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

	Manuf	factured and	certified by	APV	Products	Heat 7	Fransfe	r - Gol	dsboro, 1200	W. As	h Stre	et, Go	ldsboro	, NO	2753	3		
2.	Manuf	factured for E	vonik [egus:	sa Corpor	ation,		ox 868,	Theodore, A	. 365	90							
3.	Locati	on of Installa	tion Evo	nik De	gussa Co	orpora	tion, 42	01 Dec	ussa Rd., Th	eodoı	e, Al.	36582						
4.	Type: Vert.				(Name and Address) Heat Exchanger (Tank, separator, jkt. vessel, heat exh., etc.)							G200900008 (Mfg.'s serial No.)						
	(Horiz, or vert., or sphere				0900008 REV0				1057		2009							
_	10115	(CRN)	\ /// Di		(Drav	wing No.)	2000		(Nat'l, Bd, No					(Year b	ouilt)			
					Edition and Addenda (date)				N/A Code Case No.					Special Service per UG 120(d)				
Items 6. S		incl. to be co (a) No. of			wall vessels no shell	, jackets			ils, shell for heat e	xchang	ers, or o	hamber	of multi-c	hamb	er vess	els.		
-	-	Course(s)			Material	Thic	kness	<u> </u>	Long. Joint (Cat. A)			Circum. J	oint (Cat. A,	B, & C)		Heat Tr	ealment	
No.	Dia		ength (ft & in.)	Spec./	Grade or Type	Nom.	Corr.	Туре	Full, Spot, None	Eff.	Туре	Fu	I, Spot, None)	Eff.	Temp.	Time	
	-									-	-			-	-			
-	+			+			-			+	1							
														***		E		
7.	Heads	s: (a) SA5	16-70 H	ead, F	., Grade or Type) H.T Tin	ne & Temp.		(b) <u>SA51</u>	6-70	(Mat'l Sp	ec. No., Gra	nde or Type)	н.т т	ime & Ter	np		
		Location (Top	Thick	ness	Radiu	s	Elliptical	Cor	nical Itemispherica	1 1	lat	Side to	Pressure	1		догу А		
-,		Bottom, Ends)	Min.	Corr.	Crown	Knuckle	Ratio	Apex	Angle Radius		meter MMX	Convex	Concave	Туре	Full, Sp	at, None	Eff.	
(a)	END	30MM	MMO				6		100000000000000000000000000000000000000	6MM							
(0)	END	30MM	OMM							MMX							
	*. I									122	1MM		2.1	1 1				
					astenings) B			(Matt., Spe	M24, Nuts 20 Sec. No., Grade., size, No	SA194	-2H N	l24						
3.	Туре	of jacket	ions					(Matt., Spe	et closure	(Des	I-2H N				ed, des °C at	cribe or 10.3 10.3	3/ B	
8. 9. 10.	Type If bar, MAW	give dimens P 10.3/ 10.3 (internal)	externa	ii) ct exer	Bar at max. temp. mpt per fig	(int	emal) -66(e) ndicate yes o	(external)	et closure C components(s) impact	(Des	ribe as og	tal temp.		-	°C at	10.3 	3/ B	
3. 9. 10.	Type If bar, MAW	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or	(externsing, Impacomb. test	ct exer	Bar at max. temp. mpt per fig	(int	emal) -66(e) ndicate yes o	(external)	et closure C components(s) impact	(Des	ribe as og	tal temp.	-29	-	°C at	10.3 	3/ B	
3. 9. 10. 11. Item	Type If bar, MAW Impac Hydros 12 a	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or one and 13 to be disheet:	(externsing, Impacomb. test	ct exer	Bar at max. temp. mpt per fig 13.4 sections.	(int	emal) -66(e) ndicate yes o	(external) or no and the coof test	et closure C components(s) impact	(Descue) (Descue) (Descue) (Descue)	ribe as og	tal temp.	-29 emperat	- ure d	°C at	10.3 	3/ B	
3. 9. 10. 11. Item	Type If bar, MAW Impac Hydro s 12 a Tube	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or one and 13 to be disheet:	(externance, Impair comb. test completed	ct exer	Bar at max. temp. mpt per fig 13.4 sections.	in UCS- (II 4 Bar	emal) -66(e) ndicate yes o	(external) or no and the coof test	et closure C components(s) impact	(Dasa) (Dasa) (IDasa) (IDasa) (IDasa)	sign me	tal temp.	-29 emperat	ure o	°C at	10.3 10.3	3/ B	
8. 9. 11. 11. Ilterm	Type If bar, MAW Impac Hydro s 12 a Tube	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or ond 13 to be disheet: Site ating (Mat'l Spec.	(externance, Impair comb. test completed attorary (Math	ot exer	Bar at max. temp. mpt per fig 13. sections. Dia., in.	(int I. UCS- (I 4 Bar	ernat) -66(e) ndicate yes o	(external) or no and the coof test	et closure C components(s) impact	(Dasa) (Dasa) (IDasa) (IDasa) (IDasa)	sign me	tal temp.	-29 emperat	- ure o	of	10.3 10.3	3/ B	
3. 9. 110. 111. Item 112.	Type If bar, MAW Impac Hydres 12 a Tubes Tubes S 14 -	of jacket , give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or ond 13 to be disheet: Steating (Mat'l Spec. ss:	(external grant of the completed attendary (Mathematics No.)	ct exer press. for tube	Bar at max. temp. mpt per fig 13 sections. Dia., in.	(int UCS- (I 4 Bar)	ernal) -66(e) ndicate yes o	(external) or no and the roof test Nom. (his	et closure °C e components(s) impact om. thk., in. c., in. m. thk., in. or gauge	(Dasa	sign me arr. Allow.	tal temp.	-29 emperat	- ure o	°C at	10.3 10.3	3/ B	
3. 9. 11. 11. 12.	Type If bar, MAW Impac Hydres 12 a Tubes Tubes S 14 -	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or of sheet: St ating (Mat'l Spec. s: Mat'l Si 18 incl. to be (a) No. of	(external grant of the completed attendary (Mathematics No.)	ct exer press. for tube	Bar at max. temp. mpt per fig 13 sections. Dia., in.	(int UCS-(I) (I) (I) (I) (I) (I) (I) (I) (I) (I)	ernat) 66(e) ndicate yes of press.)	(external) or no and the roof test Nom. (his	et closure °C e components(s) impact om. thk., in. c., in. m. thk., in. or gauge	(Dasa	sign me arr. Allow.	tal temp. t test te	-29 emperat	- Ure (of	10.3 10.3	3 °	
3. 10. 11. tem 12.	Type If bar, MAW Impac Hydres \$ 12 a Tubes Tubes \$ 14 - Shell	of jacket give dimens /P 10.3/ 10.3 (internal) ct test Boltin o., pneu., or of sheet: St ating (Mat'l Spec. s: Mat'l Sp 18 incl. to be (a) No. of Course(s)	(external grant of the completed attendary (Mathematics No.)	ot exer	Bar at max. temp. mpt per fig 13.4 sections. Dia., in. Dia., in.	(int UCS-(I) (I) (I) (I) (I) (I) (I) (I) (I) (I)	ernal) -66(e) ndicate yes of press.) press.)	(external) or no and the roof test Nom. (his	et closure °C e components(s) impact om. thk., in. k., in. m. thk., in. or gauge annels of heat exc in.):	(Dasa	sign me arr. Allow.	tal temp. t test te	-29 emperat	- Lure C	of	10.3 10.3	a)	
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8. 9. 10. 11. Iltern 12. 13. Iltern 14. No	Type If bar, MAW Impac Hydres 12 a Tubes Tubes Shell	of jacket	(external grant of the completed attoracy (Mathematics of the complete of course (s)) ength (It & in) (Mathematics of the course (s))	ct exer press. for tube spec. No de or Type d for inn) Spec.	Bar at max. temp. mpt per fig 13.4 sections. Dia., in. Dia., in. er chambers Material /Grade or Type	(int I. UCS- (I 4 Bar O.D., in. s of jacke (b) (Third Norm.	B88 ernat) -66(e) ndicate yes of press.) eted vesses Overall ler ckness Corr. Elliptica	(external) or no and the coof test Nom. this els or changth (ft &	et closure *C components(s) impact orn. thk., in. c., in. m. thk., in. or gauge annels of heat exc in.): Long. Joint (Cat. A) Full, Spot, None (b)	(Dasa (Dasa)	sign me arr. Allow. Numbers. Type	tal temp. t test test test test test test test t	-29 emperat Joint (Cat. A. all, Spot, Non Prade or Type	- Altachm	of nent (weld trachmen pe (Straig) Eff. Fime & Fc Cate	10.3 10.3 10.3 Heat Ti Temp	a)	
8. 9. 10. 11. Item 12. 13. Item 14. No	Type If bar, MAW Impac Hydres 12 a Tubes Tubes Shell	of jacket	(external grant of the completed attoracy (Mathematics of the complete of course (s)) ength (It & in) (Mathematics of the course (s))	ct exer press. for tube spec. No de or Type d for inn) Spec.	Bar at max. temp. mpt per fig 13.4 sections. Dia., in. Dia., in. er chambers Material /Grade or Type	(int I. UCS- (I 4 Bar O.D., in. s of jacke (b) (Thin Norm.	B88 ernat) -66(e) ndicate yes of press.) eted vesse Overall ler ckness Corr.	(external) or no and the coof test Nom. this els or changth (ft &	et closure °C e components(s) impact om. thk., in. c., in. m. thk., in. or gauge annels of heat exc in.); Long. Joint (Cat. A) Full, Spot, None	(Dasa (Dasa)	sign me as ago sign me arr. Allow. Numbers. Type	tal temp. t test test test test test test test t	-29 emperat	Altachm	of nent (weld trachmen pe (Straig) Eff. Fime & Fc Cate	10.3 10.3 10.3 Heat Ti Temp	3/ B	

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

If removable, bolts used (describe other fastenings)

FORM U-1 (Back)

16.	MAWP (intern	all)	(external)	osi at max, ten	np. (interna	i) (externa	°F	Min.	design metal ter	np	°F at	psi		
17.	Impact test _								at test	t temperatu	ire of	°F		
18.	B. Hydro., pneu., or comb. test press. (Indicate yes or no and the components(s) impact tested) Proof test													
19.	Nozzles, inspec	ction, a	and safety va	lve openings:										
F	Purpose (Inlet		Diameter	Flange	Mat	erial	Nozzie T	hickness	Reinforcement	t How Attached Location				
Ou	tlet, Drain, etc.)	No.	or Size	Туре	Nozzle	Flange	Nom.	Corr.	Material	Nozzie	Flange	(Insp. Open.)		
	INLET	2	76MM	MACH'D					NONE			HEAD		
	OUTLET	2	76MM	MACH'D					NONE			HEAD		
											va manananan			
								William r						
20.	Supports: Skirt		10 Lug	s 0	Legs	0	Others		cot	Attached	Lland	Dalkad		
	5220	(yes o		(No.)	-	(No.)	_	Feet (Describe)		- Attached	(Where and how)			
0.4		**********	10,7040	1700000	7.020 N	- 400 / 100 K								
21.	Manufacturer's (List the name	Partia	I Data Report	s properly ide	entified and si	igned by Con	nmissioned Ir	nspectors ha	ave been furnish	ed for the foll	owing items	of the report:		
	(List the name t	or part	, item number	r, mig s. name	and identify	ing number)								
22.	Remarks: He	ads,	Impact ex	empt per l	JCS 66 (a)(3), Fixed	Head to I	Movable	head distan	ce 195mm	1			
	Heat trans	fer p	lates, Mat	1 SA240-3	16, .5mm	thick, qty	60, Impac	t exempt	per UHA 51	(d)(1)				
			- 1000 1000 1000 1000 1000 1000 1000 10					•	***************************************	\-/\-/				
	PRESSUR	E RE	LIEF DEV	ICES SUPI	PLIED BY	OTHERS	PER UG-	125 (A)						
		25			CERTIFI	CATE OF	SHOP CO	MPLIANC	E					
Co	e certify that the st de for Pressure V	ateme	nts made in the	nis report are co Division 1	orrect and tha	it all details of	design, mater	rial, construc	ion, and workma	nship of this v	essel conform	to the ASME		
					h.h. 45 0	000				_				
	Certificate Authoria				July 15, 2			1	1 -11					
Da	te 2/10/0	27	Name APV			sfer - Gold	Isboro Sig	ned	0110					
				(M	lanufacturer)					(Representative)			
							SHOP INS							
	ne undersigned, I				by the Nati	onal Board o	f Boiler and					A STATE OF THE PARTY OF THE PAR		
Ca	irolina and em sel described in	ployed	Manufactured	CT.	4 0 7	10 100		of	Hartford Con	necticut	have inspec	ted the pressure		
con	structed this pres	sure v	essel in accor	dance with AS	SME Code. S	ection VIII D	, and state ivision 1 By s	inat, to the	e best of my k	the Inspector	nor his empl	lanulacturer has		
war	ranty, expressed	or imp	lied, concernin	g the pressure	vessel descri	ibed in this Ma	anufacturer's D	Data Report	Furthermore ne	ither the Inspe	ctor nor his e	molover shall be		
liab	le in any manner i	or any	personal injur	y or property d	amage or a lo	ss of any Rind	arising from o	or connected	with this Inspecti	on.				
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 924 10 / 9 Signed (Authorized Inspector) (Natt Board, incl. endorsement, State, Province and No.)														
			11		TIFICATE	OFFIELD	ASSEMBL	Y COMP	LIANCE	rica and ivo.)				
We	certify that the st	ateme	nts on this rep	ort are correct	and that the fi	ield assembly	construction of	of all parts of	this vessel confo	ms with the re	quirements o	f ASME Code,		
Sec	ction VIII, Division	1.			1201000000									
U Certificate Authorization No. Expires														
Ua	te/		Name	(Assembler)		Sigr	ned							
-					TIEICATE	OF CIEL O	ACCEMO		resentative)			**************		
I. th	e undersigned, ho	oldina	a valid commis	CEN sion issued by	the National	Board of Boile	ASSEMB	LY INSPE	CHON	o State of De-	vinos of	المدورية		
emp	ployed by						of					and have		
con	pared the state	ements	s in this M	anufacturer's	Data Repor	t with the	described pr	essure ves	sel and state	that parts r	eferred to	as data items		
-	Management and the Art Co.				not included	in the certifica	te of shop inst	pection, have	been inspected	by me and to t	he best of my	knowledge and		
and	ef, the Manufactur subjected to a h	vdrost	atic test of	nu assembled	nis pressure	vesser in acci v signing this	cedificate no	ther the loca	Section VIII, Divi pector nor his en	ision 1. The de	scribed vesse	el was inspected		
imp	lied, concerning t	he pre	ssure vessel o	described in th	is Manufactu	rer's Data Re	port. Furthern	nore, neither	the Inspector no	or his employe	r shall be liabl	e in any manner		
for:	any personal injur	y or pr	operty damag	e or a loss of a	ny kind arising	g from or conn	nected with this	s inspection.				cy / maining		
Dat	e/_/_	Si-	ned			_								
Jul		ગવ		horized Inspector)		Cor	nmissions (Natl	Board. (Incl. end	lorsements) State, Pro	v. and No.	e 11 - 161			
_														