NB# 32268

J.a.P.n Apr-19-18 R.Cul APR-19-18

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT

Page 1 of 3

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1.	Manufacti Mexico	ared and	certified	l by Hu	udson Produ	ucts De Mexi	ico, S.A	. De C.V.	Carr	etera Villa	a De	: Garcia N	0.3840) Santa	Catarina N	Nuevo L	eon C.P.	66350
2.	Manufacti	ured for				Hudson Pr	oducts (on 96		ald F	Rd. Beasle		77417 L	J.S.A			
								(Nar	me and	address of F		aser)						
3.	Location o	of install	ation —						(Unknov Name and a	-	ss)						
	_		HEA	DER BOX	(N.	лРD-9									
4.	Type	iption of v	ssel part (s	hell, two-pic	ece head, tube	bundle)]		(Manufac		serial number	er)				(CRN)	72	
					S1628	6-1 (FRONT	T HEAD	ER) Rev.	.3			Huds	on Pro	ducts Co	orporation		201	8
	(National	Board num	ber)			(Drawing nun	nber)						(Drawin	g prepared	d by)		(Year	built)
5.	ASME Co	de, Sect	ion VIII,	Div. 1 _	[Edition and	2017 Addenda, if app	olicable (d	fate)]		(Code	Case	number)			[Special	service p	er UG-120(d)I
														a ar ah.	-			
			• • • • • • • • • • • • • • • • • • • •			essels, jack 1							_	4.0625°	amber of	munac	mannber —	vesseis.
		Course(s)		N	Material		Thick	kness		Long	g. Joint (Cat	. A)	Circum.	Joint (Cat. A.	B & C)	Heat Tre	atment
No.	Diar	neter	Ler	igth	Spec./C	rade or Type		Nom.	Co	гг. Тур	эө	Full, Spot, None	Eff.	Туре	Full, Spot, None	Eff.	Temp.	Time
2	84.0625"	x 11.7500	" 84.0	625"	SA-5	16 Gr 70 N		1.625"	0.06	25			****				1148°F	2.0 HR
2	84.0625	' x 3.8125	84.0	625"	SA-5	16 Gr 70 N		0.875"	0.08	325		****	****				1148'F	2.0 HR
	<u> </u>			- 1													****	
	Body Flanges on Shells																	
											_		Ţ		Bolting	sher		
No.	p. Type ID OD Flange Thk Min Hub Thk Material How Attached Location Num & Size Bolting Material (OD, ID, thk) Wash								Wash	r Material								
											⊢	****	-	••••				
	_										╁╌		-				+	
				5400	70.11 44.40		0.0.1100					64.54		0.1144	10.5		1100	
7.	Heads: (a)				' F (type) (H.T. — ti				(b)					48 ° F or type) (H.1			
	1,		Thick	-		Radius				1	Т			Side to P			Category	
	Location (Bottom, E		Min.	Corr.	Crown	Knuckle	Ellip Ra		onical x Angle	Hemis. Radius		Flat Diameter	C	onvex	Concave	Type	Full, Sp None	ot, Eff.
(a)	END		0.875"	0.0625	<u> </u>		+-	_		 	\dashv	3.81"X9.68	,,,				140116	
(b)			0.875"	0.0625			-					3.81"X9.68						
												0.017.0.0						
	1	1	1	1	T	1	Вос	dy Flanges	on He	ads					Bolting			
	Location	Туре	ID	OD	Flange Thk	Min Hub Thk	Ma	terial	Ho	w Attached	N	um & Size	Bolt	ng Materi		/asher , ID, thk)	Wast	er Material
(a)																		
(b)								****				****						
8.	Type of ja	cket			****				Jacl	ket closui	re _				****			
	If how air	o dimon	oiono If	baltad	describe e	e aleatab								Describe a	s ogee and w	eld, bar,	etc.)	
				boileu,	describe o		200 5							***************************************	2015	~	1507	Daia
9.	MAWP _	1527 Psi		ternal)	at max. ten	mp	130° F	(Exte	ernal)	_ Min.	desi	ign meta	temp)	-20°F	at	1527	Psig
10.	Impact te	st			Iludianta una	or no and the co						6	t test	temper	ature of			
11	Hydro., p	neu or	comb to	et nrace		or no and the co	omponent		roof t	oct								
					ibe section			!!	1001 0	cst								
			SA-516 C			.3. .3125" X 10.	000"		1	.625"			0	0625		,	WELDED	i
12.	Tubeshee		onary (mate			eter (subject to				nal thickness	s)			r. allow.)			ent (welded	
		[Floa	ting (mater	al spec. no.)]	(Diameter)		(N	ominal	thickness)			(Corr.	allow.)		{A	ttachment)	
13.	Tubes	Material spe	c. no., grad	e or type)		(O.D.)		(No	minal t	hickness)			(Nur			[Тур	e (straight c	r U)]

FORM U-2

nufac	turer's	Serial	No		MPD-98	9	CR1	V				1	National B	oard !	٧٥				
							of jacke						exchange -	ers.					
Shel	il: (a)	No. of	cour	se(s)				(b)	Overa	II leng	ıth								
		Course	s)			Materi	al		Thic	ckness		Lon	g. Joint (Cat.			oint (Cat Full, Spo		Heat Treat	
0.	Diame	eter		Length		Spec./Grade	or Type	_	Nom.	Co	rr.	Туре	Full, Spot, None	Eff.	Туре	None	L	Temp.	Time
		-																	
-	***		+							+-:									
		-		****										1					
			Т	ſ				Body FI	anges o	n Shells	<u> </u>					Bolting			
. ,		ID	0	Flance	Thk Min H	ıh Thk	Material		How Att	tached	Locatio	n N	ium & Size	Bolting	Material		Vasher), ID, thk)	Washer I	Materia
_	уре						****	-											
		****			_					-		\top	****						
			-				****			-									-
							****									<u></u>			**
. Hea	ıds: (a)					****					(b)						UT tim	o and tomp)	
			(N	laterial spec.	number, gr	ade, or type	(H.T. — tim	e and ter	mp.)				(Material sp	ec. num			.n. i. — uiii	e and temp.)	
10000	ocation (To			Thickness		Radi		Ellipti		Conical	50000	nis.	Flat	-	Side to Pr		Type	Full, Spot	
Вс	ottom, En	ds)	Min.	Co	rr.	Crown	Knuckle	Rati	о Ар	ex Angl	e Rac	dius	Diameter	La	nvex	Concave	туре	None	-
a)	****							ļ	-										
b)													<u> </u>						
								Body	y Flange	s on He	ads					Dalaina			
												<u> </u>		T		Bolting	Washer		
	Location	Туре				e Thk Min I		Mate		Ho	w Attach	ed N	Vum & Size	Bolti	ng Materia	91 (C	D, ID, thk)	Washer	r Mater
(a)			-									+		-		+			
(b)	****				··· ··										_		-4		
. MA		(Internal)	(External)	_ at max	. temp.	(Interna	al)	(Exte	rnal)	Min.	desig	n metal te	mp			at		
Imp	act test											,	a	t test t	empera	ture of			
•							nd the comp				not.								
				b. test pro nd safety					r	100116	73L								
	rpose	Specia	J., a	na sarcty	T	1		1-1		Т	Nozzle T	hiakaas	. [T	ttachmen	t Details	Π.	
(Inlet	, Outlet,		No.	Diameter or Size	Туре		lozzle	terial	Flange		Nom.	Corr	- Reillio	rcemen terial		ozzie	Flange	Local (Insp. C	
	in, etc.) ZLE VEN	JT T	1	NPS-1	CPLNG		N-105	1 -			0.475"				UW	16.1(a)			
	ZZLE IN	_	2	NPS-8	***		A-234		SA-105		0.906"	0.062				16.1(a)	2-4 (6)		
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	****	$\Box I$											-						
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		\dashv				-		-	****	-+					+				
					1					1					——				
. Ide	ntificati	ion of	part(s	s)							<u> </u>								
	Name of Part			Quantity	Line No.	Mfr's. Id	lentifica	ation N	0.	Mfr's.	Drawir	ng No.		CRN	Nati	onal Boa	rd No. Ye	ear Bu	

	4.4							••••											****
															****		****		****
		CL!		Lu				. ,	Others		Suppor (Desc	1 (2)	ΔH	ached		\	Velded C		

Design Calculations by other ,Impact Test Exempt Per UG-20 (f), Non-Lethal Service. Hydrostatic test not performed. Manufactured According Seccion VIII Div 1... * COUPLING CL6000. ***RFWN CL900.

32268 J.A.P. Apr. 19-19

R. Cul APR-19-18

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FORM U-2

Manufactured by	Hudson Proc	ducts De Mexico, S.A	. De C.V. Carret	era Villa De Garci	a No.3840 Santa Catarina	Nuevo Leon C.P. 66350 Mexico
Manufacturer's Ser	ial No	MPD-989	CRN		National Board No	
		C	ERTIFICATE OF	SHOP/FIELD COM	PLIANCE	
		s in this report are ME BOILER AND PR				I workmanship of this pressure
U or PRT Certifica	te of Authoriz	ation number	37163	Expires .	December 19, 201	9
Date April-19-20	Name	Hudson Product	s De Mexico, S.A (Manufacturer)	a. De C.V.	Signed	(Representative)
		(CERTIFICATE OF	SHOP/FIELD INSP	PECTION	
The	Hartford Stea	am Boiler Inspection	and Insurance Co	ompany	of	el Inspectors and employed by Hartford C T.
have inspected the	e pressure ve	ssel part described in	this Manufactu	rer's Data Report o	on April 19. 2	2018
and state that, to	the best of	my knowledge and	belief, the Mar	iufacturer has co	instructed this pressure	vessel part in accordance with
						Inspector nor his/her employer
						rer's Data Report. Furthermore,
			liable in any ma	nner for any perso	onal injury or property dan	nage or a loss of any kind arising
from or connected	1000		1.7		,	
Date APA-19-	Signed			Comn	nissions	5190
		Auth	drized Inspector)		(National Board Aut	horized Inspector Commission number)
		Ч				

(07/17)

D. A. P. G. Apr. 19-18

R. Lend Apr. 19-18

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FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

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	fanufacti Mexico	ured a	nd cer	tified	by Hu	idson Prod	ucts De M	exico, S	.A. De C	D.V. C	Carrete	era Villa	De Garcia N	lo.384	0 Santa	Catarina I	Nuevo L	eon C.P.	66350
-	MEXICO										(Name	and addre	ess of Manufact	urer)					
2. N	/lanufacti	ured fo	or				Hudson	Product	s Corpo	ration	9660	Grunwa	ld Rd. Beasl	ey T.X	77417 U	.S.A			
										(Name		dress of Po	•						
3. L	ocation o	of insta	allatio	ı								Unknow me and ad							
					SED BOY	,				MAD	D-993		iuicasi						
4.	Type	iption o			DER BOX	ce head, tube	bundle)]		(Man			al number	r)			- (CRN)		
							86-1 (BAC	K HEA						on Pro	oducts Co	rporation		201	8
•	(National	Board no	ımber)				(Drawing r								ng prepared			(Year	
5	ASME Co	da Sa	ction '	vin r	Div. 1		2017											-	
J. ,	ADIVIL CO	ue, se	ction	V 111, L	,,v. i	(Edition and	Addenda, if	applicable	(date)]			(Code C	(ase number)			[Special	service p	er UG-120(1))
tem	s 6–11 in	cl. to L	e con	plete	ed for si	ngle wall v	vessels, ja	ckets o	f iacket	ed ve	essels	. shell o	of heat exch	anger	s. or cha	mber of	multic	hamber	vessels.
															84.0625"				
-					100(0) _							-			L				
N1-	Di-	Cours	e(s)				Material			Thickne		_	Long. Joint (Ca Full, Spot,			Full, Spot,		Heat Tre	
No.	-	neter		Len			Grade or Typ	θ	Nom	_	Corr.	Туре	None	Eff.	Type	None	Eff.	Temp.	Time
2	84.0625" 84.0625			84.06			16 Gr 70 N 16 Gr 70 N		1.625 0.875	_	0.0625							1148°F 1148°F	2.0 HR 2.0 HR
	f		23	04.00		SA-C			0.873		0.0023	 						1140 F	2.0 nn
Body Flanges on Shells																			
		-	1			1		Вос	ly Flange	s on Si	helis	I				Bolting			
No.	Туре	ID		D F	lange The	Min Hub Thi	Mate	orial	How	Attach		ocation	Num & Size	Robin	ng Material	W	asher	Wash	r Material
			 				 		11000		ica L			Boitin			ID, thk)	- Vasile	····

													****			<u> </u>			
7 1	Heads: (a	1		SA	-516 Gr 7	70 N 114	3°F	2.0 HI	RS		(b	١	SA-51	6 Gr 7	ON 114	48°F	- 2.0	HRS	
<i>'</i>	10003. (0	, —	(P	/lateria	l spec. nun	nber, grade o	type) (H.T. –	- time and	d temp.)		\u0	/	(Material s	ec. num	ber, grade	or type) (H.)	Г. — time	and temp.)	
	Location (Тор,		Thickn	ess		Radius	EI	liptical	Conic	cal	Hemis.	Flat	L	Side to Pr	essure		Category	
	Bottom, E	nds)	Min.		Corr.	Crown	Knuc	kle	Ratio	Apex A	Angle	Radius	Diamete	C	onvex	Concave	Туре	Full, Sp None	
(a)	END		0.875	-	0.0625			-			.		3.81"X9.6	8"					
(b)	END		0.875	-	0.0625			-			-		3.81"X9.6	B"		****			
								E	Body Flan	ges on	n Heads								
									··········							Bolting			
	Location	Тур	е	ID	OD	Flange Thk	Min Hub Thi	. 1	Material		How A	ttached	Num & Size	Bolt	ing Materia		/asher , ID, thk)	Wash	er Material
(a)																	****		
(b)			-			<u> </u>						•••			****				
8.	Type of ja	icket								J	Jacket	closure	e						
										`				(Describe as	ogee and w	eld, bar,	etc.)	
	f bar, giv	e dim	ension	s. If	bolted, d	describe o	r sketch.				-				_ 				
9. 1	MAWP _	1527 F		/Eva	ernal)	at max. tei	mp	130° F		Extern		Min. d	lesign meta	l tem	o	-20°F	at	1527	Psig .
10.	mpact te			EXI	ernai)			(Interna						at test	temner:	ature of			
	,					•	or no and the	•	ent(s) impa		-				tomport				
					•	ure				. Prod	of test	·							
						be section													
12.	Tubeshee	t			r 70 N ial spec. no		2.3125" X 1)1	īM:	1.62	hickness)			0625 rr. allow.)	_r		WELDED int (welded	
					, -, -, -, -, -, -, -, -, -, -, -, -,	10.01			·· 	1.40							-Augustinite		
	T. L.	(F	loating (al spec. no.))	(Diamete	r)		(Nom	ninal thi	ckness)			allow.)		(A	ttachment)	
13.	Tubes	laterial s			or type)		(O.D.)			(Nomi	inal thicl	(ness)			mber)		[Туре	(straight o	r U)]

J.A.P.n Apr-19-18
R. Leul APR-19-18
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FORM U-2

/lanu	factured	by_	łuds	on Produc	ts De	Mexic	o, S.A. I	De C.V.	Carrete	era Vi	la De	Garc	ia No	384	0 S	anta Cat	arina N	Nuevo l	eoi	n C.P. 6	6350 M	lexico				
/lanu	facturer	's Seri	al N	0	M	IPD-99	13	(CRN						N	ational B	oard	No								
				complete				ers of jac									ers.									
+. 3	ileli. (d	8		Juisets/	1					D) OV			<u>'' </u>													
	-	Cours	e(s)					erial			Thickn		_		-	. Joint (Cat. Full, Spot,			-	nt (Cat. A, ull, Spot,		Heat Trea				
No.		neter		Lengt	<u> </u>			de or Type		Nor	-	Cori	\rightarrow	Type	-	None	Eff.	Туре	+	None	Eff.	Temp.	Time			
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o. 1	Туре	1D		OD Fla	nge Thk	Min Hu	b Thk	Mater	ial	Hov	v Attac	hed	Locat	ion	Nu	m & Size	Boltin	g Materia	al l		sher D, thk)	Washer	Materia			
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•••	****	****																								
. н	eads: (a)			·							_ (b) _													
				(Material s	ec. nun	nber, gra	ide, or typ	oe) (H.T. —	time and	temp.)			,		- (1	Material sp	ac. num	ber, grad	e, o	r type) (H.	I. — time	and temp.)				
	Location (Thicknes	S		Ra	dius		iptical	0000000	nical		emis.		Flat	-	Side to				Full, Spot	1			
	Bottom, E	nds)	М	in.	Corr.	°	crown	Knuck	e F	Ratio	Apex	Angle	R	adius	4	Diameter	Co	onvex	Co	oncave	Туре	None	Eff.			
(a)			-												\bot	****										
b)		i							i				1]						
									В	ody Fla	ngės o	n Head	ds													
																	Т		T	olting W	asher	1				
	Location			ID	OD			Hub Thk	. N	laterial		How	Attac	hed	Nu	m & Size	Boltin	ng Mater	ial	(OD,	ID, thk)		r Materia			
(a)																	-		_							
(b)												<u> </u>					1									
. N	AWP _	(Intern	al)	(Extern	a	t max	. temp.		rnal)	(E	xterna	1)	Min.	. desi	ign	metal ter	mp				at					
In	pact tes	t														at	test t	emper	atui	re of _						
				mb. test				and the co																		
				mb. test							Proc	or tes	τ													
	Purpose	Ispec		T	ty van	ve ope	T T					-				1						<u> </u>				
(In	et, Outlet,		NI.	Diamet or Size		Tuna			/laterial			_		Thickn		Reinfor		· -		hment De		Loca (insp. 0				
	rain, etc.) ZZLE VE	NT	No.	NPS-		Type CPLNG	_	Nozzle SA-105		Flan		_	iom. .475*	-	orr. 625		erial	_	ozzle	(a)	lange	(insp. c				
	ZZLE OL		2	NPS-		***	_	SA-234		SA-1			.906"	-	625	 		UW			-4 (6)					
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														-												
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	****			<u> </u>										<u> </u>		<u> </u>						<u> </u>	**			
ld	entificat	ion of	part	t(s)																						
	Na	me of	Part		Qua	ntity	Line No	Mfr's.	Identifi	cation	No.	N	Afr's.	Draw	ring	No.	(CRN	Т	Nationa	al Board	INo. Ye	ar Buil			
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					1 -												-									
. s	upports:	Skirt	(Ye	s or no)	.ugs _	(Numb	Le	gs	mber)	Othe	rs	Sı		rt (2))	Atta	ched				ded Co					
. R	emarks		ns by	other ,Imp	act Tes	t Exem	pt Per U		lon-Leth			Hydros			ot pe	rformed.										

J.A.P.4 Apr-19-18

R. Leul APR-19-18
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Manufacturer's Seria						al Board No	vo Leon C.P. 66350 Mexico
			CERTIFICATE OF SH	HOP/FIELD COM	PLIANCE		
		s in this report are ME BOILER AND PR					rkmanship of this pressure
U or PRT Certificat	e of Authoriz	ation number	37163	Expires .	Dec	cember 19, 2019	
Date April-18-201	8_ Name	Hudson Produc	ts De Mexico, S.A.	De C.V.	Signed	(Re	presentative)
**			CERTIFICATE OF S	HOP/FIELD INSF	ECTION		
The	Hartford Stea	am Boiler Inspection	and Insurance Con	npany	of	Ha	spectors and employed by tford C T.
have inspected the	pressure ve	ssel part described i	n this Manufacture	r's Data Report o	on Apr	11 19, 201	9
and state that, to	the best of	my knowledge and	d belief, the Manu	ifacturer has co	instructed t	his pressure vess	el part in accordance with
			1 1				pector nor his/her employer
			F 1				Data Report. Furthermore, or a loss of any kind arising
from or connected			1/	ier for any perso	onar mjury o	property damage	of a loss of any kind arising
Date <u>APD-19-18</u>	c:		The second	C	nissions	151	90
Date 14 E 17 10	Signet	(Auth	norized (Inspector)	Comi	nissions	National Board Authorize	d Inspector Commission number)
			1/1				

	National B	oard N	Number		FO	RM U	I-1 MANUF	FACTURE	R'S DATA	A REI	PORT	FOR PRE	SSI	URE \	/ESSEL	S	_					
		Numb						ns of the ASN									sion 1				Page	1 of 3
1. M	lanufacture	d an	d certifie	d by H	udson	Produ	ucts Corp	oration, 9	9660 Gru	nwa	ld Ro	ad, Beasl	ley,	Texa	ıs, 7741	7						
2. M	lanufacture	d for	ATLA	NTIC	COAST	PIPE	LINE, LL	C., PO Bo		Ricl	hmon	d address of d, Virgini dress of Puro	a, 2	23260								
3. Lo	ocation of i	nstal	lation A	TLAN	TIC CO	AST	PIPELINE	, LLC., N			TON,	North Ca	roli									
4. T	vne		Horizon	tal				Δir	Cooled H	eat F	`	e and addre	ess)				9	16286	6-11A-	.Δ.2		
T. I.	(Ho	rizont	tal, vertica	il, or spl	nere)	-		(Tank, sepa	rator, jkt. v	essel,	, heat e	exch., etc.)					(Manufa				ber)	
			N/A					S16286-1, I	REV 3						3220						2018	
5	ASME Cod		(CRN)	II Div	1			(Drawing nu	ımber)						ional Boa	rd nui	mber)				(Year bu	ilt)
5. <i>i</i>	ASME Cod	е, зе	ection vii	II, DIV.	' —	[Edition)15/ N/A enda, if appli	icable (dat	te)]		(Cod		N/A ase Nu	mber)		[Sr	pecial	Servi	N/A ce per l	JG-120(c	<u>d)]</u>
	Items 6-11	incl.	to be co	mplete	ed for sin						sels, sl	hell of heat	t exc	chang	ers. or c	haml					,	/ -
	nell: (a) Nu			•	1	_		•	rall length		, .			Ū	0625"							
	Со	urse(s	s)		ı	Materia	ıl	Thic	kness		Lo	ong. Joint (C	at. A	1)	Circum	. Join	t (Cat. A, I	B, & C)	Heat	Treatme	nt
No.					Spec./0		or Type	Nom.	Corr.		- 7 -	Full, Spot, N	one		Type Fu			Eff.	_	Temp.		me
1	7.375" x 11	.75"	7' 0.06	625"		N/A		N/A	N/A		N/A	N/A		N/A	N/A	N/	A	N/A	١.	N/A	N	/A
								E	Body Flang	ges o	n Shell	s					B	olting				
No.	Туре		ID	OD	Flang		in Hub Thk	Mate	erial	l .	low ached	Location	n	Num	& Size		olting aterial		her (C	DD, ID,	Was Mate	
N/A	N/A		N/A	N/A	N/A	N/A	4	N/A		N/A		N/A		N/A		N/A		N/A			N/A	
7. H	leads: (a)	//					175F - 2:0					(b)	/N.A				1125-1					
	Location (T	<u> </u>		hicknes		le or ty	Radiu	time and tem	Elliptical	I Co	onical	Hemispheri	Ò	lat Dia	·	- '	grade or to Pressure	. , .		Catego		1
	Bottom, En		Min.	11101411001	Corr.	(Crown	Knuckle	Ratio			cal Radius	ļ .	iat Bia	⊢		Concave	Ту			pot, None	e Eff.
(a)	Top & Bot	tom	0.875	(0.0625		N/A	N/A	N/A		N/A	N/A	3.8	125 x 8	34.0625			C.	J.	Pa	artial	N/A
(b)	Ends		0.875	(0.0625		N/A	N/A	N/A		N/A	N/A	3.8	3125 x	9.6875			C.	J.	Pa	artial	N/A
		1						В	ody Flang	jes or	1 Head	s										
	Location		Туре	ID	10		Flange Thk	Min Hub	Mate	erial		How Attache	d	Ni	m & Size		Iting Mate	Bolting W	/asher	(OD, ,,	N/I N	A - 4 1
			,,					Thk						Nui	n & Size	\rightarrow		-+			Vasher N	латепа
a)	N/A	N/A		N/A	N/A	N	I/A	N/A	N/A		N/A	Α				N/	A	N	/A	ľ	N/A	
3. Ty	pe of jacke	et					N/A				_Jack	et closure			(Da	oorib	N/ e as ogee		ld bo	r oto \		
lf l	bar, give di	mens	sions; if b	oolted,	describe	or sk	etch							N/A	,	SCHD	e as ogee	a we	iu, ba	1, etc.)		
. MA	WP	1527	nei		N/A		at max. temp	n 12	80 °F		N	I/A	Min	ı. desi	gn meta	l tem	p.	- 20 °	· E	at	1527	nci
		(Inter			(External		at max. tom	(Inte			(Exteri						-	- 20	Г	at	1321	psi
0. In	npact test					F1	-I:4		UG-20 (1								at	test t	empe	erature	of	N/A
1. Hy	dro., pneu.,	or co	mb. test p	ressure	Hyd		443 psi	or no and the Proof te		nt(s) II	mpact t	testeaj			N/A	١						
	ems 12 and	d 13	to be cor	npleted	d for tube	e secti	ions.															
2. T	ubesheet_		[Statio		116, 70N aterial spe	ec. no.))]		60" x 84.06 (subject to		s.)]	1.62 (Nominal th		ness)		0.062 orr. all		At	tachm	Wel nent (we	ded elded or b	polted)
			[Float		N/A terial spe	c no \1	1		N/A Diameter)			N/A		ness)	(0)	N/A orr. all	ow)				/A nment)	
3. T	ubes		Įi loai	•	9 T304L	J. 110./J	1	(1.000			0.06		.000)	,00	178	~··· <i>j</i>			` _	ight	
	_		(Materia		no., grade	e or typ	pe)		(O. D.)			(Nominal th		ness)	(1	Numb	er)		[Ту		aight or L	J)]

								F	ORM U	1									Page	e 2 of 3
Manu	factured by	Huds	on F	Produc	cts C	orporatio	on, 966	60 Grunv	vald Roa	d, Be	asley,	Texas, 77	417							
Manu	facturer's S	erial No. s	1628	6-11A-A	\-2			CRN	N/A				Nat	ional B	oard No	o. 3226	8			
	tems 14-18 nell: (a) No					ner chaml	bers of	•	vessels or verall leng		nnels of	heat excha	ngers.							
	Соц	ırse(s)				Material		Thi	ckness		Lon	ıg. Joint (Cat.	A)	Circu	m. Joint	(Cat. A,	B, & C)	Hea	at Treatn	nent
No.	Diameter	Le	ngth		Spec./	Grade or Ty	ре	Nom.	Corr		Type Fu	ull, Spot, None			ull, Spot	t, None	Eff.	Temp).	Time
	N/A	N	l/A			N/A		N/A	N/A		N/A	N/A	N/A	N/A	N/A	4	N/A	N/A		N/A
									Body Flan	ges or	n Shells					В	Bolting			
No.	Туре	ID		OD	Flang Thk		ıb Thk	Mat	erial		low ached	Location	Nun	n & Size		olting aterial	Washer	(OD, ID		asher aterial
N/A	N/A	N/A	N	/A	N/A	N/A		N/A		N/A	I	N/A	N/A		N/A		N/A		N/A	
15. F	leads: (a)					N/A						(b)				N/A				
					er, grad	de or type)						(IVI					ype) (H.T.			0.)
	Location (To Bottom, End	1.7		kness Co	rr	Crow	Radius	s Knuckle	Elliptica Ratio		nical Ape: Angle	x Hemispheri Radius		Flat iameter		Pressure Concave	Type	Categ	ory A Spot, No	ne Eff.
N/A	N/A	N/A		N/		N/A		N/A	N/A		N/A	N/A		N/A	N/A	N/A	N/A	I uii,	N/A	N/A
14,71	147.1	107	•	14,		147	•					1477		14/71	14,71	147.1	14// 1		14,71	1471
			_						Body Flang	ges on	1 Heads					E	Bolting			
	Location Type			ID	OI	D Flang	ge Thk	Min Hub Thk	Mate	erial	Но	w Attached	Nu	m & Size	Bolt	ing Mate	erial Wash	er (OD, thk)	Washer	Material
N/A	N/A	N/A	N/A	Α	N/A	N/A		N/A	N/A		N/A		N/A		N/A	١	N/A		N/A	
17. I		eu., or com	ıb. te	est pre	essure	[Indicate y	es or r	no and the	N/A compone	ent(s)							N/A test temp			N/A
	Nozzles, insose (Inlet, O			Diamet				Mate	erial		Nozzle	Thickness	Reinf	orcemer	nt .	Attachm	ent Detail:	s I	ocation	(Insn
i uip	etc.)	atict, Diairi,	No.	Size	e	Type	N	lozzle	Flang	е	Nom.			aterial	·` —	Vozzle	Flang		Ope	·
	INLET / OU		4			RFWN			SA-10)5	SCH 16	0.0625	ı	None			UW16	.1		
	VENT/DRA		_	1		COUPLING		A-105				0.0625		None	_	W-16.1				
IRAN	SITION - INL	ET/OUTLET	4	8"		Pipe	SA-2	234 WPB			SCH 16	60 0.0625	ı	None	U	W-16.1				
	Supports:	(Yes		,	(Nı	N/A umber)	Legs	N/A	,			N/A (Describe	,			iched _	(-	N /A Where a	nd how)	
Manu (2 C M 22. R Le Tw x Se IT Ov	facturer's nar 2) Header .V. Carreto PD-989 (Femarks) ngth of o Rectan 84.0625" rvice: G EM: D2.0 erall Di	ne, and identification in the control of the contro	fying fying fet He Galler) and fet He Galler) and fet He added	number) leader arcia N and Se	. & Relo. 38 erial	eturn Hea 840 Santa Number	ader) Ma Cata	Manufact rina, Nuc 993 (Bacl Header 731".	ured by: evo Leon k Header	Hud C.P.) per	son Pr . 66350 Drawii × 11.7	furnished for the oducts de of the oducts de of the oducts de of the oducts de of the oducts de	Mexicumbe -1, RE	co S.A r EV 3.	. De	5″ x 1	L1.750 ⁴	<u>"</u>	item nur	mber,

(National Board Authorized Inspector Commission number)

Manufactured by	Hudson Product	ts Corporation, 9660 Grunwald R	oad, Beasley, Texas, 77417	
Manufacturer's Seria	I No. S16286-11A-A- 2	2 CRN N/A	National B	Board No. <u>32268</u>
		eport are correct and that all details of	F SHOP COMPLIANCE of design, material, construction, and wo U Certificate of Authorization Number	rkmanship of this vessel conform to the 8728 Expires December 31, 2018
Date 05/08/20	018 Name	Hudson Products	Corporation Sig	gned LABC -
		(Manufac	turer)	(Representative)
		CERTIFICATE C	F SHOP INSPECTION	
I, the undersigne	d, holding a valid c	commission issued by the National	Board of Boiler and Pressure Vessel I	nspectors and employed by
The Hartford Sto	eam Boiler Inspec	ction and Insurance Company, of	Hartford, CT	
		escribed in this Manufacturer's Data f		ind state that,
VESSEL CODE, S concerning the pre	Section VIII, Division essure vessel descri	1. By signing this certificate neither ibed in this Manufacturer's Data Report	his pressure vessel in accordance with the Inspector nor his/her employer make	es any warranty, expressed or implied, nor his/her employer shall be liable in any
Date _{05/1}	17/2018 Sigr	ned ULF	Commissions:	12056 TX1622

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements made in this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization Number Expires

Signed Name

(Assembler) (Representative)

CERTIFICATE 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

(Authorized Inspector)

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 VIII, Division 1. The described vessel was inspected and subjected to a pressure 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.

Commission

(Authorized Inspector) (National Board Authorized Inspector Commission number)

3051515 exe: v6.3.110 U1-16