## 112162

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

1. 1	Manufactured	and certi	fied by Ko	och Heat Trar	isfer Compai	ny LP 12602	FM 529 , Ho										
2. 1	Manufactured	for Trye	er Process	Equipment L	td., 3737 Old	l Iowa Park F	Road, Wichita			ss of Manufactu )6	rer)						
								ne and Addres				Addition of the Control of the Contr					
J. [	.ocation of In	stallation	Not Kno	WN				(Name	and Ad	idress)							
4. 1		orizontal	/T		changer		11403-08-4		~ <del></del>	NA			Remarks		1918		2009
(Horiz., vert., or sphere) (Tank seperator, jkt. vessel, heat exh., 5. ASME Code, Section VIII, Div. 1 Edition 2007					, etc.)	c.) (Mfg's serial No.) (CRN) NA				(Drawing No.) (Nat'l Bd. No.) NA					(Year Built		
Edition and Addenda (o					•	e) Code Case No.						ial Service	per UG-120	(d)			
	ns 6-11 Incl. t			single wall ve	ssels, jackets					ngers, or cha	ımb∈	er of multi-c	hamber	vessels.			
	Shell (a) No.	oi course(	(s): 	C	one (1)	(t	o) Overall len	gth (ft & in.	.): 				24' - 10	3/8"			
Course(s)				Material		Thickn	Thickness		Long. Joint (Cat. A)		Circum, Joint (Cat. A,			, B & C) Heat Treatme			tment
No. Diameter, in. 1 12.750*			th (ft & in.) - 7 7/8*	Spec./Grade or Type SA-106 Gr B SMLS		Nom.	Nom. Corr. 0.375* 0.125*		Type Full, Spot, No			****		Spot, None Eff			
<u> </u>	12.750		-1 110	3A-100	OI D SIVILS	0.373	0.125	NA		NA	NA	C		NA	100	NA	NA
7. H	eads: (a) _			SA-516 G			(b) _					SA-516 (					***************************************
	Location (Top	1		No., Grade or Type) H.T Time & T Radius			Conical	T				No., Grade or Type) H.T					
	Bottom, Ends	1	Corr.	Crown	Knuckle	Eliptical Ratio	Apex Angk	Hemisphei Radiu	- 1	1		Side to Presionvex C	sure oncave	Туре	7	gory A , Spot, No	ne Eff.
(a)	(2)Flgs.	1.938	0.125	i NA	NA	NA	NA	NA		16.500°		NA	NA	NA		NA NA	NA NA
(b)	(1) Flg.	2.188	0.125	" NA	NA	NA	NA	NA		**		NA	NA	NA		NA	NA
lf rei	movable, bolt	s used (de	escribe oth	er fastening)			SA	-193 B-7 (4	40) C	).750" Dia.	/ *	r* = 17.875 <b>'</b>	x 37.87	5 <b>"</b>			
R Tv	pe of jacket			,	٧A			et closure		I Spec. No., Gra					***********		
	, , , , , , , , , , , , , , , , , , , ,				<u> </u>			i ciosui e				(Describe	NA as ogee 8	weld, bar, e	elc.)		***
lf	bar, give dim	ensions			······································		NA						lf t	oolted, de	scribe	or sketc	h.
9. M	AWP	150	NA	psi at r	nax. temp.	500	NΑ	°F	Min	ı. design me	al te	mp.	-20	°F at		150	psi.
10 1		ternal)	(externa			(internal)	(extern								_	100	
	mpact test	res, Ret.	BN1. @ -50	degs. F. No	on all other r	naterial per l (Indi	JG-20 (f), icate yes or no ar	nd the compor	nent(s)	impact tested)						~	
	lydro., <del>pneu</del> .,		•	······································	199	5 PSI		Proof te		,			N.	Α			
	s 12 and 13 to ubesheet:	be comp				11 0008		40.05	· O#		^	0001					
טארוטבין טוטב						11.860° a., in (subject to	., in (subject to press.)					000° Allow., in.		Bolted Attachment (welded or bolted)			
						NA Va. in	NA a, in.			NA Nom. thk., in.		NA Corr. Allow., in.		NA NA			
3. T	ubes:		TP-316L E			•			COIT, AIIOW 1.065°			136			Attachment U		
		Matl Spe	ec. No., Grade	or Type		O.D., in.		Nom. th	ık., in.	or gauge			Numbe	f	T	ype (Straigh	nt or U)
ems 4. S	: 14 - 18 incl. hell (a) No. o	to be com course(s	ipleted for );	inner chambe	ers of jackete NA	d vessels or		heat excha II length (ft									
			, 	***************************************							$\overline{}$			ĮA	<del></del>		
No.	Coun Diameter, in	1	(ft & in.)	Mate Spec./Gra		Thicknes Nom.		Long. Joint (Cat. A)  Type Full, Spot, None E			Circum, Joint (Cat. A, I						
NA	NA		VA.		IA	NA NA	·i	NA NA				NA N			VA	emp. NA	Time N
							L						L				
5. He	eads: (a)	(	Mat'l Spec. No	NA/NA ., Grade or Type	H.T Time & T	emp	(b)			(Mat'l Spec	No	NA/NA Grade or Type		me & Temn			
Location (Top,		Thic	kness	Radius		Eliptical	Eliptical Conical		lemispherical		Flat Sid		de to Pressure		Catagory A		
1	ottom, Ends)	Min.	Corr.	Crown			Diameter	Con	vex Con	cave	Туре	Full, S	pot, None	Eff.			
a)   o)	NA NA	NA	NA	NA NA	NA	NA	NA NA	NA	-	NA	N	<u> </u>	NA	NA		NA	NA
		unned (dan	oribo otbo	fastening)	<u>L</u>	L	1										

(Mat'l Spec. No., Grade, Size, No.)

10 + 145//441	(internal)	NA (external)	psi at max, temp.	500 NA nternal) (external)	MIT	i. design i	metal temp.	-100 °F a	at	150 psi.
17. Impact lest	No, on all mate	. ,								
18 Hydro ese	<del>u</del> .,or <del>comb</del> . test բ	araee	405 501	(indicate yes or no and the		impact teste	od)			
			195 PSI	<u></u>	roof test			NA		
Purpose (Inlet	spection, and safe Diameter			erial .	F1 1 71					
Outlet, Drain, etc		Type	Nozzle	Flange	Nozzle Thickness		Reinforcement	How Att	Location	
Inlet/Outlet	2 3*- 150#	<del></del>			Nom.	corr.	Material	Nozzle	Flange	(Insp. Open
Inlet/Outlet	2 3'-150#	RFWN	SA-106 Gr B SMLS SA-312-TP-316L ERW	SA-105	0.300*	0.125*	Self	Welded	Welded	To She
Vent	2 .75"-3000		NA NA	SA-182-F316L	0.216"	0.000"	Self	Welded	Welded	To TS FI
	2 .70 0000	, 0, 20	37/	SA-105	3000#	0.125*	Self	NA NA	Welded	To Shel
					+			+		<u> </u>
								!		<del>-</del>
					-			<del></del>	<u> </u>	-
20. Supports: Sk	110	Lugs	No Legs	VA Others	/2\ Br	ackets	Attached		01 11 0 14	1.
21 Manufacturare	(Yes or No.)		(No.) (No.) entified and signed by Comm	- Midoned	To Shell & Movable (Where and How)					
(List the name of	the nort item nu	mbor młaże	entified and signed by Comm name and identitifying nu	issioned inspectors have	been furnish	ed for the t	following items of the r	eport:	(TTTOTO GITG TT	o <del>n</del> ,
NA NA	те ран, кет пи	inber, inig s.	name and identifitying nu	mber)						
107										
22 Remarks: 1	Return Bonnet: S	A-3521CB	0.750" Thk., 0.125" Corr. A	Mou. 40 000F C	\ '' \ \					
Surface Per Exc	hanner: 1298 3	Sa Et	0.730 THK., 0.123 COIL. F	Allow., 16.000° Crown F	Radius, Con	cave side	to pressure			
			lel No.: 12276-MTB-AAJ							
			be to tubesheet welds						V	
	100 00 10 ,11,	7 7 7 7 101		1 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			-			
				CATE OF SHOP COM						
We certify that	the statements m	ade in this r	eport are correct and that a	all details of design, ma	terial, cons	truction, a	and workmanship of	this vessel co	onform to	
the member obtain	0 10/ 1 1005010 11,	33013, 360110	on VIII, Division 1.							
_	Authorization No	* ***	11	634		Expire	Nov. 28	1	200	9
Date Sept.	<u>1, 2009</u> Name	!	Koch Heat Tra	ansfer Company LP		Sig	gned 5	9.1		2
······································			(Ma	nufacturer)				(Represen	litive)	-
				ATE OF SHOP INSPE						
I, the undersign	ed, holding a vali	d commissio	n Issued by The National I	Board of Boiler and Pre	ssure Vess	el Inspect	ors and the State or	Province of	T)	<b>,</b>
and employed b	у	One B	eacon America Insurance	Co	of		I vnn MA	have incr	ootod	
the pressure ves	ssel described in	this Manufac	cturer's Data Report on 5	eptimber 01	. 09	and stat	e that to the heet of	my knowlode	and hali	ef the
Manufacturer na	is constructed the	e pressure ve	essel in accordance with A	SME Code, Section VIII	Devicion	1 Dunia	ning this against			
										spector
Date & 9 - 0	drian bo nablo in	uny maryici	for any personal injury or	property damage or a	oss of any I	kind arisir	ng from or connected	d with this Ins	pection.	•
<u> </u>	<u> </u>	<u> </u>	(Authorized Inspe	ector)	Commi	5510/15	(Not) Doord incl.	J	B .	
			CERTIFICATE	OF ASSEMBLY CON	PLIANCE		(Nat'l Board incl. en	orsement, State,	Province and	No.)
We certify that th	e statements on	this report ar	re correct and that the field	assembly construction	of all parts	of this ve	ssel conforms with t	the requireme	unto of ACI	ır İ
0000, 000000, 77	11, 011101011 1.			,		0, 1,110 10	oodi comonno wan	nie requireme	ans of ASu	ne
U Certificate of A	utnorization No.					Expires		ı		
Date	Name					Sign	ed			
				facturer)				(Representiti	ve)	
				FIELD ASSEMBLY C						
l, the undersigned	d, holding a valid	commission	issued by The National Bo	oard of Boiler and Press	ure Vessel	Inspector	rs and the State or F	rovince of		
and employed by				of						
nave compared th	ie statements in t	his Manufac	turer's Data Report with the	e described pressure v	essel and st	ate that the	he parts refered to a	s the data ite	me	
		not included	d in the certificate of shop i	nspection, have been i	ispected by	me and	hy the hest of my kn	nowledge		İ
and belief, the Ma was inspected and	nufacture has co	nstructed and	d assembled the pressure	vessel in accordance v	ith ASME (	Code, Sec	tion VIII. division 1.	The Describ	ed vessel	; ;
				igning this certificate ne	amerine in:	spector n	or his employer mak	es any warra	nty,	
pe liable in any ma Date	anner for any pers Signed	sonal injury o	vessel described in this Ma or property damage or a los	ss of any kind arising fr	ort. Furthern	nore, neit ected with	ther the Inspector no this inspection.	or his employe	er shall	1

(Authorized Inspector)

(Nat'l Board incl. endorsement, State, Province and No.)