(ps:)

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS (1) 10"-118 Sq. F as required by the provisions of the ASME Code rules, Section VIII, Division 1 FTSSX Heat Exchan

		Sofix				(name	and address of n	nanufacturer)		esport, NJ (
2. Manu	ifactured fo	r HOLLA	corporaci	.on, 10	1 North	igate Co	ommercial	Center, Cha	ittanooga	a, TN 37415	
3. Locat	tion of insta	Illation So	fix Corpo	ration	, 2800 7	name and a Riverpor	t Road, (en Chattanooga	., TN 37	7406	
. Type:	Horizo	ntal	B-4621 (mir.s. serial			- 1.76 % (n	ame and address			1991	
					(CRN)		(drawing no.)		8d. no.)	(year built)	
. The c	hemical and	d physical p	properties of a	all parts m	eet the requ	irements of	material spec	ifications of the	ASME BOIL	ER AND PRESSU	
* = 50		ne design,	construction	and workn	nanship con	iform to ASi	ME Code, Sec	tion VIII, Division	11:	(yean)	
	1989									,,,,	
	(addenda (D	- W 4		le Case no.)				pecial service per UG			
ms 6-11	inclusive i	to be comp	leted for s ing	te val /ve	oseis, jacke	19 of jacket	एक एक्डम् सम्बद्ध	shells of heat e	exchangers.		
			.13			11 ₀ 11				11 2/41 *	
	(matil. (spe	c. no., grade))	(nom. t	hickness (in.))) av a 4 a a a a	(corr. allow. (i	n.))	0 1 - 10 - 3 / 4 11 0 . D . 5 1 - 11 - 3 / 4 11 L (length (overall) (ft. & in.)			
Seams	s: Weld	ied		85	5		- 100				
	(long. (dbi	., sngl.))	(AT (spot or full)) (eff. ('	%)) (HT temp). (*F)) (time	l) (girth (db)	sngl.)) (RT(spot	, partial, or full))	(no. of courses)	
Heads	: (a)		(mat'l. (spec.			([0)			sa sabatsan safara Ti	
Lo	cation (top.	Minimum	T		T	<u> </u>		(mat'l. (spe	ec. no., grade))		
	ittom, ends)	Thickness	Corrosion Allowance	Radius	Knuckle Radius	Elliotical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave	
(a)	%										
(b)						:					
. , ,	,	***************************************	***	Proof	test:						
Jacket	closure:			Frooi	t test: bar, give din	nensions:			If holted	describe or abote	
Jacket	closure:	 (describe as og	gee & weld, bar, e		test: bar, give din	nensions:			If boited,	describe or sketc	
Jacket MAWP	85	describe as og at max. tem	p. 300	If i	test: bar, give din In metal tem	nensions: p.:20	_at85				
MAWP	. <u>85</u> (psi)	at max. tem	p. 300 (*F)	Min desig	test:bar, give din	nensions: p.:	at 85			describe or sketc	
MAWP	. 85 (psi) nd 13 to be	at max. tem	p. 300 (*F) for tube sect	Min desig	ın metal tem	p.: <u>20</u>	at 85 (psi)			pressure145	
MAWP	. 85 (psi) nd 13 to be	at max. tem	p. 300 (*F) for tube sect	Min desig	ın metal tem	p.: <u>20</u>	at 85 (psi)			pressure145	
MAWP is 12 ai Tubesh	(psi) and 13 to be neets: SA	at max, tem completed 240-T304 nary mat'l. (spec	p. 300 (°F) for tube sect 4 c. no., gr.)) (dia.	Min desig	/4 ¹¹ O.D.	p.: 20 (*F)	at 85 (psi)	Hydro., p reu. o 1101 (corr. allow. (in	†₹5mb. test	pressure 145 (psi) Welded	
MAWP is 12 ai Tubesh	(psi) nd 13 to be neets: SA (station	at max, tem completed 240-T304 nary mat'l. (spec	p. 300 (*F) for tube sect 4 c. no., gr.)) (dia.	Min designations. 10-3/ (in.) (subject 10-3/4)	/4" 0.D. to pressure) 1.D.	p.: 20 (*F) 3/4 (nom. thic	at 85 (psi) Thk. kness (in.)) O# Std.	. Hydro., p ree. o "O" (corr. allow. (in	ittomb. test (pressure 145 (psi) Welded chment (welded, boiled	
MAWP is 12 ai Tubesh iy Fl	(psi) nd 13 to be neets: SA (station anges:	at max, tem completed 240-T304 nary mat'l. (spec	p. 300 (*F) for tube sect 4 c. no., gr.)) (dia.	Min desig	/4 ¹¹ O.D. to pressure)) 11 I.D.	p.: 20 (*F) 3/4 (nom. thic	at 85 (psi) ** Thk. kness (in.)) O# Std. kness (in.))	Hydro., pr reu. o "O" (corr. allow. (in "O" (corr. allow. (in.	.i) (atta	Pressure 145 (pai) Welded comment (welded, boiled etained by L (attachment)	
MAWP is 12 ai Tubesh iy Fl	(psi) nd 13 to be neets: SA (station	at max, tem completed 240-T304 nary mat'l. (spec	p. 300 (*F) for tube sect 4 c. no., gr.)) (dia.	Min designations. 10-3/(in.) (subject 10-3/4)	/4" O.D. to pressure) 1 I.D.	p.: 20 (*F) 3/4 (nom. thic	at 85 (psi) Thk. kness (in.)) N# Std. kness (in.))	. Hydro., p ree. o "O" (corr. allow. (in	(atta	Welded Comment (welded, boiled etained by Legal (attachment) Straight	
MAWP Tubesh Tubes:	(psi) (psi) nd 13 to be neets: SA (station anges: (float) (mat'l. (sc	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.))	p. 300 (°F) for tube sect 4 c. no gr.)) (dia.	10-3, (in.) (subject 10-3/4 (dia. (ir 5/8 ¹¹ OD (in.))	/4" O.D. to pressure) I I.D. (nom.	20 (*F) 3/4 (nom. thick 15) (nom. thick 18 Ga	at 85 (psi) Thk. kness (in.)) O# Std. kness (in.)) or gauge)	(corr. allow. (in. 121	.)) (atta	Pressure 145 (pai) Welded comment (welded, boiled etained by L (attachment)	
MAWP Tubesh Tubes: Tubes:	(psi) nd 13 to be neets: SA (station anges: (float) (mat'l. (sc	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.)) o be comple	p. 300 (°F) for tube sect 4 c. no gr.)) (dia	Min designations. 10-3, (in.) (subject 10-3/4) (dia. (if 5/8)) OD (in.))	/4" O.D. to pressure) I I.D. (nom.	p.: 20 (*F) 3/4 (nom. thic 15 (nom. thic) 18 Ga	at 85 (psi) Thk. kness (in.)) # Std. kness (in.)) or gauge))	(corr. allow. (in. 121 (no.)	(total	Welded Chment (welded, boiled etained by L. (attachment) Straight Type (straight or U))	
MAWP Tubesh Tubes: Tubes:	(psi) nd 13 to be neets: SA (station anges: (float) (mat'l. (sc	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.)) o be comple	p. 300 (°F) for tube sect 4 c. no gr.)) eted for ***********************************	10-3, (in.) (subject 10-3/4 (dia. (ir 5/8))	/4" O.D. to pressure) II .D. (nom.	3/4 (nom. thic 15 (nom. thic 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) Std. kness (in.)) or gauge)) re channels of	(corr. allow. (in. 121 (no.)	(atta Re (i) rs. 1	Welded chment (welded, boiled etained by L. (attachment) straight ype (straight or U)) 1. @ 4" long & 1. @ 8" Lg.	
MAWP Is 12 ar Tubesh Iy F1 Tubes: s 14-17 Shell:	meets: SA (station anges: (float) SA249—T. (mat'l. (sc. SA312—T.) (mat'l. (specification specification specifica	completed 240-T304 pary mat'l. (spec. SA105 ng mat'l. (spec. 304 pec. no., gr.)) o be completed	p. 300 (°F) for tube sect 4 c. no gr.)) eted for ***********************************	Min designations. 10-3, (in.) (subject 10-3/4) (dia. (if 5/8)) OD (in.))	/4" O.D. to pressure) ii I.D. (nom.	p.: 20 (*F) 3/4 (nom. thic 15 (nom. thic) 18 Ga	at 85 (psi) Thk. kness (in.)) or gauge)) channels of	(corr. allow. (in. 121 (no.) heat exchanges (da. 10 (ft. & in.))	(atta Re (i) rs. 1	Welded comment (welded, boiled etained by Li (attachment) straight type (straight or U)) 1. @ 4" long & & & Lg. (attachment) (attachment) (b. & & & Lg. (c. & & Lg.) (c. & & Lg.)	
MAWP Is 12 ar Tubesh Iy F1 Tubes: s 14-17 Shell:	meets: SA (station anges: (float) (mat'l. (specification (mat'l. (sp	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.)) o be compl 304 S/S c. no gr.)) ed ill. sngl.))	p. 300 (°F) for tube sect 4 c. no gr.)) (dia. no gr.)) eted for ###################################	Min designations. 10-3, (in.) (subject 10-3/4 (dia. (ir 5/8** OD (in.)) **********************************	/4" O.D. to pressure) ii I.D. (nom.	p.: 20 (*F) 3/4 (nom. thic 15 (nom. thicl 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) From Channels of 0 - 1) DBW	(corr. allow. (in. 121 (no.) (heat exchanges (dia. ID (ft. & in.))	(leng	Welded chment (welded, boiled etained by L: (attachment) straight ype (straight or U)) L @ 4" long & L @ 8" Lg.	
MAWP Is 12 ar Tubesh Iy F1 Tubes: S 14-17 Shell:	meets: SA (station anges: (float) (mat'l. (specification (mat'l. (sp	completed 240-T304 pary mat'l. (spec. 304 pec. no., gr.)) o be completed 304 S/S c. no., gr.)) ed	p. 300 (°F) for tube sect 4 c. no gr.)) (dia eted for *** (RT (spot or full S)	Min desig	/4" O.D. to pressure) I.D. (nom.	p.: 20 (*F) 3/4 (nom. thic 15 (nom. thicl 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) or gauge) crechannels of Other Other	(corr. allow. (in. 121 (no.) (heat exchanges (dia. ID (ft. & in.))	(atta Re (i) rs. 1	Welded comment (welded, boiled etained by L. (attachment) straight type (straight or U)) 1 @ 4" long & . (attachment) 1 de 4" long & . (attachment)	
MAWP Is 12 ar Tubesh Iy F1 Tubes: s 14-17 Shell: Geams: Heads:	meets: SA (station anges: (floati sA249-T.) (mat'l. (spe Welde (iong (db)))	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.)) o be comple 304 S/S c. no gr.)) ed il sngl.)) SA105 C/	p. 300 (°F) for tube sect 4 c. no gr.)) (dia. no gr.)) eted for ###################################	Min desig	/4" O.D. to pressure) I.D. (nom.	20 (*F) 3/4 (nom. thic 15 (nom. thic 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) or gauge) crechannels of Other Other	(corr. allow. (in. 121 (no.)) Theat exchanges (dia. ID (ft. & in.)) (RT (spot.	(leng	Welded Chment (welded, boiled etained by L. (attachment) Straight Sype (straight or U)) 1 (2 4" long 8 (2 4" long 8 (3 1" long 8 (4" long 8 (4	
MAWP Is 12 ar Tubesh Ly F1 Tubes: State 17 Shell: Geams: Heads:	meets: SA (station (top., pom, ends)	at max. tem completed 240-T304 nary mat'l. (spec. SA105 ng mat'l (spec. 304 pec. no gr.)) o be completed 304 S/S c. no gr.)) ed Min. sngl.)) SA105 C/ Minimum Thickness	p. 300 (°F) for tube sect 4 c. no gr.)) (dia eted for *** (RT (spot or full S)	Min desig	/4" O.D. to pressure) I.D. (nom.	20 (*F) 3/4 (nom. thic 15 (nom. thic 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) or gauge) crechannels of Other Other	(corr. allow. (in. 121 (no.)) Theat exchanges (dia. ID (ft. & in.)) (RT (spot.	(atta Re (t) S (t) partial, or full)	Welded Chment (welded, boiled etained by L. (attachment) Straight Sype (straight or U)) 1 (2 4" long 8 (2 4" long 8 (3 1" long 8 (4" long 8 (4	
MAWP Is 12 at Tubesh Iy F1 Fubes: State 17 Shell: Geams: Heads: Location Location Location Location R.	md 13 to be neets: SA (station anges: (float) (mat'l. (spe Welde (long (db (a) com. ends) End	at max. tem completed 240-T304 hary mat'l. (spec. SA105 ng mat'l (spec. 304 bec. no gr.)) o be compl 304 S/S c. no gr.)) ed il sngl.)) SA105 C/ Minimum Thickness 1-3/16	p. 300 (°F) for tube sect 4 c. no gr.)) (dia. no gr.)) eted for *** (RT (spot or full S) (mat 1. (spec. no Gorrosion Allowance It O!)	Min designations. 10-3, (in.) (subject 10-3/4 (dia. (ir 5/8)) Columber (dia. (ir 5/8)) (eff (/4" O.D. to pressure) If I.D. (nom.	20 (*F) 3/4 (nom. thic 15 (nom. thic) 18 Ga thickness (in. 10** (corr. allow (in	at 85 (psi) Thk. kness (in.)) or gauge)) channels of 01- DBW (girth (dbi.)	(corr. allow. (in. 121 (no.) theat exchanges (dia. ID (ft. & in.)) (mat'l. (spect Radius	(atta- Records) partial, or full) Flat	Welded chment (welded, boiled etained by L: (attachment) straight ype (straight or U)) L @ 4" long & . @ 8** Lg. pth (overall) (ft. & in.)) 1 (no. of courses)	
MAWP Is 12 ai Tubesh Iy F1 Tubes: \$ 14-17 Shell: Geams: Loca botto a) R.	(psi) (psi) (nd 13 to be neets: SA (station (mat'l. (spe (long (db) (a) (mat), (spe (long (db) (a) (spe) (mat), (spe) (long (db) (a) (spe) (mat), (spe) (long (db) (a) (spe) (long (db) (a) (spe) (long (db) (lo	at max. tem completed 240-T304 hary mat'l. (spec. SA105 ng mat'l (spec. 304 bec. no gr.)) o be compl 304 S/S c. no gr.)) ed il sngl.)) SA105 C/ Minimum Thickness 1-3/16	p. 300 (°F) for tube sect 4 c. no., gr.)) (dia. no., gr.)) eted for ##### (AT (spot or full) S (mat'l. (spec. no., Allowance)	Min desig	/4" O.D. to pressure) II I.D. (nom.	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in. 18 Ga thickness (in. 19 (corr. allow (in 19 (at 85 (psi) Thk. kness (in.)) Off Std. kness (in.)) cor gauge)) channels off Off- DBW (girth (dbi.)) Conical Apex Angle	(corr. allow. (in. 121 (no.)) Theat exchanges (dia. ID (ft. & in.)) (mat'l. (spect Radius)	(atta Rest) SS (to rs. 1 D. 1 (length partial, or full)) c. no grade)) Flat Diameter	Welded comment (welded, boiled etained by L. (attachment) Straight ype (straight or U)) 1 (0 4" long & 10, 00 at 1	

late_____Signed__

18. Nozzles, inspection an	d safety valve	openinas:	FORM	U-1 (bac	k)			
Purpose (miet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'i.	Nom. Thickness	Reinforcement	How	Τ
Inlet	1	4"	- 	SA312	Sch #10	Material	Attached	Location
			CE=1.511	T304 T.	Sen #10	Inherent	Welded	Bonnet
				1004 [
Outlet	1	2"	CL-150	SA312	Sch #10	Inherent	Welded	Bonnet
				T304 L		Zinterent	Weided	Donner
Inlet and	2	1-1/2"	CL-150	SA312	Sch #10	Inherent	Welded	Shell
Outlet				T304				
10 Cummanta Olila		,					_	
19. Supports: Skirt (yes or r	Lugs 4	Legs	0	ther		Attached Welde	ed to main	shell
CO Democket Manufactures	el Damiel Ber	_	(•	(describe)		(where and how	w)
20. Remarks: Manufacturer:	s Partial Data	Reports prope	rly identifie	d and signe	ed by Commiss	ioned Inspectors	have been furr	nished for t
following items of the re	port:		(name c	d nam itam au				
following items of the re	igned for	lethal se	mirica	IIni+ do	moer, mir s. name	and identifying stamp)		
hvdro-tested in	horizont	al positi	on. Exe	mpt fro	m impact	non-corros	sive servi	ce. Un
UG-20 (D) UCS-	-bb and HH	A-51 Sa	fett tral	370 0000	action la			graphs
One bonnet cons	sisting of	10"x4" S	ch #10 c	oncentr	ic reduces	T-304 SA	iere in sv	stem.
						1-304, 1124	,,,,,	····
		CERTIE	CATE OF	SHOP COM	10111110			
Ne certify that the statement ressel conform to the ASME "U" Certificate of Authorizate Sate 8-22-91 Nar	Code for Prestion no. 432 The Perry	ssure Vessels, 8expir Products	Section VI es Dec. Corpora	II. Division 31 tion	^{1.} 91	Signed	J.M.J.	inship of th
							(representati	ve)
essel constructed by Per	rv Produc	CERTIF	CATE OF	SHOP INSP	PECTION			
the undersigned, solding a nee of New Jersey	valid commiss	ion issued by Lumbern	The Nationa	Board of E	Boiler and Pres	at Ha	ctors and the s	NJ state or prov
		U		e inspeciel	TOA DIACCUITA			
eport on	_, ,,,	and state that	. to the bes	it of mv kn	owiedge and b	elief, the manufac	in this Manufa	cturers' Dat
ressure vessel in accordance								
y signing this cert≇icate nei	ither the inspec	ctor nor his em	nolover mak	es any war	anty, expresse	d or implied con	cerning the are	551155 11565
and the state of the state of the control of	" a nara webou	i. Furthermore	. neitner th	e inspector	nor his amala		in any mana	ssure vesse
end injury or property define	246 N 321022 C	n anv king aris	sina irom o	, compacta,	:			
ate 8/22/9/ Signed		-a www.		Co	mmissions	NB 7050	NJ476	•
						(Nati). Bd. (incl. endor	sements) state, pro	v. and no.)
e certify that the Feld asse	mbly construct	tion of all part	OF FIELD A	ASSEMBLY ssel confor	COMPLIANCE	E quirements of Se	ction VIII, Divis	sion 1 of the
J" Certificate of Amborizati	100000	JUE.						
ateName_	o., 110	expire	.5	19_	•			
	(4:	sembler that certif	lied and constru	ucted field ass	embly)	Signed	(representative	
		CERTIFICATE	OF FIELD	ASSEMBLY	INSPECTION		(rapresentative	۹)
the undersigned, hadding a v ce of	alid commissi	on issued by ti by	ne National	Board of B	oiler and Press	ure Vessel Inspec		
cort with the described pres	Ssure vessel an	of_	ICIS referred	lo an data	nave compared	the statements in	n this Manufac	turers' Data
	, HELD DEEN III	SODECTED DA LU	וגמו ממג ש	IN INA BACE	. A f			
d subjected to a hydrostation	c test of	osi.	e with ASM	E Code, Se	ction VIII, Divi	sion 1. The descr	ibed vessel wa	s inspected
signing this certificate neit	her the inspect s' Data Report	tor nor his emp . Furthermore,	oloyer make neither the	s any warra inspector i	inty, expressed nor his employ	f or implied, conc er shall be liable	erning the pres	sure vesse

lescribed in the Mamufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any per-

_____Commissions____

ional injury or property damage or a loss of any kind arising from or connected with this inspection.

(Authorized Inspector)

Joh Mo: 13967

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS (1) 10"-118 Sq. F as required by the provisions of the ASME Code rules, Section VIII, Division 1

7 1	ufactured an					(name	and address of a			esport, NJ 0		
z. man	uractured to	r		,	<u> </u>	iname and a	ddress of purchas	Genter, Ch	attanooga	a, TN 3/415		
3. Loc	ation of insta	Illation Sof	fix Corpo	ration	, 2800	Riverpor	t Road,	Chattanooga	a, TN 3	7406		
t. Type	Horizon	ntal	B-4621			10 In	D-91121-	1 4241		1991		
			51 561141		(CRN)		(drawing no.)		8d. no.)	(year built)		
VES	SEL CODE. T	he design, c	roperties of a construction a	ill parts me and workn	eet the requ nanship con	irements of iform to ASI	material spec ME Code, Sec	cifications of the tion VIII, Divisio	e ASME BOIL	ER AND PRESSUI		
1989								·		(year)		
	(addenda (D)a(e))	(Cod	e Case no.)	The second secon		(3	pecial service per UC	3-120(d))			
ms 6-1	1 inclusive t	o be compl	eted for s क्रमु	e wall-vee	seis, jacke	ਦ ਦਾ ਦਿਦ	एक रस्टाम्सम्बर्ग	shells of heat	exchangers			
			.13									
. Shell		c. no., grade))		hickness (in.))		11011	<u> </u>	·10-3/4" 0.	D. 5'	-11-3/4 ¹¹ Lg gth (overall) (ft. & in.))		
Sean	. Weld	ied		85		(Corr. allow. (i	n.))	(dia. ID (ft. & in.))	(ien	gth (overall) (It. & in.))		
Sean	(long. (dbl		(AT (spot or full)		%)) (HT temp). (*F)) (time	laidh (dh	sngl.)) (RT(spo	t, partial, or full)			
Head	s: (a)							319.// (A1(3)00	n, partial, or full))	(no. of courses)		
,			(mat'l. (spec.	no grade))		(t)	(mat'l. (sp	ec. no., grade))			
	ocation (top, ottom, ends)	Minimum	Carrasian	Crown	Knuckle	Elliptical	Conical	Hemispherical	Flat	Side to Pressure		
		Thickness	Allowance	Radius	Radius	Ratio	Apex Angle	Radius	Diameter	(convex or concave)		
(a)									1 N			
(b)						<u></u> :	,			Te 1 11 11 1,170		
If rem	of jacket:	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			tast		(mat'l.,	spec. no., gr., size, n	10.)			
Туре	of jacket: t closure:		112.47	Proof		nensions:		spec. no., gr., size, n				
Type Jacke	t closure:	(describe as og	ee & weld. bar. el	Proof	oar, give din	nensions:		spec. no., gr., size, n		describe or sketci		
Type Jacke	t closure:	(describe as og	ee & weld. bar. el	Proof	oar, give din	_{p.:} _20	at 85		If boited,	Apple Anelogitus (Milita Barta V		
Type Jacke	t closure:	describe as og	ee & weld, bar, et	Proof If to	oar, give din			spec. no gr., size, n	If boited,	Apple Anelogitus (Milita Barta V		
Type Jacke	t closure:	describe as og	ee & weld. bar. el	Proof If to	oar, give din	_{p.:} _20	at 85		If boited,	pressure145		
Type Jacke MAW	t closure: p. 85 (psi) and 13 to be	describe as og at max. temp	ee & weld. bar. el	Proof If t Min design ions.	oar, give din	p.: <u>20</u>	at85	. Hydro., p rea. c	If boited,	pressure 145 (psi)		
Type Jacke MAW 15 12 a	t closure:	describe as og at max, temper completed 240-T304	ee & weld. bar. el	Proof If to Min design ions.	oar, give din n metal tem	p.: <u>20</u>			If bolted, जटनाb. test	pressure 145 (psi)		
Type Jacke MAW 15 12 a	t closure: p. 85 (psi) and 13 to be heets: SA. (station	at max. temper completed 240-T304 lary mat 1. (spec SA105	ee & weld, bar, et of the sector of the sect	Proof ic.) Min design ions. 10-3/ (in.) (subject 10-3/4	oar, give dim n metal tem /41 0.D. to pressure)	p.: 20 (*F) 3/4 (nom. thick		. Hydro., p rien. c "O"	If bolted,	pressure 145 (psi) Welded		
Type Jacket MAW 15 12 a Tubes	t closure: (psi) and 13 to be heets: SA (station	describe as og at max, temper completed 240-T304 ary mat 1, (spec) sal 05 ang mat 1 (spec)	ee & weld, bar, el 300 (*F) for tube sect i. no gr.)) (dia.	Proof ic.) Min design ions. 10-3/ (in.) (subject 10-3/4) (dia. (in)	oar, give dim n metal tem /41 0.D. to pressure)	20 (°F) 3/4 (nom. thick	at 85 (psi) ** Thk. kness (in.)) O# Std. kness (in.))	. Hydro., p rieb. c ¹¹ 0 ¹¹ (corr. allow. (iii	If bolted,	pressure 145 (psi)		
Type Jacket MAW as 12 a Tubes	t closure: (psi) and 13 to be heets: SA (station	describe as og at max, temper completed 240-T304 ary mat 1, (spec) sal 05 ang mat 1 (spec)	ee & weld, bar, el 300 (*F) for tube sect i. no gr.)) (dia.	Proof ic.) Min design ions. 10-3/4 (in.) (subject 10-3/4 (dia. (in 5/8))	74" O.D. to pressure)	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga		. Hydro., p rieb. c ¹¹ O ¹¹ (corr. allow. (ii	If bolted,	Welded comment (welded by L.		
Type Jacke MAW IS 12 a Tubes Tubes Tubes	t closure: p. 85 (psi) and 13 to be heets: SA (station langes: (floatii) (mat'), (spi	completed 24()—T304 lary mat 1. (spec. SA105 ng mat 1 (spec. 304 lec. no gr.))	ee & weld, bar, el 300 (*F) for tube sect i. no gr.)) (dia.	Proof If to Min design ions. 10-3/ (in.) (subject 10-3/4) (dia. (in.) 5/8)	74" O.D. to pressure) 1 I.D.	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga	at 85 (psi) *** Thk. *** Kness (in.)) O# Std. *** Strong (in.)) or gauge))	(corr. allow. (ir	If bolted,	Welded comment (welded, boiled etained by L: (attachment)		
Type Jacke MAW 15 12 a Tubes Tubes Tubes	t closure: p. 85 (psi) and 13 to be heets: SA (station langes: (floatii) (mat'), (spi	completed 24()—T304 lary mat 1. (spec. SA105 ng mat 1 (spec. 304 lec. no gr.))	ee & weld, bar, el 300 (*F) for tube sect i. no gr.)) (dia.	Proof If to Min design ions. 10-3/ (in.) (subject 10-3/4) (dia. (in.) 5/8)	74" O.D. to pressure) 1 I.D.	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga	at 85 (psi) *** Thk. *** Kness (in.)) O# Std. *** Strong (in.)) or gauge))	. Hydro., pree.c. ''O'' (corr. allow. (ir 110'') (corr. allow. (ir	If bolted,	Welded comment (welded, boiled etained by L: (attachment) ctraight cype (straight or U))		
Type Jacke MAW IS 12 a Tubes Tubes Tubes	t closure: p. 85 (psi) and 13 to be heets: SA. (station langes: (floatii) (mat'l. (sp. 7 inclusive to	completed 24()—T304 lary mat 1. (spec. SA105 ng mat 1 (spec. 304 lec. no gr.)) o be completed	for tube sect i. no gr.)) (eted for immediate.	Proof If the proof of the proo	74 ¹¹ O.D. to pressure) I I.D.	p.: 20 (°F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) *** Thk. **Ress (in.)) O# Std. **Ress (in.)) or gauge))	(corr. allow. (in 121 (no.)	If bolted, Freemb. test Re (atta	Welded comment (welded, boiled etained by L: (attachment) (traight type (straight or U))		
Type Jacke MAW 75 12 2 Tubes Tubes Tubes 5 14-1	t closure: p: 85 (psi) and 13 to be heets: SA. (station (floati) (mat'l. (spi (mat'l. (spi (mat'l. (spi (mat'l. (spi (mat'l. (s	completed 240-T304 hary mat 1. (spectors) SA105 ng mat 1 (spectors) o be completed 304 S/S c. no., gr.))	for tube sect i. no gr.)) (eted for ***********************************	Proof If the proof of the proo	74" O.D. to pressure)) I.D. (nom.	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga	at 85 (psi) Thk. Kness (in.)) Std. Kness (in.)) or gauge)) # channels of	(corr. allow. (in 121 (no.)) Theat exchange 10-3/411 0.	If bolted, Presmb. test Re (tests.)	Welded comment (welded, botted etained by L: (attachment) straight type (straight or U)) @ 4" long & @ 8" Lg.		
Type Jacke MAW 75 12 2 Tubes Tubes Tubes 5 14-1	t closure: p: 85 (psi) and 13 to be heets: SA. (station (floati) (mat'l. (spi (mat'l. (spi (mat'l. (spi (mat'l. (spi (mat'l. (s	completed 240-T304 hary mat 1. (spectors) SA105 ng mat 1 (spectors) o be completed 304 S/S c. no., gr.))	for tube sect i. no gr.)) (eted for ***********************************	Proof If the proof Min design ions. 10-3/4 (In.) (subject 10-3/4) (dia. (in.) 5/8) DD ((in.))	74" O.D. to pressure)) I.D. (nom.	20 (°F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) Thk. kness (in.)) or gauge)) channels of	(corr. allow. (in 121 (no.)) Theat exchange (dia. ID (fit. & in.))	If bolted, Presmb. test Re (tests.)	Welded chained by L: (attachment) (btraight (per (straight or U)) (attachment) (btraight or U)) (btraight or U) (continued by L: (continued		
Type Jacke MAW Ts 12 a Tubes Tubes Tubes Shell:	t closure:	completed 240-T304 pary mat'l. (spec. SA105 pg mat'l (spec. 304 pec. no., gr.)) co be completed c. no., gr.)) ed f., sngl.))	for tube sect i. no gr.)) (RT (spot or full)	Proof If t ic.) Min design ions. 10-3/4 (in.) (subject 10-3/4 (dia. (in 5/8) DD (in.)) Strawibur it	74" O.D. to pressure)) I.D. (nom.	p.: 20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) ** Thk. Kness (in.)) ** Std. kness (in.)) cor gauge)) ** channels of 01- DBV	(corr. allow. (in 121 (no.)) Theat exchange (dia. ID (fft. & in.))	If bolted, Freemb. test Re (tr.) Sr.) Sr. (leng	Welded comment (welded, botted etained by L: (attachment) straight type (straight or U)) @ 4" long & @ 8" Lg.		
Type Jacke MAW 75 12 2 Tubes Tubes 1y F. Tubes Shell:	t closure:	completed 240-T304 lary mat'l (spec. SA105 ng mat'l (spec. 304 lec. no., gr.)) add S/S c. no., gr.)) add	for tube sect i. no gr.)) (RT (spot or full)	Proof If t ic.) Min design ions. 10-3/4 (in.) (subject 10-3/4 (dia. (in 5/8) DD (in.)) Strawibur it	74" O.D. to pressure) I I.D. (nom.	p.: 20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) "Thk. kness (in.)) O# Std. kness (in.)) cr gauge)) # channels of 02- .)) DBV (girth (db).	(corr. allow. (in 121 (no.)) Theat exchange (dia. ID (fft. & in.))	If bolted, Presmb. test Re (tests.)	Welded Chment (welded, boiled etained by L: (attachment) (traight type (straight or U)) @ 4" long & @ 8" Lg. (th (overall) (it. & in.))		
Type Jacke MAW 75 12 2 Tubes Tubes 1y F. Tubes Shell:	t closure: p. 85 (psi) and 13 to be heets: SA. (station langes: (floatii) (mat') (spi SA312-T3 (mat') (spe (long (db)	completed 240-T304 pary mat'l. (spec. SA105 pg mat'l (spec. 304 pec. no., gr.)) co be completed c. no., gr.)) ed f., sngl.))	for tube sect i. no gr.)) (RT (spot or full)	Proof If the proof of the proo	74" O.D. to pressure) I I.D. (nom.	p.: 20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) "Thk. kness (in.)) O# Std. kness (in.)) cr gauge)) # channels of 02- .)) DBV (girth (db).	(corr. allow. (in 121 (no.)) Theat exchange (dia. ID (ff. & in.)) (sngl.)) (RT (spot	If bolted, Freemb. test Re (tr.) Sr.) Sr. (leng	Welded Chment (welded, boiled etained by L: (attachment) (traight type (straight or U)) @ 4" long & @ 8" Lg. (th (overall) (it. & in.))		
Type Jacke MAW as 12 a Tubes Ty Finance Start Tubes Start Tubes Seams Heads:	t closure: 1. 85 (psi) 2. 85 (psi) 2. 13 to be theets: SA. (station (floating) (mat'l. (specification) (mat'l. (completed 240-T304 pary mat'l. (spec. SA105 pg mat'l (spec. 304 pec. no., gr.)) co be completed c. no., gr.)) ed f., sngl.))	ee & weld, bar, et 300 (*F) for tube sect (**E) in no., gr.)) (dia. no., gr.)) (dia. (RT (spot or full S) (mat 1, (spec, no Allowance	Proof If the proof of the proo	74" O.D. to pressure) I I.D. (nom.	p.: 20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Ga thickness (in.	at 85 (psi) "Thk. kness (in.)) O# Std. kness (in.)) cr gauge)) # channels of 02- .)) DBV (girth (db).	(corr. allow. (in 121 (no.)) Theat exchange (dia. ID (ff. & in.)) (sngl.)) (RT (spot	If bolted, Freemb. test (atta Ref.)) Strs. (lengers. partial, or full))	Welded Chment (welded, boiled etained by L: (attachment) (traight type (straight or U)) @ 4" long & @ 8" Lg. (th (overall) (it. & in.))		
Type Jacke MAW ns 12 a Tubes Tubes iy F. Tubes s 14-1 Shell: Seams Heads:	t closure: 1. 85 (psi) 2. 85 (psi) 2. 10 be theets: SA. (station (station (mat') (specification (mat')	completed 240-T304 tary mat'l (spec. SA105 ng mat'l (spec. 304 tec. no gr.)) o be completed co	ee & weld. bar. et 300 (*F) for tube sect i. no gr.)) (dia. no gr.)) eted for *** (RT (spot or full S) (mat I. (spec. no Allowance 110 11	Proof If the second se	n metal tem /4" O.D. to pressure) I I.D. (nom.	p.:	at 85 (psi) "Thk. Kness (in.)) O# Std. Kness (in.)) or gauge)) # channels of O! - DBW (girth (dbi.	Hydro., pres. c. (corr. allow. (ii) 121 (no.) heat exchange (dia. ID (ft. & in.)) (mat'l. (spe	If bolted, Fromb. test (atta Re (t) (rs. 1 (leng partial, or full)) c. no grade))	Welded chained by L: (attachment) (btaight (pressure 145 (psi) Welded chained by L: (attachment) (attachment) (attachment) (attachment) (btaight (pre (straight or U)) (attachment) (btaight (pre (straight or U)) (attachment) (btained by L: (attachment)		
Type Jacket MAW 15 12 a Tubes Iy F. Tubes S 14-1 Shell: Seams Heads:	t closure: 1. 85 (psi) 2. 85 (psi) 2. 10 be theets: SA. (station langes: (station (mat') (spe) (long (db) (a) 1. 10 be (a) 2. 12 constant (spe) (long (db) (a) 2. 12 constant (spe) (s	completed 24()—T304 lary mat 1. (spec. SA105 ng mat 1. (spec. 304 lec. no gr.)) ad 1 sng(.)) SA105 C/ Minimum Thickness 1-3/16	ee & weld, bar, et 300 (*F) for tube sect (**E) in no., gr.)) (dia. no., gr.)) (dia. (RT (spot or full S) (mat 1, (spec, no Allowance	Proof If the control of the control	oar, give dim n metal tem /4" O.D. to pressure) II .D. (nom.	20 (*F) 3/4 (nom. thick 15 (nom. thick 18 Gather 18 Gather 18 (corr. allow (in (corr. allo	at 85 (psi) Thk. Kness (in.)) Std. Kness (in.)) Cor gauge)) Conical Apex Angle	Hydro., pres. c. (corr. allow. (ii 1101) (corr. allow. (ii 121 (no.) (heat exchange (dia. ID (ft. & in.)) (sngl.)) (mat'l. (spet Hemispherical Radius	If bolted, Fraction b. test Ref. (atta Ref. (it) (ref. .partial, or full)) c. no. grade) Flat Diameter	Welded comment (welded, boiled etained by L: (attachment) (traight (pe (straight or U)) (@ 4" long & (@ 8" Lg. (In (overall) (It. & in.)) 1 (no. of courses) Side to Pressure (convex or concave) Concave		

Purpose (elet, outlet, drain, etc.)	Number		_		Nom.	Reinforcement	How	
Inlet	1	Dia. or Size	Туре	Mat'l,	Thickness	Material	Attached	Location
T117C C	<u> </u>	4	CL-150		Sch #10	Inherent	Welded	Bonne
				T304 L				
Outlet	1	2"	67 150	0.010	<u> </u>			
-/dciec	<u> </u>	1 2	CL-150		Sch #10	Inherent	Welded	Bonne
		 		T304 L				
Inlet and	2	7 7 701	CT 150	04010	10, "10			
Outlet		1-1/2"	CL-150	T304	Sch #10	Inherent	Welded	Shell
00000				1304				
		 						
							ļ	
			<u> </u>				<u> </u>	
9. Supports: Skirt	Luos 2		^			Mold.	.d 	-111
(yes ar n	(1	no.)	(no.)	tner	(describe)	Attached <u>Werd</u>	ed to main	snell
0. Remarks: Manufacturers	' Partial Data	900000					(where and nov	v)
Remarks: Manufacturers following items of the re	norti	neports prope	riy identified	and signe	ed by Commiss	ioned Inspectors	have been furr	nished for
following items of the re	port:					and identifying stamp)		
Unit not desi	gned for	lethal se	rozi ce	Unit do	cioned for	and identifying stamp)		
hvdro-tested in	horizont	al position	on. Exe	mnt fro	m impact	non-corros	ive servi	ce. Ur
UG-40 (D) UGG-	on and ur	4-71 52	tetv vral	770 0000	cotion la			graphs
One bonnet cons	isting of	10"x4" S	ch #10 c	oncentr	ic reduces	ated elsewi	ere in sv	stem.
				. One chief	re reducei	- 1-304, SA4	173.	
		CERTIC	CATE OF					
ssel conform to the ASME "Certificate of Authorizat ite_8-22-91Nan								
ssel constructed by Perne undersigned, solding a se of New Jersey	ry Produc valid commiss	es cornora	ition			at <u>Ha</u>	inesport,	NJ
ce of Tion Delacy	and employed	by Edinbern	iens Muci	ual Cast	laity Co.	of Long Gro	ve, IL	
port on 8-22-	100/	01	hav	e inspected	the pressure	vessel described elief, the manufac	in this Manufac	turers' Da
essure vessel in recordance	_, 19	and state that	, to the bes	t of my kno	owledge and b	elief, the manufac	cturer has cons	structed th
essure vessel in accordance	that the incre	Code, Section	VIII. Divisio	on 1.				
signing this certificate nei	mer the inspec	ctor nor his em	ployer mak	es any warr	anty, expresse	d or implied, cond	erning the pre	ssure ves:
	in mare lichts	. Fulliennore	. neuner in	B INCHAPTOR	Oct bis small		in any manner	for any p
nal injury or prop e rty dama te <i>8/22/9(</i> Signed	ا جون الرازع وا	n any sind ans	sing from of	r connected	d with this insi	pection.		
Jarghed.		Authorized Insper	ctori	Co	mmissions	(Nat'l. Bd. (Incl. endor	11/476	
							semen(s) state, pro	v. and no.)
certify that the field asser	Thly construct	tion of all and	OF FIELD A	SSEMBLY	COMPLIANCE			
certify that the feld asser ME BOILER AND PRESSUI	RE VESSEL CO	non or all part	s or this ves	ssel confor	ms with the re	quirements of Sec	ction VIII, Divis	ion 1 of t
" Certificate of Authorization			_					
teName_	311 110	expire	5	19_	•			
		sembler that certif	ied and constru	icted field ass	emply)	Signed		
					INSPECTION		(representative	*)
ne undersigned, hælding a v	alid commissi	on issued by the	OF FIELD /	-SOEMBLY	INSPECTION			
ne undersigned, hælding a v e ofa	ind employed i	5	ie italional	poard of Bo	oller and Press	ure Vessel Inspec	tors and the s	ate or pro
		of		<u> </u>	200 00 ====	A.L		
ort with the described pres	Sure vessel an	d state that no	rts referred	n	iave compared	the statements in	n this Manufac	turers' Da
cted and assembled this o								
	ressure vesse	l in accordance	e with ASM	E Code S-	ction VIII	idge and belief, t	he manufactur	er has co
	test of	nsi.	e with ASM	c Code, Se	ction VIII, Divi	sion 1. The descri	bed vessel wa	s inspecte
signing this certificate neith	test of	psi.	NOVEL MAKE	e Code, Se	ction VIII, Divi	sion 1. The descri	bed vessel wa	s inspecte
subjected to a hydrostatic signing this certificate neith cribed in the Mamufacturers	test of	psi.	NOVEL MAKE	e Code, Se	ction VIII, Divi	sion 1. The descri	bed vessel wa	s inspecte

lescribed in the Mamufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any per-

_____ Commissions__

onal injury or property damage or a loss of any kind arising from or connected with this inspection.

(Authorized Inspector)

)ate_____Signed_