107561

ASME

National Board Number: 20 48

Mtr. Representative: VSRV7 Date: APR. 1/2-015

Authorized Inspector: Date: Apr. 1/2. >015

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

20.00		The same of the sa				Orania de la composición dela composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición de la com						111111						-	
1. Ma	iruta	ctured an	d certified	by		lisung	Copo	ration #7	74 Daeje		lo, Onsan-				689-892,	Repu	ıblic Kore	a.	
2. Ma	ınufa	ctured fo	or		SHELL	CANADA	A ENE	RGY 40	0 4AVE	S.W.,	BOX 100,	STA	ATION M		RY, ALBE	ЯТА	T2P 0J4		
3 10	cation	of incts	llation			CARN	MON C	REEK 8			nd address of I PEACE I			LEX. AL	BERTA, C	CANA	DA		0.
<i>y</i> , L(<i>y</i>	CALIFO	i Oi iriota									(Name and ad	(dress))						
1. Ty	ре		ł	Horizonta	ł .		_		Heat	Exchar	nger					4-HE	E-064		
			(Horizonta	il, venical, o	r sphere)			(Tank, se	garalor, jki	, yessel,	heat exch. et	5)			(Manufac	turer's	sorial numbe	r)	
_			068.2				(*16						2048					014	
			HN)) golwat					0.0000	onal Board n	umber)			120000	ar built)	
i. ASME Code, Section VIII, Div. 1				2010 ED), 2011 /	uly.01,20)11)			N/A	-	<u> </u>		N/A [Special service per UG-120(di)]					
			are same enter	(6)	[Edition ar								number)						
				970	1250						essels, sh					noer	or muitici	namber	vessels.
6. Sh	ell:	(a) Nu	mber of c	ourse(s)			3			(b) Ov	erall lengt	h _		758	onim				
-	-	Co	urso(s)		7	Material		Thic	knesa	Γ	Long. Joint	(Cat. /	A)	Circu	m. Joint (Cat	. A. B	& c) T	Heat Tre	atment
No.	D	iameter	1	ength	Spec/Grade or Type			Nore, Corr.		Туро				Тура			EH.	Temp. Tim	
2	7000	West Control of the C		_	SA516-70(*1)			1.5mm	1	Full		1.0	.1	Full		1.0	625°C	1.1Hr.	
1	I,D 860mm 2600mm		SA516-70(+1)			1.5mm	.1	Full		1.0	1.0	Full		1.0	625°C	1.1Hr.			
-		LANK)	- 60	COTTEN		1510 101	17	I SHEIL	E.Grann		, un		+		1 41		1.1.0	020 0	7.11.07
	11	CAINI																	
									Body Fl	inges on	Shells								
												L			В	alting			
1615				00	Flange Th		A 766	Material	Lemm	Attache	d Locatio		Num 8	Chra	Soring Mar	la rial	Washer (OD,ID,thk)	Weeks	. Matarial
1	No. Type ID 1 (•2) 860m			00 1054mm	97mm	15n		(+3)	_	, butt w		-		8UN×420L	SA320-L7M 5				
(BLA	-	1-21	COMPANI	100-11111	OTHER	100		(31	Unique	, com	2.00		1011 170	0.017 12.00			24 341 410	1.00	
_	135														.[T	
200 200				^	/		411.00	200 / 1	0)							•			
7. H	ead:	s: (a) _			6-70(+1)	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	_				- ^(b)		Materi	M sono our	har acida ar	timal (H T -tma an	t temp l	
_	7111					mber, grade or type) (H.T Radius Elijatic			,						ic. number, grade or ide to Pressure		Cate		
		ition (fop, om, Ends)	Min.	Corr.	Crown	Knuckla	Eltipti Rati		Conteat Apax Angle		emisphorical Radius		Flat lameter	Convex	Concave	Тура		Spat, None	E#,
(a)		End 12.75mm 1.5mm				2:			\dashv			-	YES	YES	-		-	-	
(6)	/5	(BLANK)							_				125			_		+	
101	- 11	ILMAN)																	
									Body FL	arges on	Heads								
															. 6	oting			
					100	1					1						Washer		
1-1	\rightarrow	Location	Type	10	CD	Flange	Itk ?	Vin Hub TI	ek A	Asterial .	How Attac	hed	Num & St	e Boar	g Material	(O	D, ID, this)	Washer	Material
(a)	-	BLANK)			5		+		-			+		_			-	<u> </u>	
(0)																			
						11/1										NUA			
8, T	ypo	of jacke	t			- N/A				J	acket clos	ure		in	otrrho as no	N/A	weld, bar, e	(a.)	_
13	har	ann d	imension	c						N/A				107	coereo as og		ited, desc		sketch
11	Uai	, give u	menaton	a						,						kas este	1100, 000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	onoton.
9. N	AWI	255	ikPa	F.V	-	max. te	mp.	200'		200		n. de	esign me	tal temp	-45	'C	. at _	2551kPa	<u>.</u> .
			temai)	(Externa)}		VEOL	(lotern)		(Exter	mái)							1510	
10.	Impa	ct test			flor	cate yes o		SHELL-/		art tastar	d d			at test	emperatu	re ot		45°C	
11	Hydr	0		e test r	oressure			00kPa	newfat kult		of test				-				
• • •	riyur	o., piio	1.707-9011	not toot }	nessare					_ ' '	-								-
Item	s 12	and 13	to be co	ompleted	for tube	section.	S.												
12.	Tube	sheet	5	SA765-11(•1)		860	Omm _			106mm			. 3	lmm			Bolted	
2020			[Stations	ry (material	spec. no.l]	iDia	meter (su	bject to pri	(1.620)	ţ	Nominal thickne	055)		(Co	r. allow.)		[Attechme	nt (welded	or bolled)
				-							-	,			-			-	
				o (material s	pec. no.)]			noterl			aminal thicknes	5)			atlow)		{	Altachmend	
3.	J. Tubes SA179				19.05mm						2.03mm				68 mbor)		17:-	U (Straight	or 103
	literated cone no grada or																		



National Board Number: Do 48

Mir. Representative: NO 117 Juste: APR. 19/20/5

Authorized Inspector: Date: APR.19.3-45

FORM U-1 (Cont'd)

PAGE >-

4. She)										7.			T			
Course(s)				Material Spec/Grade or Type			ness Com		ong. Joint				Circum, Joint				Heat Tr			
Vo.	Diameter Length LD 860mm 540mm						Nom.			Full, Spot		1.0	Type	Full,	Full, Spot, None		Eff.	Temp.	Time	
1			540mm	SA:	SA516-70(•1)		14mm	1.501001	1	Full		1.0	+-		Full		1,0	624°C 1.1H		
+	(BLANK)	+				- 8						+				\dashv				
						_														
								Body Fland	es on Sh	eWs										
			ĺ								-	Num & Stze		1	Bolting		Washer			
No.	Туре	Ю	CD	Flange Thk	Min Hul	This	Material	How A	ttachod	Locatio	n L			Bolting Mate		erial (OD,ID,I) Wash	sher Materia STM-F436	
1					14m	_	(+3)	The second name of the second	blew thuc		-	48,1 1/8"-8UN×310L			320-L7			-		
1	(*2)	860mm	1054mn	100mm	14m	m	(+3)	Single, t	outt weld	End	+	(*)	5)	+	(*15)		(*15)		(+15)	
BLANK)	-		-		-	-		+			+			+		+		+		
													_				-			
5. He	ids: (a)_			SA765-II(*1 spec. number, q	I)/H.T-6	24°C	1.1Hr		(I	o)					-					
\neg			(Material Thickness	epec, number, gi Radis					1	pherical			Side to	Pressu		(H,T,	the second	temp.)		
	Bottom, Ends		n. Corr		Knuckle	Elliptic Ratio		Contral pax Angle		pherical dius		neler	Conyex	Conc	-			I, Spot, None		
(a)	- mac		_		-			-	<u> </u>	_	105	4mm	- Convex	-		-		-	EH.	
				T																
								Dadi Flori	!!-											
						$\neg \Gamma$		Body Flang	jes on ne	803	\neg				Bolt	ting				
				l									1-		1		/asher			
	Location		ID.	OD	Flange T	hk I	Min Hub Th	Mat	erial	How Altac	hed 1	Num & Size Bottin		ing Mate			(th), (ii)	Wash	Vasher Mater	
(a) (b)	(BLANK)							1	- 1		1									
 5. MA	WP 25	15 kPa	F.\()	/ at ma	YE	S(CH/	ANNEL-A	.01)												
6. MA 7. Imp	act test		5.00		YE e yes of m	S(CH)	ANNEL-A	(01) It(s) Impact t	esteal			8	t test te	mpera	ture o	ı				
6. MA 7. Imp 8. Hyd	act test	, or oc	md. test	[Indicate	YE e yes of m	S(CH) and the	ANNEL-A	(01) It(s) Impact t	esteal			8	t test te	mpera	ture o	ı				
6. MA 7. Imp 8. Hyd	act test	pection,	md. test	(Indicate	YE e yes of m	S(CH) and the	ANNEL-A he componen 2000 kPa	(01) It(s) Impact t	Proof t			Peln	it test te	mpera	ture o	r	-4!	5°C Local	ion .	
6. MA 7. Imp 8. Hye 9. No	act test fro., process vzles, ins	pection,	md. test	[Indicate pressure	YE e yes of m	S(CH) and the	ANNEL-A he componen 2000 kPa	(01) h(s) impact t	Proof t	est		Peln	t test te	mpera	ture o	nt Deta	-4!	5°C	ion .	
6. MA 7. Imp 8. Hye 9. No	act test fro., process zzles, ins	pection,	and safe	pressure by valve ope	YE e yes or m	S(CH)	ANNEL-A he componen XXX KPa	(01) (s) impact t	Proof I	est	ness	Peln M	it test te	mpera	fure o	Fia (-	-45	5°C Local	ion .	
6. MA 7. Imp 8. Hyo 9. No tinke	act test dro., press ezles, ins Purpose , Outlet, On	pection,	and safe	lindicate pressure ety valve ope Diameter or Sizo DN 200 DN 200	YE e yes or me enings: Type Cl. 300	S(CH/ and II 39	ANNEL-A he componen he componen Mal Nozzle (-6) (-6)	(-6)	Proof I No: No: 28.15i	est	ness Corr. Omm	Peh M INH	forcement aterial ERENT	empera N	Attachme ozzla (+4)	ent Dela	-45	Local (Insp. C	ion lpen.)	
6. MA 7. Imp 8. Hyo 9. No Unite SH SHE	act test dro., process exiles, ins Purpose Outlet, On ELL SIDE LL SIDE (LL SIDE (pection, ain, etc.) INLET DUTLET	No.	lindicate pressure sty valve ope plameter or Size DN 200 DN 200 DN 100	YE e yes or menings: Type Cl. 300 Cl. 300 Cl. 300	S(CH/ and P 39 flg. flg. iwn.	ANNEL-A he componed 000 kPa Mai Nozzle (+6) (+6)	(16) (16) (16) (16) (16) (16)	Proof t Proof t Non Non 28.15i 22.25i	est	Omm	Pelnin M INH INH	forcement aterial ERENT ERENT	mpera	Attachme ozzla (+4) (+4)	Fig. (-	-4/	5°C Local	ion lpen.)	
6. MA 7. Imp 8. Hyo 9. No: (Inke SH SHE SHE	act test fro., precedence of the propose of the pr	pection, ain, etc.) INLET DUTLET ENT(+7) RAIN(+7)	and safe	lindicate pressure by valve ope plameter or Size DN 200 DN 200 DN 100 DN 100	YE e yes or m enings: Type Cl. 300 Cl. 300 Cl. 300 Cl. 300	s(CH) and the second se	MAINEL-A he componed 200 kPa Mai Nozzle (+6) (+6) (+6) (+8)	01) terlat France (-6) (-6) (-6)	No: No: No: No: 28,15i 22,25i 8,56n	est	Corr. Omm Omm Omm	Pein M INH INH INH	l test le	mpera	Attachme ozzle (-4) (-4) (-4)	Fla	-43	Local (Insp. C	ion lpen.)	
6. MA 7. Imp 8. Hyo 9. No: (Intel SH SHE SHEI TU	act test fro., present graphs, ins. Purpose , Outlet, Dra ELL SIDE (LL SIDE V LL SIDE D BE SIDE	pection, ain, etc.) INLET DUTLET /ENT(+7) RAIN(+7)	No.	lindicate pressure sty valve ope Diameter or Size DN 200 DN 200 DN 100 DN 100 DN 150	YE e yes or m enings: Type Cl. 300 Cl. 300 Cl. 300 Cl. 300 Cl. 300	flg. flg. flg. flg. flg. flg.	ANNEL-A he componed 000 kPa Mai Nozzle (+6) (+6) (+8) SA333-6	(c)	No: No:	est	Corr. Omm Omm Omm	Pelni M INH INH INH SA5	loroement aterial ERENT ERENT ERENT ERENT ERENT	empera N	Attachme ozzle (+4) (+4) (+4) (+4)	Fig. (-	-43	Local (Insp. C	ion lpen.)	
6. MA 7. Imp 8. Hyd 9. No: (Intel SHE SHEI TU	act test fro., present purpose , Quilet, Dri ELL SIDE (LL SIDE V LL SIDE D BE SIDE SIDE C	pection, ain, etc.) INLET OUTLET ENT(*7) RAIN(*7) INLET	and safe	Indicate pressure sty valve oper or Size DN 200 DN 100 DN 150 DN 150 DN 150	YE e yes or m enings: Type Cl. 300	flg. flg. flg. flg. flg. flg. flg. flg.	ANNEL-A he component he compone	(01) (c) Impact to the control of th	Non Non 28.156 22.256 8.566 10.976	est	Corr. Omm Omm Omm Omm	Pelm M INH INH INH SA5 SA5	loroement aterial ERENT ERENT ERENT ERENT 16-70(-1)	empera N	Attachme ozzle (+4) (+4) (+4) (+4)	Fig. (-)	-4(Local (Insp. C	ion lpen.)	
66. MA 77. Imp 88. Hyd 99. No. (Intel SHE SHE SHE TU TUE	act test fro., presentes, ins. Purpose, Outlet, Dri ELL SIDE (LL SIDE V LL SIDE D BE SIDE C E SIDE C E SIDE V E SIDE	pection, ain, etc.) INLET CUTLET (ENT(+7) PAIN(+7) INLET UTLET ENT(+12)	nno. test and safe No. 1 1 1 1 1 1	Indicate pressure sty valve oper or Size DN 200 DN 100 DN 150 DN 150 DN 50	YE enings: Type CI, 300	flg. flg. flg. flg. flg. flg. flg. flg.	MAINEL-A he componed 000 kPa Mai Nozzle (+6) (+6) (+8) SA333-6 (+6)	(01) (c) Impact to the control of th	No: No: No: No: 28.156 22.256 8.566 10.976 16.65	est	Omm Omm Omm Omm Omm Omm Omm	Pelm M INH INH INH SA5 SA5 INH	forcement aterial ERENT ERENT ERENT ERENT 16-70(-1) ERENT	empera N	Attachme ozzle (-4) (-4) (-4) (-4) (-4) (-4) (-4)	Fta (-	-4(Local (Insp. C	ion lpen.)	
66, MA 77, Imp 77, Imp 88, Hyd 99, No Unite SHE SHE SHE TUE TUE TUB TUB	act test Aro., preserved sins, purpose, outlet, Drie LL SIDE CLL SIDE VLL SIDE DBE SIDE CE SIDE CE SIDE OF SI	pection, ain, etc.) INLET CUTLET PENT(-7) PAIN(-7) INLET CUTLET CUTLET ENT(-12)	nno. test and safe No. 1 1 1 1 1 1 1	Indicate pressure of the press	YE enings: Type CI, 300	fig. fig. fig. fig. fig. fig. fig. fig.	ANNEL-A he component he compone	(c)	No: No: No: No: No: 28,15i 28,15i 22,25i 8,58n 10,97i 16,65i 8,74n	est	Corr. Omm Omm Omm Omm Omm Omm	Pelm M INH INH INH SA5 SA5 INH INH	latest test test test test test test test	empera N	Attachme ozzle (+4) (+4) (+4) (+4) (+4) (+4) (+4) (+4)	Fig. (-)	-4.	Local (Insp. C	ion lpen.)	
66, MA 7. Imp 8. Hyo 9. No Unke SHE SHE TU TUB TUB TUBO SH SH SHE SHE SHE SHE SHE SHE SHE SHE S	Purpose, Outlet, Driver SIDE VLL SIDE VLL SIDE VLL SIDE DBE SIDE SIDE OF SIDE VERSION SIDE DE SIDE OPPOPORTS: SIDE DPOPORTS: S	pection, sin, etc.) INLET DUTLET PENT(*7) PAIN(*7) INLET DUTLET FORMIN(*12) RAIN(*12) RAIN(*12) RAIN(*12)	No.	Indicate pressure of year valve operation of State of Sta	YE experience of memory senings: Type C1, 300	S(CH) 39	ANNEL-A he component he compone	(01) (c) Impact to the factor of the factor	No: No: No: No: 28.15i 22.25i 8.58n 10.97i 16.65; 8.74n	est	Omm Omm Omm Omm Omm Omm Omm Omm	Penning NH INH INH SA5 SA5 INH INH Atta	oroement aterial ERENT ERENT ERENT ERENT ERENT 16-70(-1) ERENT ERENT Ched	mpera N	Attachme ozzla (*4) (*4) (*4) (*4) (*4) (*4) (*4) (*4)	Figure 1 (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)	-4: Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ion lipen.)	
SHE TUBE	Purpose, Outlet, Dri ELL SIDE (LL SIDE VL SIDE OF SIDE OF SIDE OF SIDE OF SIDE OF SIDE OF SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OUTL	pection, ain, etc.) INLET DUTLET ENT(*7) RAIN(*7) INLET BUTLET ENT(*12) RAIN(*12) kint reer's Pa	No.	Indicate pressure of valve operation of Size o	YE enings: Type CI, 300 CI, 3	s(CH) 39	Mal Nozzle (+6) (+6) (+6) (+6) (-6) (-6) (-6) (-6) (-6) (-6) (-6) (-	(c)	No: No: No: No: 28.15i 28.15i 22.25i 8.56n 10.97i 16.65i 8.74n	est	Corr. Omm Omm Omm Omm Omm Omm Omm Omm Omm Om	Pelnik MM INH INH INH SA5 SA5 INH INH Atta	oroement aterial ERENT ERENT ERENT ERENT ERENT 16-70(-1) ERENT ERENT Ched	mpera N	Attachme ozzla (*4) (*4) (*4) (*4) (*4) (*4) (*4) (*4)	Figure 1 (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)	-4: Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ion lipen.)	
SHE TUBE	Purpose, Outlet, Dri ELL SIDE (LL SIDE VL SIDE OF SIDE OF SIDE OF SIDE OF SIDE OF SIDE OF SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OPPOPORTS: SIDE OPPOPORTS: SIDE OUTLE SIDE OUTL	pection, ain, etc.) INLET DUTLET ENT(*7) RAIN(*7) INLET BUTLET ENT(*12) RAIN(*12) kint reer's Pa	No.	Indicate pressure of year valve operation of State of Sta	YE enings: Type CI, 300 CI, 3	s(CH) 39	Mal Nozzle (+6) (+6) (+6) (+6) (-6) (-6) (-6) (-6) (-6) (-6) (-6) (-	(c)	No: No: No: No: No: No: 28.15i 22.25i 8.58n 10.97i 16.65; 8.74n Command ide:	est	Corr. Omm Omm Omm Omm Omm Omm Omm Omm Omm Om	Pelnik MM INH INH INH SA5 SA5 INH INH Atta	oroement aterial ERENT ERENT ERENT ERENT ERENT 16-70(-1) ERENT ERENT Ched	mpera N	Attachme ozzla (*4) (*4) (*4) (*4) (*4) (*4) (*4) (*4)	Figure 1 (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)	-4: Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ion lipen.)	
6. MA 7. Imp 8. Hyo 9. No Unice SH SHE SHE TUB TUB 20. Su thin thin	Purpose, Outlet, On ELL SIDE OLL SIDE O	pection, ain, etc.) INLET CUTLET /ENT(-7) PAIN(-7) INLET CUTLET ENT(-12) RAIN(-12) kirt er's Pa (list the	No. 1 1 1 1 1 NO. es or ool tial Data	pressure Plameter or Size DN 200 DN 200 DN 100 DN 150 DN 150 DN 50 Lugs N/ (Numi Reports pr part, item re	YE e yes of menings: Cl. 300	S(CH) and P 39 fig. fig. fig. fig. fig. fig. fig. fig	Mai Nozzle (+6) (+6) (+6) (+6) (+8) SA333-6 (+6) (+8) N/A (Number) ied and sufacturer's	(via) Impact to (via) Impact to (via) Impact to (via) Impact to (via) (v	No: No:	est	Omm Omm Omm Omm Omm Omm Omm Omm Omm Omm	Pelm M INH INH INH SA5 SA5 INH Atta	latest test test test test test test test	N N	(v4) (v4) (v4) WE	Fig. (v. (v. (v. (v. (v. (v. (v. (v. (v. (v	-4: Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ion lipen.)	
5, MA 7, Imp 7, Imp 8, Hyo 9, No (Intel SHE SHE TUB TUB TUB 10, Su th	Purpose, Outlet, Dri ELL SIDE OLL SIDE DE SIDE OE SIDE OF SIDE	pection, INLET DUTLET PENT(-7) RAIN(-7) INLET PUTLET PENT(-12) RAIN(-12)	No. 1 1 1 1 1 1 1 1 1 and safe	Indicate pressure exty valve operation of the pressure of the	YE e yes of me enings: Type Cl. 300 Cl. 300	S(CH) and P 39 fig. fig. iwn. fig. fig. iwn.	ANNEL-A he component he compone	(erlat Flange (+6) (+6) (+6) (+6) (+6) (+6) (+6) (+6)	No: No: No: No: No: No: 28.15i 22.25i 8.58n 10.97i 16.65i 8.74n / Command ide: N/A	est	Corr. Comm Omm Omm Omm Omm Omm Omm Omm Omm Omm	Pelm M INH	Corpornent aterial ERENT ERENT ERENT 16-70(-1) ERENT ERENT Ched have be	N N FIG. L	(v4) (v4) (v4) WE	Fig. (-44 Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ems of	
SHE TUBE TUBE TO SU The Manual Control	act test dro., press purpose , Quitet, Dri ELL SIDE LL SIDE OL L SIDE OF SIDE VI E SIDE OF poorts: Si anufacture e report (pection, ain, etc.) INLET DUTLET PENT(*7) PAIN(*7) INLET ENT(*12) PAIN(*12) RAIN(*12) kint (r) er's Pa (list the 1. Norm 5. Single	and safe No. 1 1 1 1 1 NO es or no: tial Data name of	Indicate pressure sty valve operations of the pressure of the	YE e yes of menings: Type C1, 300 C1,	S(CH) 39 39 fig. fig. fig. fig. fig. fig. fig. fig.	ANNEL-A he component he compone	(of) (orlal France (-6) (-6) (-6) (-6) (-6) (-6) (-6) (-6)	No: No: No: No: No: No: 28.15i 22.25i 8.58n 10.97i 16.65i 8.74n / Command ide: N/A	est	Corr. Comm	Pelm M M M M M M M M M M M M M M M M M M M	latest test test test test test test test	N N FIG. L	(v4) (v4) (v4) (v4) WE		-44 Its Inge 55 55 55 55 55 55 55	Local (Insp. C	ems of	
SHE TUBE TUBE TO SUBTER TO	act test dro., preserved act test Purpose, Outlet, On ELL SIDE of LL SIDE DE BE SIDE DE SIDE VE SIDE OF	pection, ain, etc.) INLET DUTLET PENT(+7) INLET PUTLET ENT(+12) ENT(+12) ENT(+12) ENT(+12) EXIT ENT(+12) INLET ENT(+12) EXIT ENT(+12) EXIT EXIT EXIT EXIT EXIT EXIT EXIT EXIT	No. 1 1 1 1 1 NO. se or no! attial Data name of	Indicate pressure sty valve operations of the pressure of the	YE e yes of menings: Type C1, 300 C1,	S(CH) 39 39 fig. fig. fig. fig. fig. fig. fig. fig.	ANNEL-A he component he compone	(vertal France (-6) (-6) (-6) (-6) (-6) (-6) (-6) (-6)	No: No: No: No: No: No: 28.15i 28.15i 22.25i 8.56n 10.97i 16.65i 8.74n 7 Command ide: N/A 8)	est	Corr. Comm A765- Cover	Pelm M M M M M M M M M M M M M M M M M M M	largement aterial ERENT ERENT ERENT ERENT ERENT ERENT ERENT Ched have be	N FIG. L	(v4) (v4) (v4) (v4) WE	Fig. (-4: Its	HELL oowing it	ems of	
SHE TUBE TUBE TUBE TO SEE THE TUBE TUBE TUBE TO SEE THE TUBE TUBE TUBE TUBE TUBE TUBE TUBE TUB	act test dro., preserved act test Purpose, Quitet, Dri ELL SIDE C LL SIDE D BE SIDE D SE SIDE V SIDE D SI	pection, ain, etc.) INLET DUTLET PENT(+7) PRAIN(+7) INLET ENT(+12) ENT(+12) ENT(+12) RAIN(+12) Kirt (Y er's Pa (list the 1. Norm 5, Single NPL6 + valve w	and safe No. 1 1 1 1 1 NO es or no) tial Data name of alized co	Indicate pressure sty valve operations of the pressure of the	YE e yes of menings: Type C1, 300 C1,	S(CH) 39 39 ffg. ffg. ffg. ffg. ffg. ffg. ffg. ffg	ANNEL-A he component he compone	(vertal France (v.6) (v.	No: No: No: No: No: No: 28.15i 28.15i 22.25i 8.56n 10.97i 16.65i 8.74n 7 Command ide: N/A 8)	est	Corr. Comm Comm Comm Comm Comm Comm Cover C	Pein M M INH	largement aterial ERENT ERENT ERENT ERENT ERENT ERENT ERENT Ched have be	FIG. L FIG. 194-7,	(v4) (v4) (v4) (v4) WE US (v4) US (v5) US (v5) US (v6) US (v6) US (v7)	Fig. (-4: Its	HELL oowing it	ems of	



FORM U-1 (Cont'd)

National Board Number: 2849

Mir. Representative: CSW7 Date: AFR. 10/2015

Authorized Inspector 25 Date: APR.19, 2015

PAGE 3

CERTIFICATE OF SHOP COMPLIANCE
We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel
conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.
U Certificate of Authorization Number 32,997 Expires DEC. 04, 2016
Date AFR. M 2015 Name ILSUNG CORPORATION. Signed
(Manufacturer) (Representative)
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the employed by
HSB Global Standards of Hartford CT.
have inspected the pressure vessel described in this Manufacturer's Data Report on Apr. 18. 2015, and
state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND
PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed
or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall
be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date Apr. 18.20/5 Signed S.JANG Commissions NB#14412(A,N) [National Board (incl. endorsements)]
CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE
We certify that the statements in this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements
of ASIVE BOLLER AND PRESSURE VESSEL CODE, Section VIII, Division 1, U Certificate of Authorization NumberExpires
Date Name Signed
(Assemble) (Representative)
CENTIFICATE OF FIELD ASSEMBLY INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by
1, have compared the statements in this Manufacturer's Data Report with the described pressure vessel
and state that parts referred to as data items, not included in the certificate of shop inspection, have been
inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance
with the ASME BOILER AND PRESSURE VESSEL CODE, Section MI, Division 1. The described vessel was inspected and subjected to a
hydrostatic test of By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or
implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer
shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date Signed Commissions [National Board (Incl. deducements)]
(Authorized (repector) Institutional Board (rict, endorsements))