

47910

# INSPECTION CERTIFICATE

**Nippon Steel Corporation**

HEAD OFFICE: 6-1, MARUNOUCHI 3-CHOME, CHIYODA-KU, TOKYO 100-8071, JAPAN  
 SAKAI WORKS: 1, CHIKKOYAWATA-CHO, SAKAI-KU, SAKAI-SHI, OSAKA-PREF. 590-0901, JAPAN

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: \_\_\_\_\_

DATE OF ISSUE: SEP. 21, 2012  
 CERTIFICATE No: 20921H045-002

REMARKS:					TENSILE TEST										BEND TEST		IMPACT TEST			
1) TYPE OF STEEL : FULLY KILLED STEEL					*3) 7:GL= 8 INCH (RECT)										*5		*6			
					*4		*7		*8		*9		*10		*11		*12		*13	
SIZE	CUSTOMER'S CONTROL No (2)	NUMBER OF PRODUCTS	MASS KG	CAST No	TEST No	Y.P.	Y.S	TS	EL	YIELD RATIO	REDUCTION OF AREA	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION	LOCATION OR ORIENTATION		
33"X15-3/4"X201LX40'		1	3647	G86040ND2410	FL7	59	7600	78												
					ND2420	FL7	58	7630	76											
		1	3647	G87036DA2710	FL7	58	7730	75												
					DA2720	FL7	59	7731	77											
		1	3647	G87037DA2810	FL7	58	7720	75												
					DA2820	EL7	61	7830	78											
		23	8388	G88129UK9710	FL7	59	7630	75												
					UK9720	FL7	58	7731	75											
		1	51058	G88130UK9610	FL7	55	7531	73												
					UK9620	FL7	56	7532	75											

FERRE BARNIEDO S.A. DE C.V.  
 ESTE ORIGINAL DE PRODUCTOS  
 LA REMISION DE PRODUCTOS  
 APPLICABLES A LOS PRODUCTOS  
 TEL: 58-36-210-00 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 (%)										CAST ANALYSIS (%)					PRODUCT ANALYSIS (%)				
	C	Mn	P	S	CU	N	CR	MO	NB	V	SN	N	T-A1	Mn/C	CEQ	ICEQ-2	Pcm	TE-1	TE-2	
G86040	17	33	123	17	0	2	2	0	1	0	0	21	27	38				10	10	
G87036	17	36	123	17	0	2	3	0	1	0	0	18	20	38				10	10	
G87037	17	34	124	21	0	2	2	0	1	0	0	23	21	38				10	10	
G88129	17	34	124	24	0	1	2	0	1	0	0	29	14	38				10	10	
G88130	17	33	122	12	0	1	2	0	1	0	0	30	21	38				10	10	

CEQ = 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

47913

# INSPECTION CERTIFICATE

**Nippon Steel Corporation**

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SAKAI WORKS : 1, CHIKKOYAWATA-CHO, SAKAI-KU, SAKAI-SHI, OSAKA-PREF. 590-0901, JAPAN

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: \_\_\_\_\_

DATE OF ISSUE: SEP. 21. 2012  
CERTIFICATE No: 20921H045-003

REMARKS: 1) TYPE OF STEEL : FULLY KILLED STEEL

TENSILE TEST \*3 7:GL= 8 INCH (RECT)

BEND TEST \*5

IMPACT TEST \*6

SIZE	CUSTOMER'S CONTROL No (2)	NUMBER OF PRODUCT	MASS KG	CAST No	TEST No	LOCATION	ORIENTATION	SPECIMEN SIZE	TEST TEMP	TENSILE TEST				BEND TEST		IMPACT TEST	
										Y.P.	Y.S	TS	EL	REDUCTION OF AREA	AVG	INDIVIDUAL	
33"X15-3/4"X201LX40'		5	18235	G88131	UK9810FL7					57	7632	75					
33"X15-3/4"X221LX40'		1	36472	K3815	DA3310FL7					57	7531	76					
TOTAL		50	182350							58	7631	76					

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

CHEMICAL COMPOSITION (%): L: CAST ANALYSIS P: PRODUCT ANALYSIS

CAST No	C	Mn	P	S	CU	NI	CR	MO	NB	V	SN	N	T-AI	Mn/C	CEQ-1	CEQ-2	Pcm	TE-1	TE-2
G88131	16	34	122	18	8	1	2	0	1	0	0	29	22	37				10	
2K3815	17	33	123	14	7	2	4	1	1	0	0	29	18	39				10	
2K8063	17	33	122	21	6	2	3	6	1	1	0	24	15	39				10	
G85846	17	34	121	20	6	1	2	0	1	0	0	19	24	38				10	
G85847	17	34	122	25	6	1	2	0	1	0	0	17	23	38				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