23531

INSPECTION CERTIFICATE

NIPPON STEEL & SUMITOMO METAL CORPORATION

HEAD OFFICE : 6-1, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO, 100-8071, JAPAN
SAKAI LARGE SHAPE MILL : 1, CHIKKOYAWATA-CHO, SAKAI-KU, SAKAI-SHI, OSAKA-PREF, 590-0901, JAPAN

CONTRACT No. : 7-820-D3-5-1-NW34
REFERENCE No. : JCE5-5A00483 CUSTOMER'S CONTROL No.(1) :
SHIPPER : MITSUI & CO., LTD.
CUSTOMER : FERRECABSA S.A. DE C.V.
SHIP No. :
COMMODITY : WIDE FLANGE BEAMS PROJECT NAME :
SPECIFICATION : ASTM A992-11

DATE OF ISSUE : JAN. 27, 2017
CERTIFICATE No. : 70127H046-002

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 ※3 7:GL=8 INCH (RECT) LOCATION	ORIENTATION	SPECIMEN SIZE	TEST TEMP	※4 YP, YS KSI	TS KSI	EL %	YIELD RATIO %	REDUCTION OF AREA AVG %	REDUCTION OF AREA INDIVIDUAL %	BEND TEST LOCATION	BEND TEST ORIENTATION	IMPACT TEST mm Charpy ※6 LOCATION	ORIENTATION	SPECIMEN SIZE	TEST TEMP	※7 AVG	※7 INDIVIDUAL	※9
30"X15"X173LX40'	2	6278	6L9083	WF5310	F	L	7		56	77	29	73											
				WF5320	F	L	7		57	77	30	74											
TOTAL	6	18834																					
30"X15"X211LX40'	1	3828	6K8091	WF5510	F	L	7		55	76	30	72											
TOTAL	1	3828																					
33"X15-3/4"X241LX40'	2	8744	6K6613	VC5710	F	L	7		56	75	30	75											
				VC5720	F	L	7		55	75	31	73											
TOTAL	2	8744																					
36"X16-1/2"X247LX40'	2	8964	6K7688	VS2510	F	L	7		55	76	32	72											
				VS2520	F	L	7		56	76	30	74											
TOTAL	2	8964																					

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

CHEMICAL COMPOSITION ※10 L:CAST ANALYSIS P:PRODUCT ANALYSIS %

CAST No.		C ~~X1000~~ X100	Si X100	Mn X100	P X1000	S	CU ~~X1000~~ X100	NI ~~X1000~~ X100	CR ~~X1000~~ X100	MO ~~X1000~~ X100	NB ~~X1000~~ X100	V ~~X1000~~ X100	SN ~~X1000~~ X100	N X10000	T-AL X1000	Mn/C X100	CEQ-1 X100	CEQ-2 X100	Pcm X100	TE-1 ~~X1000~~ X100	TE-2 X1000
6L9083	L	17	32	115	25	6	1	2	5	1	1	0	0	16	12		38			10	
6K8091	L	18	34	109	20	6	1	3	4	1	1	1	0	21	19		38			20	
6K6613	L	18	34	107	18	5	1	2	6	1	1	0	0	18	14		37			10	
6K7688	L	18	34	114	16	6	1	3	3	1	1	0	0	18	8		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.

K. Eda
KAZUHIKO EDA
SENIOR MANAGER
of QUALITY ASSURANCE DEPT.
WAKAYAMA WORKS

MILL'S CONTROL No. : 09A (E- 5) 2A9M