP5420FL	59	7731	77						

FERRE BARNIEDO ORIGINAL DE ESTE CERTIFICADO LA REVISION No. 0026-10-00 ventas@ferrebarniedo.com.mx

NOTES:
 *1 LOCATION F: FLANGE W: WEB C: CENTER
 *2 ORIENTATION L: LONGITUDINAL C: TRANSVERSE Z: THROUGH THICKNESS

CAST No	CHEMICAL COMPOSITION (%)										L: CAST ANALYSIS				P: PRODUCT ANALYSIS (%)					
	C	Si	Mn	P	S	CU	NI	CR	MO	NB	V	SN	N	T-A4	Mn/C	CEQ-1	CEQ-2	Pcm	TE-1	TE-2
G87676	0.17	0.34	1.24	0.13	0.05	0.01	0.01	0.02	0.01	0.01	0.00	0.00	0.031	0.24	0.12	0.38	0.10	0.10	0.10	0.10
G87857	0.17	0.33	1.24	0.13	0.06	0.01	0.01	0.02	0.01	0.01	0.00	0.00	0.024	0.12	0.12	0.38	0.10	0.10	0.10	0.10
G87858	0.17	0.33	1.22	0.12	0.06	0.01	0.02	0.02	0.01	0.01	0.00	0.00	0.026	0.21	0.12	0.38	0.10	0.10	0.10	0.10
2K8060	0.17	0.39	1.25	0.20	0.06	0.01	0.03	0.06	0.01	0.01	0.00	0.00	0.028	0.22	0.12	0.39	0.10	0.10	0.10	0.10
2K8127	0.17	0.35	1.23	0.20	0.06	0.02	0.02	0.05	0.01	0.01	0.00	0.00	0.037	0.22	0.12	0.39	0.10	0.10	0.10	0.10

CEQ-1 = C + Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15
 TE-1 = Nb+V

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT.

H. Sugiyama
 DEPARTMENT MANAGER,
 PRODUCTION SCHEDULING
 & QUALITY MANAGEMENT DEPT.
 SAKAI WORKS