

CUSTOMER : VAN LEEUWEN STAINLESS BV

# MILL CERTIFICATE

DATE OF ISSUE : MAR. 31, 2011  
 CERTIFICATE NO. : 110331-FC10-01/01  
 ORDER NO. : PO. 932154

SUPPLIER : SHINSHO CORPORATION

**KOBE SPECIAL TUBE CO., LTD.**  
**CHOFU-KITA PLANT**  
 13-1, CHOFU-MINATOMACHI, SHIMONOSEKI  
 YAMAGUCHI-PREF, JAPAN

SUPPLIER CODE : 050  
 SECTION CODE : 2T5  
 REFERENCE NO. : 1103W015

KIND OF MATERIAL :

SEAMLESS STAINLESS STEEL TUBES, COLD DRAWN ANNEALED  
 AND PICKLED  
 EN10216-5:2004 TC1, 1.4401/1.4404, & ORDER SPEC.  
 FCR TUBES

CONTRACT NO. : S52166106

SIZES : 30.0X2.0X6000

CASE NO. : LPI-01

Mfg. No.			Quantity			Tension Test			Hardness Test		Grain Size	Flattening Test	GOOD	Eddy Current Test	GOOD	Notes	
Product No.	Lot No.	Heat No.	No. of Pieces	Mass	Total Length	*1	*2	0.2% Y.S.	T.S.	EL							MIN.
Unit Designated		PCS	kg	METER	MPA			%		Method	HRB	Faring Test	GOOD	Ultrasonic Test	GOOD	*1: Type of Test piece Full Section → (F) Strip Section → (S)	
Specification		Min.	Max.				205	515	40	90		GOOD	GOOD	GOOD	*2: Gauge Length 50mm → (F) 2" → (F) 5.65"/3" → (S)		
S10276	001	V00768	18	149	108.0	F	S	281	564	56	75	76	75	76		GOOD	GOOD
												Measurement & Surface	GOOD	Penetrant Test		*4: Heat Analysis → (L) Product Analysis → (C)	
												Corrosion Test	GOOD	*5			
												Microscopic Test					
												Hydrostatic Test					
SOLUTION HEAT TREATMENT : 1100° C X 2.4 MIN. / W. Q.																	
Chemical Composition (%)															Remarks		
Heat No.	C ×100	Si ×100	Mn ×100	P ×1000	S ×1000	Ni ×100	Cr ×100	Mo ×100	N ×100								
	3.0	100	200	40	15	1300	1650	200	11							*5 : ASTM A262 PRACTICE E	
V00768	2.2	44	95	25	2	1221	1666	204	7							PMI TEST : GOOD	
	2.3	44	95	27	2	1227	1677	204	8								
															SEE MILL CERTIFICATE ADDENDUM FOR OTHER REMARKS		
															INSPECTION CERTIFICATE ACCORDING TO EN10204 - CERTIFICATES OF MATERIAL INSPECTION TYPE 3.1		

SURVEYOR TO

IT IS HEREBY CERTIFIED THAT THE ABOVE MATERIALS  
 ARE SATISFACTORY IN COMPLIANCE WITH THE REQUIREMENTS  
 SPECIFIED IN THE CONTRACT.

*J. Kitano*

MANAGER OF QUALITY SYSTEM SECTION

243747