ational	Board Number	164

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

Page	1	of	3

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

			-								Owne	er equip#	(341A.1-C1	/ 19-X-763	3
1	Mar	ufactu	rod and ce	artified h	у	Δ	Alliance	Fabricati	ng Ltd., 763	Cheste	r Stree	t Sarnia, O	ntario Canada	N7S 5N2		
					7 Graham Corpor				(Name	and addr	ess of Ma	mufacturer)			nerica Ir	nc.
			-						(Nam Ilestra North	e and add	dress of P	'urchaser)				
3.	Loca	ation of	installatio						(Na	me and	address)		II, CA, USA			
4.	Тур	e	(Horizonta	Vertical	r sphere)		(Tank	Heat separator.	Exchanger ikt. vessel, heat o	exch. etc.)		(Manufac	1342 turer's serial	number)	
			N/A			7094	<u>5-0100 l</u>	Rev.5		(N)-11-	164	number)		20. (Year		
5	Λ S N.	AE Code	(CRN) e, Section											•	•	
													[Special			
Iten	ns 6-1				single wall ves		kets of j	аскетеа \							Vessels	•
6.	She		·	r of cours	se(s) 2 (CRS						engtn _		15:		Heat Tr	ontmont
Ala	-	Course(: meter	s) . Length	Spec	_Material ./Grade or Type	Nom.	kness Corr.	Type	Long. Joint (Full, Spot,		Eff.	Type	um. Joint (Cat A,B Full, Spot, None		Temp.	Time
<u>No.</u> 1		1/4" ID	35-7/8"		SA-516,70	3/8"	1/16"	1	None		0.7	1	None	0.7	-	-
1	33-	1/4" ID	118"		SA-516,70	3/8"	1/16"	11_	None	1	0.7	11	None	0.7		-
!				-												
								Body Flan	iges on Shells		3		<u> </u>			
											-		Во	lting Washer	1	
N		Type		OD ·	Flange Thk	Min Hub 1	Thk N	vlaterial	How Attached	Loc	ation	Num & Size	Bolting Material	Washer (OD,ID,thk) Washe	er Material
		- 1/2-			-	-			-	ļ	-	-	-			-
·			-													
7.	Hea	ds: (a)							(b)							
					umber, grade or type							· · · · · ·	grade or type) (H.T.		Category	Λ
		ation (To Itom, end	M1	ickness Corr.	Radius Crown Knuc	Ellip ckle Ra		Conical Spex Angle	Hemisphe Radius		Flat Diame	· }	ide to Pressure nvex Concave		ull,Spot,No	
(a)	100	-	- 141111	-					-		_		-			-
(b)								-					- -			
			T		I			Body Fla	nge on Heads		T		Во	olting		
						<u>.</u>				11 4.4		N 0 Ol		Washer	Wash	or Matorial
(a)		Location	Туре	ID -	OD	Flange T	nk Wir	Hub Thk	Material -	HOW At		- Num & Size	Bolting Material	(00,10,111)	VVasile	er Material -
(b)																
8.	дуТ	e of jacl	ket						Jacket	closure			-			
	16.1.		م مام م معال	a if balta	d, describe or s	kotch						, (c	lescribe as ogee and	a weid, bar, e	ic.)	
•		. 0		S II DOILE	u, uescribe or s	at max	tamn	212°F	=	_	M	lin design	metal temp.	0°F	at ′	150 psig
9.	MA	WP	150 psig (Internal)		(External)	atmax		(Interna		External))	min acolgii				
10.	Imp	act Tes	t <u>See</u>	Remarks	(Indicate yes of no	and the sam	nonont(a)	Impact toeto	nd)		а	at test temp	erature of			
11.	Hvd	ro., pne	eu., or com		ressure 195				Proof tes	·						
	-				or tube sections											
		esheet	SA-	-204,304	<u> </u>	33-1/8"			1-1/8"				0"		Welde	
			[Stationary	(material sp -204,304		er (subject to 33-1/8"	o press.)]	4)	Nominal thickness 1-1/8"	3)			allow.) O"	įAttachi	nent (welde Welde	ed or bolted)] d
				material spe		(Diameter)		(1)	Nominal thickness	5)		(Corr.	allow.)		(Attachme	ent)
13.	Tub			TP304 (\		3/4"			20 BWG A/W				052 mber)		Straigh	
		1)	Material spec.	no., grade	or type)	(O.D.)		(II	Commentification	′1				1,,	, ₁ (-11 might	11
									Ma Danner	ntath:-	//		Í	Data: #	7 17 7 AU	G 10

Form No.: QC-074A

Authorized Inspector JUS NB 14585 A Date: AUG 1 1 2022

Page 2 of 3

FO	R	M	U	1-1

Manu	ufactured by	/ _				Al	liance f	abric	ating	Ltd., 7	63 (Chester	Street	Sarnia,	Ont	ario Cana	da î	N7S 5N2				
Manı	ufacturer's	Serial	No.		1	342			C	RN			N/A		_ Na 	itional Bo	ard	No. 164				
															nT	op Bonne	et: 4	2-7/16" / Bo	otton	n Bonne	et: 18-9.	/16"
	Course	e(s)		<u> </u>	Material		TI	icknes	S			Long. Joi	nt (Cat A)		Circ	um. c	Joint (Cat A,B	& C)		Heat Tre	eatment
No.	Diameter		ength	Sp	ec./Grade o	r Type			orr.	Туре		Full, S	pot, Non			Туре	Fu		-		Temp.	Time
1	33-1/2"							$\overline{}$		1											-	
1		42	2-7/16"		SA-240,30	4L	1/4"	-	0"	1		<u></u>	lone).7	_1		None	-	0.7		
	<u> </u>						_ <u></u>				J.		· · · · · · · · · · · · · · · · · · ·									
									В	ody Flai	nges	on Shell	<u>s</u> .		1			5 111				
			1															Boltii		Machar		
No	Type		n l	OD	Flange T	hk M	in Hub T	nk	Mater	rial	How	Attached	Loc	cation	N	um & Size	E	3olting Materia			Washer	Material
	, , , , , ,	<u> </u>					***************************************				enappine.		Botton			- Andrews - Andrews						
CF.	A Girth	34-	1/8"	37-7/8"	1-5/8"			SA	\-182,F	-304L	Ŋ	Velded			(40)	3/4" – 10 UI	1C	SA-193,B7		-		-
05		1 24	4 /0"	27 7/0"	1 5/9"			92	-182 F	3041	Welded (CRS4) (40) 3/4" - 1 Top Bonnet (CRS1) (40) 3/4" - 1 (b) HD2: (Material spec. num Hemispherical Flat		3/4" – 10 H	VIC!	SA-193 B7		_		_			
CF	B GIIII	34-	1/0	31-110	1-5/0			- 5	(-102,1	0045		VCIGOG	1-10	ixo i/	1(-10)	10 01	10	0// 100,0/	┰			
 	Indicator Serial No. 1342 CRN N/A Netronal Board No. 164																					
L					IDAL GA C	40.20/	II No.	מאובים				(h)			-	HD2. SA	.oãc	3041 1001	DIA/L	1T		
15.	Heads: (a)	(M	aterial spe	c. number, g	rade or ty	ре) (Н.Т.	time a	and ten	ıp.)		(0)		(Mate	erial sp	ec. number,	grade	e or type) (H.T.	– tim	e and tem	p.)	
	Location (Ton T	Th	lckness	F	Radius	T FI	intical	1 (Conical	Т	Hemisp	herical	·					Τ			
								•			е			1		-			Tyr			e Eff
(a)			3/16"	0"	33-1/2	2-1	14	-		-					-				<u> </u>		-	-
(b)	Тор		3/16"	0"	33-1/2	2-1	/4		<u></u>					<u></u>	-			X	<u></u>		Heat Treatment Temp. Time	
									В	ody Fla	nge	on Heads	3									
														-				Boltin		1		
		T.,		ID	00		Elongo T	h	Min Hi	ıh Thk	M	atorial	How At	tachod	. Mun	a si 2 & c	Rolti	na Material			Machai	Material
(a)								111/			1416		1100771	laorica	IVUII	-	DOIG	ng material	100	,1D,011()	VVGSTICI	- Waterian
(b)												-				-		-		_		_
16.	MAWP _	50.7	6 psic	<u> </u>	FV	At	max te	np	4(00 °F			- -	N	1in. d	esign me	tal t	emp	0°F	at	50.7	6 psig
17.									(111)	nemai)		(1	-Atemai)	at tes	t tem	perature	of			_		
					(Indicate y																	
18.	Hydro., pr	eu., c	or com	ıb. test p	oressure .	70 p	sig (Ho	- Sho	op)			Proof te	est					<u> </u>				
19.	Nozzles, i	nsped	tion, a	and safe	ety valve o	pening	s:															
			· ·					N.	1ateria	1		Mozz	le Thickr	2221	T D	oinforceme	of T	Attachme	ent De	etails	Loc	ation
(Inlet		ı. etc.)	No	i	1	Type	1				\dashv				┧ '"		<u>"</u>					
Milot		2.2.1				RFSO	SA	-106,B								*			U۷		S	nell
	Test		181.1									0.000			_	-				- AL O4/4)		
											+				-	-						
									-	-	\dashv				1	-						
20.		Skirt:	No						O her)	Othe	ers	(2) V	ertical	Suppor	ts	Attache			Welc		hell	
04	Manufact	ıror'o	•										•	,	have	e been fu	nish	ed for the f	,		•	e
21.	report (list	the n	ame p	part, iten	n number,	Manu	facturer	's nar	ne, a	nd ider	ntifyi	ing num	ber):	pootoro	11446	, soon rai	71101	704 101 1110 1	001	THIS ICO	,,,,	
22.	Remarks	1)	Imp	act tes	t exemp	per U	IG-20() & L	JHA-	51(d)	<u>& U</u>	JCS-66	(a) & F	ig UC	S-66	NOTE	(c) {	<mark> ԱG-84(</mark> c	:)(3)			
		.,	n U-4,	U-5																···		
																/ _						
															1	0				***		4.6
											Mfa	g. Repre	sentativ	ve /	da.	X.		Da	ite:	2022	l AUG	10
												-		1		Lass	es e		-		IC 1:4	2020
										/	Auth	norized I	nspect	or	O	JB#145	85	<i>[+</i>] Da	ite: _	AU	ו טו	LULL

					National B	oard Number		164	
		FORM U-	1			Page ,	3	_ of	3
Manufactured by	Alliance	Fabricating Ltd., 763 Ch	ester Street Sa	arnia, Ontario Canac	la N7S 5N2				
Manufacturer's Serial No.	1342	CRN	N/A	National Boa	rd No16	34			
		CERTIFICATE OF SHOP	COMPLIANC)E					
We certify that the statements conform to the ASME BOILER A	ND PRESSURE VESS	EL CODE, Section VIII,		erial, construction,	and workm	nanship of t	his ve	essel	
U Certificate of Authorization Nun		33851	Expires	Mar. 28, 2024	10				
Date <u>2022 Aug, 10</u> Na	ame <u>A</u> l	liance Fabricating Ltd. (Manufacturer)	S	Signed	(Rep	resentative)			
		CERTIFICATE OF SHO	P INSPECTIO	N					
i, the undersigned, holding a v		d by the National Boar		d Pressure Vessel			loyed	by	
	TSSA	aufacturaria Data Banart	of	AUG 1 1	Onta 2022	rio		, an	
have inspected the pressure ves- state that, to the best of my kno	ser described in this ivial	Manufacturer has cons	tructed this or			with ASME	BOIL F		
PRESSURE VESSEL CODE, Se	etion VIII Division 1 By	signing this certificate n	either the inspe	ector nor his/her emp	lover make	s anv warra	ntv. ex	xpres	sed
or implied, concerning the press	ure vessel described in	this Manufacturer's Dat	a Report. Furt	hermore, neither the	Inspector	nor his/her	emplo	yer s	hall
he liable in any manner for any p	ersonal injury or propert	y damage or loss of any	kind arising fro	m or connected with	this inspec	tion.			
Date AUG_1_1 2022_ Si	aned 1		· · · Commis	sions ANT ILIC	W.C.A.				
Date	griod (At	ithorized Inspector)		[National Box	ard Authorized	Inspector Comm	ilssion n	iumber))
and the second s		CERTIFICATE OF FIEL	D ASSEMBLY	(-	-	
We certify that the statements in of ASME BOILER AND PRESSU	this report are correct a RE VESSEL CODE, Sec	nd that the field assembletion VIII, Division 1. U C	y construction ertificate of Au	of all parts of this ve thorization Number	ssel confor	ms with the Expire	requir	remer	nts
DateNa	ime	(Assembler)	Sigr	ned	/Danne	entative)			
		(Assembler)			(izebres	enauve)			
	CERTI	FICATE OF FIELD ASS	EMBLY INSPE	ECTION					
I, the undersigned, holding a v	alid commission issue	d by the National boar	d of Boller an	d Pressure Vessels	s Inspector	s and empl	oyed	by	

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 and 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.

(Authorized Inspector)

, have compared the statements in this Manufacturer's Data Report with the described pressure vessel

_____ Commissions

, not included in the certificate of shop inspection, have been

(National Board Authorized Inspector Commission number)

of

and state that parts referred to as data items

Signed ____

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured	and cer	tified by	fied by Alliance Fabricating Ltd., 763 Chester Street Sarnia, Ontario, Canada N7S 5N2 (Name and address of Manufacturer)											
2. Manufactured	for _	Graha	m Corporat	tion, 20 Flore	nce Ave, Bat	avia, New Y	ork, USA, 1	4020 for Desme	t Ballestra N	orth Americ	a Inc.			
Location of Ins	tallation					atavia, New York, USA, 14020 for Desmet Ballestra North America Inc. (Name and address of Purchaser) stra North America Inc., Paramount, CA, USA								
5. Location of the	lanation				comot banco	(Name	and address)	aramoung or g		 				
4. Type		Vertical Horizontal, vertical,	or aphoral			Heat Exc	hanger		(Manufacti	1342 urer's serial nun	her)			
	N/A	Horizontal, Vertical,		'0945-0100 F	Rev.4		164		(Manajaott	2022	ibery			
	(CRN)			(Drawing numb	oer)		(National Board	number)		(Year built)				
Data Report					<u></u>	Ren	narks			·				
Item Number 19)								MARKET WILLIAM TO THE TAXABLE PROPERTY OF		,	7			
							· · mi							
Purpose	T	Diameter		Ma	terial	Nozzle 1	hickness	Reinforcement	Attachme	nt Details	Location			
(Inlet, Outlet, Drain, etc.)	No.	or size	Туре	Nozzle	Flange	Nom.	Corr.	Material	Nozzle	Flange	(Insp. Open.)			
Drain	1S4	3/4" CL 3000	CPLG	SA-105	-		1/16"		UW-16.1(z-1)		Shell			
Vangurlalet	1T1	18" CL 150	RFSO	SA-312, TP304L	SA-182,F304L	1/4"	0"	_	UW-16.1(c)	UW-21(1)	Channel			
Vapour Inlet Test	1T1.1	3/4" CL 3000	CPLG	SA-182,F304L		-	0"	_	UW-16.1(z-1)	*	Channel			
				SA-312,		0.00=	0.11		UW-16.1(z-1)	UW-21(1)	0			
- Vapor Outlet	- 1T2- 1T2.1	3/4" CL 3000	RFSO CPLG	TP304L - SA-182,F304L	SA-182,F304L	. 0,337."	0"		UW-16.1(z-1)		Channel			
Test	1112.1	3/4" CL 3000	CPLG	SA-102,1-304L			U		``````		Offariner			
Condensate Outlet	1T3	4" CL 150	RFSO	TP304L	SA-182,F304L	0.337"	0"	н	UW-16.1(c)	UW-21(1)	Channel			
Seal Purge	1T4	6"	STUDDED	SA-240,304L		-	0"		UW-16.1(z-1) UW-16.1(z-1)	-	Channel Channel			
Vent	1T5	1/2" CL 3000	CPLG	SA-182,F304L SA-312,	-		<u> </u>			······································	Chainei			
Spray Nozzle	TP1	1-1/2" CL 150	RFSO		SA-182,F304L	1/4"	0"	-	UW-16.1(c)	UW-21(1)	Channel			
										· · · · · · · · · · · · · · · · · · ·				
		200100												
											-			
N. A. C.														
									273455					
														
														
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										···				
											,			
Certificate of Author	orization	n: Type		J	No	338	51	Expires		Mar. 28, 20	24			
D-4- 0000 A	10	Nama	Allia	nce Fabricati	na I td		Signed		/					
Date <u>2022, Aug</u>	. 10	Name	Alliai	(Manufacturer)	ng Ltu.		olyneu	-14	(Represer	tative)				
Date AUG 1.1	2022	*Aprenament			AND THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRE	_			Test 1					
Date AUU I I	E V Lots	Name	J - C/	uthorized Inspect	or)	Coi	mmissions	NO 14	> 50> //	octor Com-sis-1	on number			
			· (A	athonizou mapeot	<i>j</i>			, (National Roat)	d Authorized Inspe	JULUT COMMISSI	on number)			

FORM U-5 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET SHELL-AND-TUBE HEAT EXCHANGERS

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

		.,						Equip I	No.: 641A.1-C1	/ 19-X-763		
Manufactured and	i certifie	d by			Alliance Fabri	cating Ltd., 763 C	hester Street S	arnia, Ontario, Ca	nada N7S 5N2			
Name of an dead		Grah	am Cor	noration	20 Florence A	·	nd address of Manu York TISA 140	_{facturer)} 20 for Desmet Ba	llestra North An	nerica Inc.		
Manufactured for	****	Olai	iani coi	porution,		(Name a	nd address of Purcha	iser)		101100 11101		
Location of Install	ation _	·			Desmet		.merica Inc., Pa e and address)	ramount, CA, US	4			
Туре		Verti	cal			13	42		N/A			
	Horizo 0100 Re	ontal, vertic	cal, or sphe	ere)		(Manufacturer's	serial number)		(GRN) 2022			
(Draw	ing numbe	r)			1)	National Board number)			(Year built)			
				FIXED	SHELL-AND-	TUBE HEAT EXC	HANGER DAT	ΓΑ				
	Desig	n/Opera		essure	Maxim	um Design/Opera	ting Metal Tem	perature	Allowable Ax	ial Differentia		
			nges		·	T T	ang motor rom	T	Thermal Expa	ansion Rang		
Name of Condition	Shell	Side		Side	Shell	Channel	Tubes	Tubesheet				
	Min.	Max.	Min.	Max.		weiter		itai	Min.	Max.		
	units: PSI	units: PSI	Units: PSI	units: PSI	units: °F	units:	units: °F	units: °F	units: in	Units: in		
- Design		150		50.76	-212	400	400	400	-0.03	0		

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Data Report Item Number						R	emarks					
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						444						
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antificate of Authority	ation:	Туре _		U	No.	33	851	Expires	) Mar. 28	, 2024		
ertificate of Authoriz									/			
	NI.	ame		Alliance	Fabricating Lt	d.	Signed					
ate 2022 Aug. 10	Na	ame			Fabricating Lt	d.	Signed _	of the work	(Representative)	- n-		