Report on examination

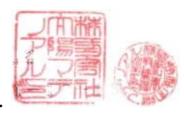
Delivered to: University of Tokyo

Product: Xenon recovery tank (TX-2000)

Product ID: #0003, #0004, #0005,

#0006, #0007, #0008

January 2001



Taiyo Material Inc.

1-18-15 Ohmori-nishi Ohta-ku Tokyo 143-0015 Japan

TEL +81-3-3764-0271/FAX +81-3766-6597

Result of tightness leak test

No.		Product No					
Product	Xenon	Dimension	ID520x154	ŀ6			2
Name	recovery						tanks
	tank				_		
Design	8.0 Mpa	Manufacture	Approved	Mr.	Operated	Mr.	
Pressure		No.	by	Otobe	by	Kobayashi	
		#4058					

Test

Prod	duct Name	e		Test Pressure (Mpa)	Duration Temp.	Date	Decision	Examining staff
1	Xenon (3-5)	recovery	tank	8.5	10min 6°C	20/Jan/2001	OK	Mr. Kobayashi
2	Xenon (6-8)	recovery	tank	8.3	10min 6°C	20/Jan/2000	OK	Mr. Kobayashi
3								
4								
5								
6								

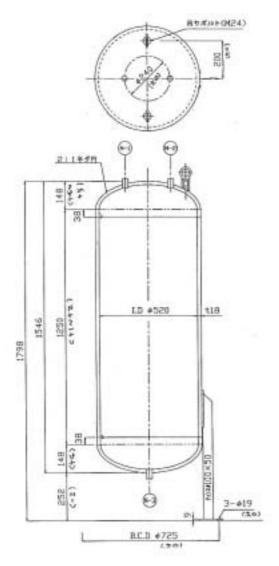
Dimension

Otobe Tekkousyo Inc.

No.:	
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Product Name: xenon recovery tank

Product ID: #0003, #0004, #0005, #0006, #0007, #0008



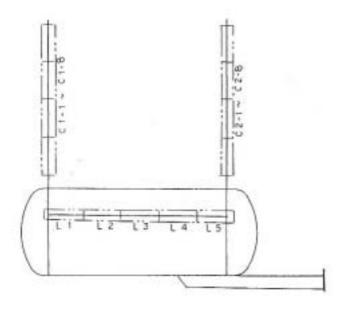
Measured values are shown in (). Visual examination OK

X-ray Photography

Otobe Tekkousyo Inc.

No.: 4058-3~8

Product Name: xenon recovery tank



X-ray photography inspection: 100%

Applied law: Japanese regulation for special equipments 51, 52

Inspection method and approval condition: Follow methods described in JIS Z 3106 (regulation for the examination of X-ray photography for stainless welding, and its grade classification)

Approved when the photograph satisfies requirements for the grade 2 or higher in JIS Z 3106.

Mark, Material, thickness and quantity

Mark	Material	Thickness	Quantity	Mark	Material	Thickness	Quantity
4058-L1~L5	SUS 304	18	5				
4058C1-1~C1-8	SUS 304	18	8				
4058C2-1~C2-8	SUS 304	18	8				

Total 21

Results of X-ray photography

Unisec Inc. 4-14-9 chuo Tsurumi-ku Yokohama, 230-0051, Japan +81-45-503-3511

12/Jan/2000													
Orderer			Oto	be Tekkousy	o Inc.	Date 4/D	e ec/2000, 1	0.11/.	Jan/2001		pector Mrs. S.	Taka	da, S.Kudo
Product Name						1	ied regulatio						ments 51, 52
			Xe	non recovery	tank	Dec	ision Criteria	a	J	IS Z31	06 abov	e 1-2	2-2
Equipment fo	r l	Producer		Riga	ıku De	nki In	c.		Type		RF.	300E	GS-2
inspection	Foc	cusing po	int	2.5x2.5m	m	Rated	voltage	3	00kVp	R	ated cur	rent	5mA
Film	Name	and dime	nsion	Fuji 1:	x100 8	5x305r	nm		Ietallic		Silver	foil (0.03mm
Development condition	t E	Developer		Fujifilm Highrend			lopment erature		23°C	D	evelopr duratio		5min
Outer dimension	Plate th	ickness			•	•	Filming	g Cor	ndition	•			
(mm)	(m	m)	Volt	age (KVp)	Curre	ent(m.	A) Dista	ance (n	nm)	Duration	n (min.)	Trar	nsmission meter
520.0	18	3.0		205		5		600		1.	0		S02
				295		5		700		2.	3		S04
Film mark	Grade	Defec	tion	Film mark	G	rade	Defecti	ion	Film	mark	Grad	le	Defection
4058-3 L-1	1	ВН	[C2-3	3	1	ND			C1-5	1		ND
-2	1	BH	[-4	4	1	ND			-6	1		ND
-3	1	NE)	-:	5	1	ND			-7	1		ВН
-4	1	NE)	-(5	1	ND			-8	1		ND
-5	1	ВН	[7	1	ND			C2-1	1		ND
C1-1	1	NE)	-{	8	1	ND			-2	1		ND
-2	1	NE)	4058-4 L-	1	1	ND			-3	1		ND
-3	1	NE)	-2	2	1	ND			-4	1		ND
-4	1	NE)		3	1	ND			-5	1		ND
-5	1	NE)	-4	4	1	ND			-6	1		ND
-6	1	NE)	-:	5	1	ND			-7	1		ND
-7	1	NE)	C1-	1	1	ND			-8	1		ND
-8	1	NE)	-/2	2	1	ND		4058	-5 L-1	1		ND
C2-1	1	NE)	-3	3	1	ВН			-2	1		ND
-2	1	NE)	-4	4	1	ND			-3	1		ND
Defection category	1				2	2					3		4
Defection mark	ВН		SI	P			LF		IP		W		ND
Defection description	Blow hole		lag rained	Pipe			erfect sion		sufficie merge		Tungster intrained		

Results of X-1	ray photogra	nphy								
Film mark	Grade	Defection	Film mark	Grade	Defecti	on	Film ma	rk	Grade	Defection
4058-5 L-4	1	ND	C2-5	1	ND		C1	-6	1	ND
-5	1	ND	-6	1	ND			-7	1	ND
C1-1	1	ND	-7	1	ND			-8	1	ND
-2	1	P	-8	1	ND		C2	2-1	1	ND
ND -3	1	ND	4058-7 L-1	1	ВН			-2	1	ND
-4	1	ND	-2	1	ND			-3	1	ND
-5	1	P	-3	1	ВН			-4	1	ND
-6	1	ND	-4	1	ND			-5	1	ND
-7	1	ND	-5	1	ND			-6	1	ND
-8	1	ND	C1-1	1	ND			-7	1	ND
C2-1	1	ND	-2	1	ND			=9	1	ND
-2	1	ND	-3	1	ND					
-3	1	ВН	-4	1	ND					
-4	1	ND	-5	1	ND					
-5	1	ND	-6	1	ND					
-6	1	ND	-7	1	ND					
-7	1	ND	-8	1	ND					
-8	1	ND	C2-1	1	ND					
4058-6 L-1	1	ND	-2	1	W					
-2	1	ND	-3	1	ВН					
-3	1	ВН	-4	1	ND					
-4	1	ND	-5	1	ND					
-5	1	ND	-6	1	ND					
C1-1	1	ND	-7	1	ND					
-2	1	ND	-8	1	ND					
-3	1	ND	4058-8 L-1	1	ND					
-4	1	ND	-2	1	ND					
-5	1	ND	-3	1	ND					
-6	1	ND	-4	1	ND					
-7	1	ND	-5	1	ND					
-8	1	ND	C1-1	1	ND					
C2-1	1	ND	-2	1	ND					
-2	1	ND	-3	1	ND					
-3	1	ND	-4	1	ND					
-4	1	ND	-5	1	ND					
Defection category	1		-	2					3	4
Defection mark	ВН	SI	P		LF		IP		W	ND
Defection	Blow hole		Pipe		perfect		ufficient		ngsten	
description		entrained		fu	ision	r	nerge	en	trained	

2000/09/20 E 15

鏡板検査成績書 HEAD PLATE INSPECTION RESULTS

盤

乙部鉄工所

株式会社

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Customer

4058

注文替号

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Type

日本鏡板工業株式会社 MPPON KYOHAN KOGYO CD.,LTD.

30.0

開先詳細図 Detail of bavar

Shetch of head plate 鐵板彫図

38.0

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18.0

板 厚.

520.0

SUS304

M

李

Material

新日本製鉄株式会社 住友金属工業株式会社

材料メーカー・

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E E			Nin &	Single Vignore
配品を	6	ż.,	P IS	Inside V groove
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-	1	9 3	4	,
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		9	1	
	0			
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数 Quantity

000829-005-0

製品 Freduct No Forming Method

温間アレス

智川北州 Steel Maker

Unit: nm

ok												9	
南 Hants Fa		222818-01	222818-01	222818-01	222818-01	222818-01	222818-01	222818-01	222818-01	222818-01	222818-01	、これに合格したことを証明する d plate is satisfied with 47	1 -
機関形状機構 Stage Devatory		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	検査を行ない。 that this head B 8 2 ×	an a
化超型運	168.0	172.0	172.0	172.0	172.0	173.0	173.0	173.0	173.0	172.0	172.0	上記録版は現まの検査を行ない。 We herelty certify that this head J I S B 8 2	Authorized Inspector
計	15.2) T2HTN	17.4	17.2	17.2	17.0	18.2	18.2	18.2	18.0	18.1	18.1		
Thickness	TINIH.	18.2	18.2	18.1	18.2	18.9	18.7	19.0	18.7	18.8	19.0		
微	18.0 TIMAX	18.4	18.5	18.4	18.3	19.1	18.9	19.2	18.9	19.0	19.2		
東円度 Roundness	2.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	att	
平 均 值 Aneraga	- · ·	2.50	2.50	2.25	2.25	2.50	2.50	2.50	2.50	2.50	2.50	着 参 Barnels 開先及び,外額検査合格	
蝉	0.4	3.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	ζ,	
1000	03	2.0	2.0	2.0	5.0	2.0	5.0	2.0	5.0	2.0	2.0	f 参 Banari 開先及	
大学なり Inside の指摘やDia	520.0 D2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	報。班	
Æ	D1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
円周集 Circimference	1747	1757	1755	1756	1757	1758	1760	1760	1760	1758	1780	神 き	
	業の世 No Fakeron	-	2	62	4	ın	9	7	00	6	10	材料発注番号 Natural Order to	

2000/09/20 日付: Dete :

鏡板検査成績書 HEAD PLATE INSPECTION RESULTS

啟

乙部鉄工所

株式会社

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Customer

K

4058

注文番号

Order No

ED

Type

桜

副

4. 体學化作品 衛龍井

内径 in 014.

日本鏡板工業株式会社 MPPON KYDONN MOGYO CO., LTD. E C

30.0

開先詳額図 Detail of benef

編 核 器 区 Sworth of head plate		7
器setch	71	1
	(b) (c)	

0 18.

板 厚 Thidness

SUS304

詉

Material

520.0

新日本製鉄株式会社 住友金屬工業株式会

材料メーカー・

Steel Mater

38.0

Single Vigicoval Single Vignopia gritove

ARRE Double Vgroove

12

数 脚 Quantity

000829-005-0

٠.

Product 1th

K 77

E

明

甘州州縣 Forming Method 製油排印

			-	_	-	-	-	_	_	-	
okr											
数におき		222818-01	222818-01								
機能表別期間 Stage Deviation	5.20	1.0	1.0								
化 Xint	168.0	172.0	173.0								
計	TININ TONIN	18.1	16.7								
Thickness		18.9	17.8								
模	18.0 TINAN	1.00 19.1	17.9								
東田康 Roundness	2.60	1.00	1.00								
平均值 Average	-1 ~ 3	2.50	2.50								
牌	p q	3.0	3.0								
¢ Die.	03	2.0 2.0	2.0 2.0								
お本本 Inside 動機能等Dis.	520.0 D2	2.0	2.0								
E.	D1	3.0	3.0								
田田田	1747	1760	1756								
選売項目	H-William Trinsmoot W	11	12								

上記律板は損定の検査を行ない、これに合格したことを証明する。

We hereby certify that this head plate is satisfied with

2 4

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B

SI

合格

外報検査

開先及び Remark

框

材料発注番号 Material Order fit

步

郑

雉

Authorized Inspector

温が高います。 91.話性機器率 Swar Fracture,C:減性緩電率 Crystallinity Fracture,LE:構態出 Lateral Expansion,ADS:1-2計件粒度 Austenite Grain Size,BC:30xe,BC:31xe,BC:3 Y16-02-2 RW. 2 99 No. of the second 〒100-8073 東京都千代田区大年町二丁目6巻3 PAGE 八権製織所 ステンレス厚板工場 技術・管理グループリーダー MANAGER,INSPECTION YAWATA WORKS N 2000-07-20 9 1 M. Umeno 900 13467 E03 8001800 8221820 SP CHEMICAL COMPOSITION 51 ž! COOFED 3 1 8 30 in it H E 明 書 等 号 CERTIFICATE No. SR 行 年 月 日 DATE OF ISSUE 45 26 8 4 WATER 200 89 51 3 8100 1 解散後事以申与 CUSTOMERS CONTROL No. IS ! 100 U 8 WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT. 45 87 140C X 12M **新瓦黎** NSPECTION CERTIFICATE NIPPON STEEL CORPORATION 第 日本製織株式船社 r 2 100 89 51 年 以 TENSIE TEST M7.AUA SHRW 613 N/WW2 135 Y.S Y.P. 205 251 鋼材 E83232 46287 234451-01TCA COTANI KAKO . dir ż 市 PLATE PEC. 唱 3 類 線 反 CUSTOMER 試験番号 製鋼器号 TEST No. CAST No. 2176 2176 2176 MASS M STAINLESS STEEL PLATE JIS G4304-1999 SUS304 COM. 裁 0-123-TH-1-6-R951 0 TOTAL SUB TOTAL NITTETSU SHOJI 153 10F55575 body plate 規 DIMENSION (3587190060) 2 18X2500X6100 + 主文者開合書与 REFERENCE No. AR HE SPECIFICATION M M # 9 CONTRACT No. S. SOMMOONTY 文書等与 DOCUMENT N 犎 SHPER

(PYABI

VIE-00-3 Rev. 9

本 社: **100-8071 東京都千代田区大手町二丁目 6 李 3 多 HEAD OFFICE 2-63, OTEMACH ACHYODAKI, TOKYO, 103-1071 JPAN 八幅縣區下: 7-804-0001 北九州市戸镇区和修町 1 参 1 参 TAMATA WORKS 14, TOSIMATACIO, TOKYO, SELONIA JAMAN M. Umeno 64 2000-03-25 82 9 8 E05 8001800 58 景書 18 E 科 等 号 号 CENTRICATE No. 分 行 年 月 日: DATE OF ISSE us in ı 28 ā 1 8100 200 는 10 M 등 10 M e î â 森 数 実 等 理 毎 号: CUSTOMER'S CONTROL No. WE HEREBY GERTIFY THAT THE WATERIAL DESCRIBED HEREIN HAS BEEN WADE IN ACCORDANCE WITH THE RULES OF THE CONTRACT. INSPECTION CERTIFICATE NIPPON STEEL CORPORATION 本製鐵株式會社 GINEM JIS ZZZOTTYPE 前問 7 æ iz. 5] 强 以 聚 [5] TENSET TE V.S Y.P. TS 616 鋼材検査 205 265 Ш head plate Location By > O 222818-01TCM 排 TEST SPECT 啦 PLATE NO. 棒 SELKO 唱 35 編 版 M 製鋼衛布 試験要手 CAST No. TEST No. 698 2659 MASS STAINLESS STEEL PLATE JIS 84304-1999 SUS304 A L 0-123-TH-1-2-E202 SUB TOTAL BFB 9BE2022 WITSUBISH 溅 DIMESSION (3583240190) ž 18X3054X6100 以文書語会學等 程序用BVA No. 数 数 等 等 COVIENCT No. SPECIFICATION SCHAROOTTY COMMODITY X # # 4

Y36-02-2 May. 2

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(国) 東京のみ有

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人者製膏形 ステンフス原放工を 社会・有型グラーン・・・ MANAGER,INSPECTION YAWATA WORKS

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Contractor Q fo &	ルンハンイ					*	# #	Purchaser f & *	#	たキソウヒン	(090703)	3				+
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pecification ig B		N/NM NIN 205		NIN 520	. N. O.	. W N 09		HB MAX 187				90	_			
Results	11310	280		642	69		-	164				1050°C	50°C X SMIN (7255245")	O 3		
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Date:	0	Z.	- th	Type	Type of Steel	4	on _	Size & Shape	¥	×	Condition A	9	Beat No	Quality Assurance	Section Kawasaki Plan	Lant
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is hereby certi	NEET,	is hereby certified that the above results are true and correct in every details	above re	O(ZL-Z	rue and	correct	in ev	ary deta	.2		Chief of Quality Assurance Section	ty Assurance	a Section		被保管照	488

Heat Treatment E 本	5 NO		10 INSPECTION	PE	STS	Z	CER	2	7	IFICALE			横道	計別	-	1		
Condition No. 2 Chemical Composition (L + 2 - 2 - 3 - 4 NAX NA	# to #		PE YOU	66			0- RE	- "	- 4	1641¢								*
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A Method: R. A. H. (340 A.A.) Method: R. A. H. (340 A.A.) M. A. H. E. R.	当年	11810	1291		674	60	72	167						254445	225-00			
Method: R. A. (1—300 A.A.) Condation A. A. R. B. R. B.		#2 E =4		Decarb	R (=)			Body i			Non Metallic		祖当 小屋 高さ		<u> 909 a</u>			
Method: R. A. H. (MRA.A.A.) Condution M. A. H. E. I. R. W. W. W. ST., P.M. 33.93.D Chief of Quality Assurance Section	2 3																	
Method: R. A. H. (300 A.A.) Condution M. A. H. E. Heat No M. A. H. E. I.S. W. B. S. ST., P.M. 3393D Chief of Quality Assurance Section	, m	* Kaca								_					el <u>Comp</u>			
Method: R. A. H. (\$\$A.A.E.) Condution A. H. E. Heat No A. H. E. H. W. W. W. W. ST., P.M. 33.93D Chief of Quality Assurance Section	5			Ey	e bolt													
Condution A the B is W w by ST, PM 3393D Chief of Quality Assurance Section							Hardenab	bity (End Qu	enching Me	*	-	EA.E.						
ST, PM State of Quality Assurance Section																		
ST, PM 3193D St, PM 3293D	alts.																	
ST, PM 3193D 大同特殊個株式会社 Chief of Quality Assurance Section 用格工場 品質保証室	Date #	8	ertificate No	o dr	Type	of Steel	AC DA	절반	tape H: 4k		Condution A H		Heat No			Burance Se	Stion, Ka	Ski Flan
Chief of Quality Assurance Section	-50		14997 5BR052)	118	64303-	98-308	304	0		ST, PM		63	1393D			のののでは、	Leed 表古会	3 m
11111	135	y certifie	PN: A'-9	above re	sults are	true and	correct in	every de	cails.		Chief of Qual	dy Assurance	re Section		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	明 田 報	(保証	を記している。