National Board Number: \_\_\_\_\_

Mfr. Representative: _	Date:
Authorized Inspector:	Date:

	As R	equi			I-1 MAN												ll, Div	ision 1		
1. I	Manufact	ured a	and certifie	ed by																
										(Na	me and add	ress	of Manufactu	urer)						
2. I	Manufact	ured f	or						(Na	me and	address of	Purc	chaser)							
3. I	_ocation (	of inst	allation _							(	Name and	addro	ress)							
4	Гуре		(Horizonta	l, vertical, or	sphere)		(	Tank, sepa	arator,	jkt. ves	sel, heat ex	ch., e	etc.)		()	/lanufacture	r's serial	number)		
	(	CRN)				(Drawi	ng numl	ber)				-	1)	Vationa	l Board nur	nber)		(Year	built)	
5. /	ASME Co	de, Se	ection VIII,	Div. 1 _	[Edition and											10			-0.1	
			-		ngle wall	vessels, ja	nckets	of jacke	eted	vesse	ls, shell	of h	heat excha	-		mber of	-	er UG-120( hamber		
0. 3	Shell. (	Cours				Material		(u		kness			ng. Joint (Cat.			oint (Cat. A	, B & C)	Heat Tre	eatment	
No.	Diar	neter		ength	Spec./	Grade or Typ	e	Noi		Cor	r. Typ		Full, Spot, None	Eff.	Туре	Full, Spot, None	Eff.	Temp.	Time	
								_												
							B	ody Flang	jes on	Shells										
												_				Bolting W	asher			
No.	Туре	ID	OD	Flange Thk	Min Hub The	K Mat	erial	Hov	How Attached		Location	N	lum & Size	Bolting Material		(OD, ID, thk)		Washe	Washer Material	
												-								
7. 1	Heads: (a)	)									(b)									
	1				mber, grade or		– time a	ind temp.)			1		(Material spe	ec. num	. 0	71	Г. — time			
	Location ( Bottom, Er		Min.	cness Corr.	Crown	Radius Knuc		Elliptical Ratio			Hemis. Radius		Flat Diameter	С	Side to Pr onvex	essure Concave		Category Full, Sp None	ot, <sub>Fff</sub>	
(a)														+				None	,	
(b)																				
		1	T		· [ · · · · · · · · · · · · · · · · · ·		1	Body Fla	anges	on Hea	ds	_				D. It's s				
	Location	Тур	be ID	OD	Flange Thk	Min Hub Th	k	Material		Hov	v Attached	N	lum & Size	Bolt	ing Materia		/asher , ID, thk)	Wash	er Material	
(a)	Loodtion				i lango i lik			materia						, 10, 111,	vvasi					
(b)																				
												re _		])	Describe as	ogee and v				
		e dim	ensions _															scribe o		
9. I	MAWP _	(Intern	nal) (E	xternal)	at max. tei	mp	(Interr	nal)	(Exte	ernal)			ign metal							
10.	Impact te	st			[Indicate yes	or no and the	e compo	onent(s) im	pact te	ested]			a	t test	tempera	ature of				
				•	ure ube section				_ Pr	roof te	est									
12. <sup>-</sup>	Tubeshee	t[Sta	ationary (mat	erial spec. n	p.)] [Diar	neter (subjec	t to pres	ss.)]		(Nomin	al thickness	)		(Cor	r. allow.)		Attachme	ent (welded	or bolted)]	
		[FI	loating (mate	rial spec. no	.)]	(Diamete	er)		(N	ominal	thickness)			(Corr.	allow.)		(A	ttachment)		
13. '	Tubes (N	laterial s	spec. no., gra	de or type)		(O.D.)			(No	minal th	nickness)			(Nur	nber)		[Туре	e (straight c	or U)]	

National Board Number:	
Mfr. Representative:	Date:
	_Date
Authorized Inspector:	Date:

## FORM U-1 (Cont'd)

Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

Image: Section of the section of th											1												
Image: No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     Image: No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   (OD, D, 1hk)   Wesher     Image: No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   (OD, D, 1hk)   Wesher     Image: Number, State   Image: Number, Numer, Numer		Course(s) Material						_	Thickness Lo			-						atment					
No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     I   I   I   I   I   Image Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   (OD, D, Ithk)   Washer     I   Image Thk   Image Thk   Min Hub Thk   Material   Image Thk   Image Thk <td>No.</td> <td>Dia</td> <td>meter</td> <td></td> <td>Le</td> <td>ngth</td> <td>S</td> <td>bec./Gr</td> <td>ade or Type</td> <td></td> <td>Nor</td> <td colspan="2">Nom.</td> <td>r.</td> <td>Туре</td> <td>Full, Spot, None</td> <td>Eff.</td> <td>Туре</td> <td>Full, Spot</td> <td>' Eff.</td> <td>Temp.</td> <td>Time</td>	No.	Dia	meter		Le	ngth	S	bec./Gr	ade or Type		Nor	Nom.		r.	Туре	Full, Spot, None	Eff.	Туре	Full, Spot	' Eff.	Temp.	Time	
No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     I   I   I   I   I   Image Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   (OD, D, Ithk)   Washer     I   Image Thk   Image Thk   Min Hub Thk   Material   Image Thk   Image Thk <td></td>																							
No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     I   I   I   I   I   Image Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   (OD, D, Ithk)   Washer     I   Image Thk   Image Thk   Min Hub Thk   Material   Image Thk   Image Thk <td></td>																							
No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     I   I   I   I   I   Image Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   (OD, D, Ithk)   Washer     I   Image Thk   Image Thk   Min Hub Thk   Material   Image Thk   Image Thk <td></td>																							
No.   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting   Material   Washer     I   I   I   I   I   Image Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   (OD, D, Ithk)   Washer     I   Image Thk   Image Thk   Min Hub Thk   Material   Image Thk   Image Thk <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>E</td> <td>Body Flang</td> <td>es on</td> <td>Shells</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										E	Body Flang	es on	Shells										
No.   Type   ID   OD   Flage Thk   Min Hub Thk   Material   How Attached   Location   Num & Size   Bolting Material   Washer   Material     I										_									Bolting				
N   N		Tupo	חו		00	Elango Th	Min Hub	Thk	Matori		Но	Ar Atto	abad	Loop	tion	Num 8 Ci		a Mataria	W (00	asher	Washer	Matoria	
(Material spec. number, grade, or type) (H.T. — time and temp.)     Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat   Side to Pressure   Category A     (a)	NU.	Type			00	riange rin	( WIIII HUL	THK	Wateri	aı	1100	N Alla	cheu	LUCA		Nulli & Size	Doitin	g wateria		, ID, LNK)	vvasitei	vvasner Materia	
(Material spec. number, grade, or type) (H.T. — time and temp.)     Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat   Side to Pressure   Category A     (a)																							
(Material spec. number, grade, or type) (H.T. — time and temp.)     Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat   Side to Pressure   Category A     (a)				_																			
(Material spec. number, grade, or type) (H.T. — time and temp.)     Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat   Side to Pressure   Category A     (a)																			-				
(Material spec. number, grade, or type) (H.T. — time and temp.)     Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat   Side to Pressure   Category A     (a)																							
Location (Top, Bottom, Ends)   Thickness   Radius   Elliptical Ratio   Conical Apex Angle   Hemis. Radius   Flat Diameter   Side to Pressure   Category A     (a)	5. H	Heads: (a	)										(	b) _									
Location (1op, Bottom, Ends)   Min.   Corr.   Crown   Knuckle   Ratio   Apex Angle   Radius   Diameter   Convex   Concave   Type   Full, Spot.   I     (a)					(Materi	al spec. nui	mber, grad	e, or ty	pe) (H.T. — 1	time	and temp.)					(Material sp	ec. num	nber, grad	e, or type) (	H.T. — time	e and temp.)	)	
Bottom, Ends)   Min.   Corr.   Crown   Knuckle   Ratio   Apex Angle   Radius   Diameter   Convex   Conceve   Type   Full, Spot, Investigation     (a)		Location /	Ton		Thick	iness		R	adius		Elliptical	6	nicol		lomia	Elet		Side to F	ressure	essure		Category A	
Body Flanges on Heads   Bolting     Body Flanges on Heads   Bolting Material   Washer Ma     Location   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (a)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (a)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (a)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (b)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (b)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     5.   MAWP   (Internal)   (Internal)   (Internal)   (External)   Min design metal temp.   at test temperature of   at test				Mi	n.	Corr.	Cr	own	Knuckl	e							C	onvex	Concave	Туре	Full, Spo	<sup>t,</sup> Eff.	
Image: constraint of the constraint								-		-				┢			_				None		
Body Flanges on Heads     Body Flanges on Heads     Location   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer     (a)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   (OD, ID, thk)   Washer Material     (b)   ID   I									_	_				<u> </u>							_		
Location   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting     (a)   (a)   (D)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer   Masher Ma     (a)   (D)   ID   ID   ID   ID   ID   ID   Washer     (b)   ID   ID   ID   ID   ID   ID   ID   ID   ID     6.   MAWP	(b)																						
Location   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting     (a)   (a)   (D)   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   Washer   Masher Ma     (a)   (D)   ID   ID   ID   ID   ID   ID   Washer     (b)   ID   ID   ID   ID   ID   ID   ID   ID   ID     6.   MAWP											Body Fla	nges	on Hea	ds									
Location   Type   ID   OD   Flange Thk   Min Hub Thk   Material   How Attached   Num & Size   Bolting Material   (OD, ID, thk)   Washer Material     (a)													T		L				Bolting				
(a)   (		Location	Т	/pe	ID	OD	Flange	Thk Mi	n Hub Thk		Material		How	Attac	hed N	Num & Size	Bolti	ng Materi			Washe	r Materi	
(b)   at max. temp.	(a)		-																	,,,			
6. MAWP at max. temp Min. design metal temp at test temperature of																							
2. Impact test				I				I	I				1										
2. Impact test	5. N	/IAWP _	(Inter	nal)	(Ext	ernal) é	at max.	temp	(Inte	rnal)	(F	vtern	al)	Min	. desig	n metal te	mp			_ at			
Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Purpose Indicate yes or no and the component(s) impact tested] Purpose Indicate yes or no and the component(s) impact tested] Material Nozzles, inspection, and safety valve openings: Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Material Nozzles, inspection, and safety valve openings: Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and the component(s) impact tested] Indicate yes or no and tested yes or no and tes					(EAC	ernar,			linco	inan,	(1	Atom	ui)				+ + 0 0 + +	ompore	turo of				
Purpose (Inlet, Outlet, Diameter Material Nozzle Thickness Reinforcement Attachment Details Location	. m	npact tes	ι			[	Indicate y	es or no	and the co	mpo	nent(s) imp	act tes	sted]			a	เเธรเเ	empera	iture or				
9. Nozzles, inspection, and safety valve openings: Purpose (Inlet, Outlet, Diameter Material Nozzle Thickness Reinforcement Attachment Details Location	з. н	lydro., pr	neu.,	or cor	nb. te	st press	ure					Pro	of tes	t									
Purpose (Inlet, Outlet, Diameter Material Nozzle Thickness Reinforcement Attachment Details Location	9. N	lozzles, ir	nspec	ction, a	and s	afety val	ve oper	ings:															
(Inlet, Outlet, Diameter Material Nozzle Interfers Reinforcement Attachment Details Location		Purpose				· 	•				. ,												
Drain, etc.)No.Of SizeTypeNozzleFlangeNom.Corr.MaterialNozzleFlange(Insp. OperImage: Size Size Size Size Size Size Size Size	(In	nlet, Outlet,					-			later	-				1	Neimo		·			1		
Image: state in the state in	L	Drain, etc.)		No.		5126	Type		Nozzle	$\rightarrow$	Flan	ge		lom.	Corr.	Ma	terial	N	ozzle	Flange	(Insp. (	Jpen.)	
Image: state of the state										-+						_		_					
Image: Sector of the sector										$\dashv$						_							
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21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report (list the name of part, item number, Manufacturer's name, and identifying number):

22. Remarks

National Board Number: _	
Mfr. Representative:	Date:
Authorized Inspector:	Date:

## FORM U-1 (Cont'd)

CERTIFICATE OF SHOP COMPLIANCE
We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel
conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.
U Certificate of Authorization Number Expires
Date Name Signed (Representative)
CERTIFICATE OF SHOP INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by of
have inspected the pressure vessel described in this Manufacturer's Data Report on, and
state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND
PRESSURE VESSEL CODE, Section VIII, Division 1. 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.
Date Signed Commissions [National Board (incl. endorsements)]
CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE
We certify that the statements 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
Date Name Signed (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
of, 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 hydro-
static 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.
Date Signed Commissions
(Authorized Inspector) [National Board (incl. endorsements)]

(04/14)