	PC	O#				M U-1 MANUI												
	Tag and/	or Proje	ect	A	s Required	by the Provision	ns of the ASN	/IE Boiler ar	nd Press	sure V	essel Code Ru	ules, S	ection V	III, Division 1				
1. N	lanufactured	d and	certified	by T	aylor For	ge Engineer	ed Systen	ns, Inc., 6	5333 N	. Erie	e Ave., Tuls address of Ma	a, Ol	klahon	na, 74117,	USA			
2. N	lanufactured	d for	KP EN	IGINE	ERING, 5	5555 OLD JA	CKSONVI		, TYL	ER, 1		3, US						
3. L	ocation of in	stallat	tion U	NKNC	OWN			(Na	ine anu	auure		ei)						
											and address)							
4. T	ype(Hori	H izontal	lorizont	al I, or sph	nere)		(Tank, sepa	HEAT EXC rator, jkt. ve			ch., etc.)			(Man	1203 ufacturer's		ber)	
		,	Ν/Δ				1203-02-A1	REV 5					30	38			2016	
-			n/a CRN)				(Drawing nu				3038 (National Board number)					(Year built)		
5.	ASME Code	e, Sect	tion VII	l, Div.			015/ N/A					N/A			[Special Se	N/A		<u> </u>
	Hama C 11	in al de			-	Edition and Add		,	/-		(Code Ca		,					1
<u> </u>					0	le wall vessels		-		s, sne		•		cnamper of	muiticnar	nber ves	seis.	
0. 5	hell: (a) Nur		or cours	se(s)	2	-	()	rall length					6875"			.		
NL.		urse(s)	1	0.		aterial		kness			g. Joint (Cat. A	,		m. Joint (Cat.	,		at Treatment	
No. 1	Diameter		Lengt 9' 11.81		-	ade or Type	Nom. 4375"	Corr. 0.125'			ull, Spot, None SPOT	Eff.	1 Type F	ull, Spot, None	Eff.	Temp.	Tim	
1	24.0" ID	_	6' 0.68	-	-	516-70	4375"	0.125			SPOT	.85	1	SPOT	.05	N/A	N/A	
								Body Flang		holle								
					Flange			body i lang	How						Bolting			
No.	Туре		ID	OD	Thk	Min Hub Thk	Mate	erial	Attach		Location	Num	& Size	Bolting Material		r (OD, ID, hk)	Wash Materi	
1	RFWN	2	4.0"	30.625	5" 3-5/8"	7/16"	SA105	,	WELDE	D E	END	28 - 1	-1/8"	SA193B7	N/A	,	N/A	
7. H	leads: (a)	!			SA5	16-70	•				(b)			N//	<u>`</u>		•	
	· · · · · ·	(Ma	aterial sp	ec. nun		or type) (H.T 1	time and tem	ıp.)			(Ma	terial s	spec. nu	mber, grade c		Г time aı	nd temp.)	
		(1110											Flat	Cide to Dress		Calara		
	Location (To	op,	Tł	hicknes		Radiu	1	Elliptical	Conica					Side to Pressu	_		ory A	54
(a)	Bottom, End	op,	Tł Min.		Corr.	Crown	Knuckle	Ratio	An	gle	Radius	Di	ameter	Convex Conca	ve Туре	Full, S	pot, None	Eff.
(a)		op,	Tł				Knuckle N/A	Ratio 2:1	An N	gle ['] /A		Di			_	Full, S		Eff.
(a)	Bottom, End	op,	Tł Min.		Corr.	Crown	Knuckle N/A	Ratio	An N	gle ['] /A	Radius	Di	ameter	Convex Conca	ve Туре	Full, S	pot, None	
(a) No.	Bottom, End	op, Is)	Tł Min.		Corr.	Crown	Knuckle N/A	Ratio 2:1	An N	gle ['] /A eads	Radius	Di	ameter	Convex Conca X X	ve Type NA Bolting	Full, S	pot, None	NA
No.	Bottom, End END Location	op, Is)	Th Min. 0.413" /pe		Corr. 0.125"	Crown N/A	Knuckle N/A E Min Hub	Ratio 2:1 Body Flange	An N	gle ['] /A eads	Radius N/A w Attached	Di	ameter N/A	Convex Conca X X	ve Type NA Bolting	her (OD, N, hk)	pot, None Ione	NA
No. (a)	Bottom, End END Location	pp, ls) Ty N/A	Th Min. 0.413" /pe	ID	Corr. 0.125" OD	Crown N/A Flange Thk	Knuckle N/A B Min Hub Thk	Ratio 2:1 Body Flange Mater	An N es on He	gle /A eads Ho N/A	Radius N/A w Attached	Nur	ameter N/A n & Size	Convex Conca X X Bolting M N/A	ve Type NA Bolting aterial Was II N/A	her (OD,), thk)	pot, None None Washer Ma	NA
No. (a) 8. Ty	Bottom, End END Location N/A /pe of jacket	pp, ls) Ty N/A	/pe	ID N/A	Corr. 0.125" OD N/A	Crown N/A Flange Thk N/A N/A	Knuckle N/A B Min Hub Thk	Ratio 2:1 Body Flange Mater	An N es on He	gle /A eads Ho N/A	Radius N/A w Attached	Nur	ameter N/A n & Size	Convex Conca X X Bolting M	ve Type NA Bolting aterial Was II N/A	her (OD,), thk)	pot, None None Washer Ma	NA
No. (a) 8. Ty	Bottom, End END Location N/A	pp, ls) Ty N/A	/pe	ID N/A	Corr. 0.125" OD N/A	Crown N/A Flange Thk N/A N/A	Knuckle N/A B Min Hub Thk	Ratio 2:1 Body Flange Mater	An N es on He	gle /A eads Ho N/A	Radius N/A w Attached	Nur	ameter N/A n & Size (E	Convex Conca X X Bolting M N/A	ve Type NA Bolting aterial Was II N/A	her (OD,), thk)	pot, None None Washer Ma	NA
No. (a) 8. Ty	Bottom, End END Location N/A /pe of jacket bar, give dim	pp, ls) Ty N/A	/pe	ID N/A	Corr. 0.125" OD N/A	Crown N/A Flange Thk N/A N/A	Knuckle N/A E Min Hub Thk N/A	Ratio 2:1 Body Flange Mater	An N es on He	gle /A eads Ho N/A	Radius N/A w Attached c closure	Nur NA N/A	ameter N/A m & Size	Convex Conca X X Bolting M N/A	ve Type NA Bolting aterial Was II N/A	her (OD,), thk)	vasher Ma	NA
No. (a) 8. Ty If 9. MA	Bottom, End END Location N/A /pe of jacket bar, give dim	pp, s) Ty N/A t	Ti Min. 0.413" /pe	ID N/A	Corr. 0.125" OD N/A describe c	Crown N/A Flange Thk N/A N/A N/A or sketch	Knuckle N/A Min Hub Thk N/A	Ratio 2:1 3ody Flange Mater N/A N/A	An No rial	gle [′] /A Ho N/A acket	Radius N/A w Attached c closure	Nur NA N/A	ameter N/A m & Size	Convex Conca X X Bolting M N/A Describe as oc al temp.	ve Type NA Bolting aterial Was IC N/A N/A eee & weld, -20 °F	Full, S Full, S her (OD,), thk) bar, etc.)	Vasher Ma N/A 396 ps	NA aterial
No. (a) 8. Ty If 9. MA	Bottom, End END Location N/A /pe of jacket bar, give dim	pp,	Ti Min. 0.413" /pe	ID N/A	Corr. 0.125" 0D 0D N/A describe c	Crown N/A Flange Thk N/A N/A or sketch at max. tem	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter	Ratio 2:1 Body Flange Mater N/A	An Ni es on He rial Ji	gle /A Ho N/A acket	Radius N/A w Attached c closure	Nur NA N/A	ameter N/A m & Size	Convex Conca X X Bolting M N/A Describe as oc al temp.	ve Type NA Bolting aterial Was IE N/A N/A eee & weld,	Full, S Full, S her (OD,), thk) bar, etc.)	Vasher Ma N/A 396 ps	NA aterial
No. (a) 8. Ty If 9. MA	Bottom, End END Location N/A /pe of jacket bar, give dim	nensic 396 ps (Interna	Ti Min. 0.413" /pe bons; if b si al)	ID N/A Polted,	Corr. 0.125" OD N/A describe c -15 psi (External)	Crown N/A Flange Thk N/A N/A N/A or sketch	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter	Ratio 2:1 3ody Flange Mater N/A 0 °F rnal) NO componen	An Ni es on He rial Ji	gle /A Ho N/A acket	Radius N/A w Attached c closure	Nur NA N/A	ameter N/A n & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp.	ve Type NA Bolting aterial Was IC N/A N/A eee & weld, -20 °F	Full, S Full, S her (OD,), thk) bar, etc.)	Vasher Ma N/A 396 ps	NA aterial
No. (a) 8. Ty If 9. MA 10. Ir 11. Hy <i>It</i>	Bottom, End END Location N/A /pe of jacket bar, give dim AWP(npact test(rdro., pneu., o ems 12 and	mensic 396 ps (International or combined or combine	Min. 0.413" /pe pons; if b si al)	ID N/A holted, essure npleted	Corr. 0.125" OD N/A describe of -15 psi (External) Hydro	Crown N/A Flange Thk N/A N/A or sketch at max. tem [Indicate yes ofat 531 psi	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter	Ratio 2:1 3ody Flange Mater N/A 0°F rnal) NO componen est	An Ni es on He rial Ji	gle /A Ho N/A acket	Radius N/A w Attached closure	Nur NA N/A	ameter N/A n & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp. /A	ve Type NA Bolting aterial Was IC N/A N/A eee & weld, -20 °F	Full, S her (OD, 0, thk) bar, etc.) at	None lone Washer Ma N/A 396 ps e of <u>N/</u>	NA aterial
No. (a) 8. Ty If 9. MA 10. Ir 11. Hy <i>It</i>	Bottom, End END Location N/A /pe of jacket bar, give dim AWP(npact test(rdro., pneu., o	mensic 396 ps (International or combined or combine	min. 0.413" /pe ons; if b si al) be con	ID N/A Holted, Holted, Holteco (1) SA	Corr. 0.125" OD N/A describe c -15 psi (External) Hydro	Crown N/A Flange Thk N/A N/A or sketch at max. tem [Indicate yes c b. at 531 psi sections.	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter pr no and the Proof te	Ratio 2:1 3ody Flange Mater N/A 0 °F rnal) NO componen	An N es on He rial J	gle /A eads Ho N/A acket 600 (xxterna act tes	Radius N/A w Attached c closure	Nur NA N/A	ameter N/A n & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp.	ve Type NA Bolting aterial Was II N/A Iee & weld, -20 °F at test ter	Full, S Full, S her (OD, , thk) bar, etc.) at at BOL	Vasher Ma N/A 396 ps	NA aterial
No. (a) 8. Ty If 9. MA 10. Ir 11. Hy <i>It</i>	Bottom, End END Location N/A /pe of jacket bar, give dim AWP(npact test(rdro., pneu., o ems 12 and	Ty N/A Ty N/A t anensic age for the second s	min. 0.413" /pe ons; if b si al) be con	ID N/A Polted, essure npletec (1) SA hary (matrix)	Corr. 0.125" OD N/A describe of -15 psi (External) Hydro d for tube s -516-70N aterial spec	Crown N/A Flange Thk N/A N/A or sketch at max. tem [Indicate yes c b. at 531 psi sections.	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter pr no and the Proof te	Ratio 2:1 3ody Flange Mater N/A 0°F rnal) NO componen est 26" (subject to	An N es on He rial J	gle /A eads Ho N/A acket 600 (xxterna act tes	Radius N/A N/A w Attached c closure cost closure minument Nominal thickr	Nur NA N/A	ameter N/A n & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp. /A 0.250" Corr. allow.)	ve Type NA Bolting aterial Was II N/A Iee & weld, -20 °F at test ter	Full, S Full, S her (OD,), thk) bar, etc.) bar, etc.) at at nperature BOI	None Nasher Ma N/A 396 ps of <u>N/</u> Elded or bo	NA aterial
No. (a) 8. Ty If 9. MA 10. Ir 11. Hy <i>It</i>	Bottom, End END Location N/A /pe of jacket bar, give dim AWP(npact test(rdro., pneu., o ems 12 and	Ty N/A Ty N/A t anensic age for the second s	Min. 0.413" /pe bons; if b si al) be con [Station	ID N/A Polted, polted, npletec (1) SA hary (ma	Corr. 0.125" OD N/A describe of -15 psi (External) Hydro d for tube s -516-70N	Crown N/A Flange Thk N/A N/A or sketch at max. temp [Indicate yes c b. at 531 psi sections no.)]	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter Dr no and the Dr no fte Dr no fte	Ratio 2:1 3ody Flange Mater N/A 0°F rnal) Componen est 26"	An N es on He rial J	gle (A ads Ho N/A N/A acket 600 (xterna act tes (1)	Radius N/A w Attached closure closure m er m Min sted] 2.8125"	Nur NA N/A . desi	ameter N/A m & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp. /A 0.250"	ve Type NA Bolting aterial Was II N/A Iee & weld, -20 °F at test ter	Full, S Full, S her (OD,), thk) bar, etc.) bar, etc.) mperature BOI chment (w:	, None ↓one ↓washer Ma ₩/A 396 ps ≥ of <u>N/</u>	NA aterial
No. (a) 8. Ty If 9. M <i>A</i> 10. Ir 11. Hy <i>It</i> 12. T	Bottom, End END Location N/A /pe of jacket bar, give dim AWP(npact test(rdro., pneu., o ems 12 and	Ty N/A Ty N/A t anensic age for the second s	Min. 0.413" /pe bons; if b si al) be con [Station	ID N/A N/A wolted, pletec (1) SA hary (ma ing (ma	Corr. 0.125" OD N/A describe of <u>-15 psi</u> (External) <u>Hydro</u> d for tube s <u>516-70N</u> aterial spec	Crown N/A Flange Thk N/A N/A or sketch at max. temp [Indicate yes c b. at 531 psi sections no.)]	Knuckle N/A Min Hub Thk N/A p. <u>60</u> (Inter Dr no and the Dr no fte Dr no fte	Ratio Ratio 2:1 3ody Flange Mater N/A 0 °F rnal) NO componen est 26" (subject to N/A	An N es on He rial J	gle (A ads Ho N/A N/A acket 600 (xterna act tes (1)	Radius N/A N/A w Attached c closure c closure	Nur NA N/A . desi	ameter N/A m & Size (E gn met	Convex Conca X X Bolting M N/A Describe as oc al temp. /A 0.250" N/A	ve Type NA Bolting aterial Was II N/A Iee & weld, -20 °F at test ter	Full, S Full, S her (OD, , thk) bar, etc.) bar, etc.) at at nperature BOI chment (w N (Attac	vasher Ma N/A 396 ps ≥ of <u>N/</u> Elded or bo	NA aterial

FORM U1-(Cont'd)

NB Number 3038

Course(s)					Mat	erial	Thickness			Long. Joint (Cat. A)			Circu	Circum. Joint (Cat. A, B,			B, & C) Heat Treat		nt
No.	Diameter	r Ì	Leng	gth	Spec./Grad		Nom.	Corr	. Ту	pe Fi	ull, Spot, None	Eff.		ull, Spot,	`	Eff.	Temp.	Ti	me
1	24.0" ID		0' 11.		SA51	<i>,</i> ,	0.625"	0.12		_	SPOT	.85	1	SPO	т	.85	1150°	1 H	OUR
						I		Pody Flop		hollo					I	I			
					-			Body Flan	Ĭ						B	olting			
No.	Туре		ID	OD	Flange Thk	Min Hub Thk	Mate	erial	How Attach		Location	Nur	n & Size		lting terial	Washer (thk		Was Mate	
1	RFWN		24"	30.625"	2-13/16"	5/8"	SA105		WELDE	D	END	N/A		SA193	3-B7	N/A		N/A	
	RFWN		24"	30.625"	3-1/16"	5/8"	SA105		WELDE	D	END	N/A		SA193	3-B7	N/A		N/A	
5. ⊢	leads: (a)			FLA	T HEAD	SA516-70N					(b)				N/A				
		(N	Material s			r type) (H.T		ıp.)					spec. nui	mber, gra	ade or ty	ype) (H.T.	- time an	d temp.)	
	Location (To	- · · L		hickness		Radiu		Elliptica			ex Hemispheric			Side to P			Categor		
	Bottom, End	as)	Min.		orr.	Crown	Knuckle	Ratio		gle	Radius			Convex (Concave	Туре		oot, None	_
(a)	END		1.2534	" 0.1	25"	N/A	N/A	N/A	N	/A	N/A		30-5/8"			N/A	N	I/A	N/
							. 6	Body Flang	ges on He	ads									
	Location	.	Туре		OD		Min Hub	Mat	rial		our Attached					Bolting			
No.	Location	ation 1				Flange Thk	Thk	Mate	enai	пс	ow Attached	Num & Size		 Bolting Mat 		aterial Washer (OD, ID, thk)		Vasher Mate	
				NI/A	N/A	N/A	N/A	N/A		N/A		N/A		N/A		N/A	N	/A	
6. N		N/A 450 (Inter				t max. temp.	(Interr		(Ext		= Min. c	lesigr	n metal t		-2	0 °F	_ at		
6. N		1		1	psi a mal)	t max. temp.	400 (Interr	NO)0 °F ernal)		lesigr	n metal t		-2		_ at		osi //A
6. N 7. Ir	/AWP	450 (Inter	psi	-15 (Exten	psi a ⁱ nal)	t max. temp. licate yes or	400 (Interr	NO compone)0 °F ernal) ìpact		lesigr	n metal t	emp	-2	0 °F	_ at		
6. M 7. Ir 8. F	/AWP	450 (Inter	psi mal) or comb	(Exter	psi a mal) [Inc	t max. temp. licate yes or Hydro	400 (Interr	NO compone	ent(s) im)0 °F ernal) ìpact		lesigr	n metal t	emp	-2	0 °F	_ at		
6. M 7. Ir 8. F 9. N	/AWP	450 (Inter	psi mal) or comb ion, and	(Exter	psi a' nal) [Inc essure _ alve open	t max. temp. licate yes or Hydro ings:	400 (Interr	NO compone si	ent(s) im Proof te)0 °F ernal) npact	t tested]	lesigr		emp	-2	0 °F	_ at		
6. M 7. Ir 8. F 9. N	IAWP mpact test Hydro., pne lozzles, ins	450 (Inter	psi mal) or comb	(Exter (Exter . test pre safety va Diameter or Size	psi a' nal) [Inc essure alve open	t max. temp. dicate yes or Hydro	400 (Interr no and the b. at 586 ps Material zle	NO compone si	ent(s) im Proof te)0 °F ernal) pact est	t tested]	Reinforc	ement rial	emp	-2 at te 	0 °F est tempe Details Flange	_ at	^{of}	/ A
6. M 7. Ir 8. H 9. N urpos	MAWP mpact test Hydro., pne lozzles, ins ie (inlet, Outlet, etc.) SH INLET	450 (Inter eu., c pecti Drain,	psi rnal) or comb ion, and No.	(Exter (Exter . test pre safety va Diameter or Size 4"	psi a mal) [Inc essure alve open Type RFW	t max. temp. dicate yes or Hydro ings: Noz Noz	400 (Interr no and the b. at 586 ps Material zle	NO compone si Flange SA105	ent(s) im Proof te No No 0.59)0 °F ernal) npact est zzle Th m. 90''	t tested] hickness Corr. 0.125"	Reinford Mate	eement rial FRAL	emp	-2 at te I/A achment [ie .1C V	0 °F est tempe Details Flange VELDED	_ at	of <u>N</u>	/ A
6. M 7. Ir 8. H 9. N urpos	MAWP mpact test Hydro., pne lozzles, ins ie (Inlet, Outlet, etc.) SH INLET SH OUTLET	450 (Inter eu., c pecti Drain,	psi mal) or comb ion, and No.	(Exter (Exter safety va Diameter or Size 4" 2"	psi a mal) a ssure alve open Type RFW RFW	t max. temp. dicate yes or Hydro ings: Noz Noz Noz Noz	400 (Interr no and the b. at 586 ps Material zle 06B 06B	NO compone si Flange SA105 SA105	ent(s) im Proof te No 0.59 0.30	00 °F ernal) npact est zzle Tł m. 90" 01"	hickness F Corr. I 0.125" I	Reinforc Mate NTEG	rement rial FRAL FRAL	emp	-2 at te J/A achment [le .1C V .1C V	0 °F est tempe Details Flange VELDED VELDED	_ at	of <u>N</u>	/ A
6. M 7. Ir 8. H 9. N urpos	MAWP mpact test Hydro., pne lozzles, ins ie (Inlet, Outlet, etc.) SH INLET SH OUTLET CH INLET	450 (Inter 	psi mal) for comb ion, and No.	(Exter (Exter safety va Diameter or Size 4" 2" 6"	psi a mal) a ssure alve open Type RFW RFW RFW	t max. temp. dicate yes or Hydro ings: Noz Noz Noz Noz Noz Noz Noz Noz	400 (Interr no and the b. at 586 ps Material zle 06B 06B	NO compone si Flange SA105 SA105 SA105	ent(s) im Proof te No 0.59 0.30 0.31	00 °F ernal) npact est zzle Tł m. 90" 01" 78"	Inickness F Corr. 0.125" I 0.125" I 0.125" I 0.125" I I I	Reinford Mate NTEG NTEG	ement rial FRAL FRAL FRAL	emp	-2 at te I/A achment [le .1C V .1C V .1C V	0 °F est tempe Details Flange VELDED VELDED	_ at	of <u>N</u>	/ A
6. M 7. Ir 8. F 9. N urpos	IAWP mpact test Hydro., pne lozzles, ins ie (Inlet, Outlet, etc.) SH INLET SH OUTLET CH INLET CH OUTLET	450 (Inter peu., c pecti Drain,	psi rnal) or comb ion, and 1 1 1 1 1 1	(Exter (Exter safety va Diameter or Size 4" 2" 6" 6"	psi at mal) at ssure alve open Type RFW RFW RFW RFW	t max. temp. dicate yes or Hydro ings: Noz Noz Noz Noz Noz Noz Noz Noz	400 (Interr no and the b. at 586 ps Material Izle 06B 06B 06B	NO compone si Flange SA105 SA105 SA105 SA105 SA105	ent(s) im Proof te No 0.59 0.30 0.31 0.33	200 °F ernal) npact est zzle Tr m. 90" 01" 78" 78"	Thickness F Corr. 0.125" 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I	Reinford Mate NTEG NTEG NTEG	ement rial RAL RAL BRAL BRAL	emp	-2 at te I/A achment I le .1C V .1C V .1C V .1C V	0 °F est tempe Details Flange VELDED VELDED VELDED VELDED	_ at	of <u>N</u>	/ A
16. M 17. Ir 18. H 19. N 19. N 19. SI	IAWP mpact test Hydro., pne lozzles, ins ie (inlet, Outlet, etc.) SH INLET SH OUTLET CH INLET CH OUTLET H AUXILIAR	450 (Inter Drain, c Drain,	psi mail) or comb ion, and No. 1 1 1 1 1 1 1	-15 (Exter safety va Diameter or Size 4" 2" 6" 6" 1"	psi at mal) at ssure alve open Type RFW RFW RFW RFW RFW	t max. temp. dicate yes or Hydro ings: N SA10 N SA10 N SA10 N SA10 N SA10 N SA10 N SA10	400 (Interr no and the <u>At 586 ps</u> <u>Material</u> zle 06B 06B 06B 06B	NO compone si Flange SA105 SA105 SA105 SA105 SA105 SA105	No No 0.59 0.31 0.32 0.33 0.34	200 °F ernal) npact est zzle Th m. 90" 01" 78" 78" 50"	t tested] hickness F Corr. 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I	Reinforc Mate NTEG NTEG NTEG NTEG NTEG	ement rial RAL RAL RAL RAL RAL RAL	emp	-2 at te J/A achment [le .1C V .1C V .1C V .1C V .1C V	0 °F	_ at	of <u>N</u>	/ A
6. M 7. Ir 9. N urpos	IAWP mpact test lozzles, ins e (inlet, Outlet, etc.) SH INLET SH OUTLET CH INLET CH INLET CH OUTLET H AUXILIAR	450 (Inter 	psi mal) or comb ion, and 1 1 1 1 1 1 1 1 1 1 1 1 1	15 (Exter safety va Diameter or Size 4" 2" 6" 6" 6" 1"	psi at mal) at ssure alve open Type RFW RFW RFW RFW RFW RFW	t max. temp. dicate yes or Hydro ings: Noz Noz Noz Noz Noz Noz Noz Noz	400 (Interr no and the <u>At 586 ps</u> <u>Material</u> zle 06B 06B 06B 06B 06B	NO compone si Flange SA105 SA105 SA105 SA105 SA105 SA105 SA105	No No 0.59 0.31 0.32 0.32 0.33 0.34	00 °F ernal) npact est 22le Tr m. 90" 01" 78" 78" 50"	t tested]	Reinforc Mate NTEG NTEG NTEG NTEG NTEG	irial irial iRAL iRAL iRAL iRAL iRAL iRAL	emp	-2 at te J/A achment [le .1C V .1C V .1C V .1C V .1C V .1C V	0 °F est tempe Details Flange VELDED VELDED VELDED VELDED VELDED VELDED	_ at	of <u>N</u>	/ A
6. M 7. Ir 8. H 9. N Jrpos	IAWP mpact test Hydro., pne lozzles, ins ie (inlet, Outlet, etc.) SH INLET SH OUTLET CH OUTLET CH OUTLET H AUXILIAR H AUXILIAR	450 (Inter eu., c pecti Drain, Y Y Y Y	psi mail) or comb ion, and No. 1 1 1 1 1 1 1	-15 (Exter safety va Diameter or Size 4" 2" 6" 6" 1"	psi at mal) at ssure alve open Type RFW RFW RFW RFW RFW	t max. temp. dicate yes or Hydro ings: Noz N SA10 N	400 (Interr no and the b. at 586 ps 06B 06B 06B 06B 06B 06B 06B	NO compone si Flange SA105 SA105 SA105 SA105 SA105 SA105 SA105 SA105	No No 0.55 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.37	00 °F ernal) npact est 22le Tr m. 90" 01" 78" 78" 78" 50" 50" 50"	t tested] hickness F Corr. 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I	Reinforco Mate NTEG NTEG NTEG NTEG NTEG NTEG	iement rial IRAL IRAL IRAL IRAL IRAL IRAL IRAL	emp	-2 at te J/A achment I le .1C V .1C V .1C V .1C V .1C V .1C V .1C V	0 °F	_ at	of <u>N</u>	/ A
6. M 7. Ir 8. H 9. N JITPOS	IAWP mpact test Hydro., pne lozzles, ins e (inlet, Outlet, etc.) SH INLET SH OUTLET CH INLET CH INLET CH OUTLET H AUXILIAR	450 (Inter Peu., c pecti Drain, Y Y Y Y	psi mal) or comb ion, and 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15 (Exter (Exter safety va Diameter or Size 4" 2" 6" 6" 6" 1" 1" 1" 1" 1"	psi at mal) at ssure alve open Type RFW RFW RFW RFW RFW RFW RFW RFW RFW RFW	t max. temp. dicate yes or Hydro ings: N SA10 N S	400 (Interr no and the b. at 586 ps 06B 06B 06B 06B 06B 06B 06B	NO compone si Flange SA105 SA105 SA105 SA105 SA105 SA105 SA105 SA105 SA105 SA105 SA105	ent(s) im Proof te No 0.59 0.31 0.37 0.22 0.22 0.22 0.23	00 °F ernal) npact est 22le Tr m. 90" 01" 78" 78" 78" 50" 50" 50"	t tested] hickness F Corr. 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I 0.125" I	Reinforc Mate NTEG NTEG NTEG NTEG NTEG	iement rial IRAL IRAL IRAL IRAL IRAL IRAL IRAL	Attr Nozz UW16 UW16 UW16 UW16 UW16 UW16 UW16	-2 at te J/A achment I le .1C V .1C V .1C V .1C V .1C V .1C V .1C V	0 °F est tempe Details Flange VELDED VELDED VELDED VELDED VELDED VELDED VELDED VELDED	_ at	Df N Location Isp. Open.	.)

22. Remarks

Length of tubes: 16' 0" <u>IMPACTS EXEMPT PER UG-20 (f) UCS-66</u> <u>over pressure protection per UG-125 (a) (2)</u>

NB Number 3038

FORM U1-	(Cont'd)
----------	----------

			CERTIFICATE OF SHO			
ASME	BOILER AND PRI	ESSURE VESSEL C	re correct and that all details of desig CDE, Section VIII, Division 1. U Cer	in, material, construction	Number 47294	Expires March 12, 2017
Date	07/07/2016	Name	Taylor Forge Engineered Sys	tems, Inc.	Signed	All
			(Manufacturer)			(Representative)
			CERTIFICATE OF SHO	OP INSPECTION		
l, the u	indersigned, hold	ling a valid commis	sion issued by the National Board	of Boiler and Pressure	e Vessel Inspector	s and employed by
			nd Insurance Company of Conne			
have in	spected the press	sure vessel described	d in this Manufacturer's Data Report	on June 9, 201	6 , and state t	hat,
VESSE concer	EL CODE, Section ning the pressure	VIII, Division 1. By vessel described in	lanufacturer has constructed this pre- signing this certificate neither the Ins his Manufacturer's Data Report. Fu mage or a loss of any kind arising fr	pector nor his/her emp rthermore, neither the I	loyer makes any wa nspector nor his/hei	arranty, expressed or implied,
Da	te 07/07/201	6 Signed	(Authorized Inspector)	Commissions:	114	48AB. OK713
		<u> </u>	(Authorized Inspector)			d (incl. endorsements)]
of ASME	E BOILER AND PF	RESSURE VESSEL	CODE, Section VIII, Division 1. U Ce	ertificate of Authorizatio		Expires (Representative)
			(Assembler)			(Representative)
			CERTIFICATE OF FIELD ASS	SEMBLY INSPECTIO	N	
I, the ur	ndersigned, holdir	ng a valid commissi	on issued by The National Board o	of Boiler and Pressure	Vessel Inspectors	s and employed by
belief, th Section the Insp Furthern	e Manufacturer ha VIII, Division 1. T ector nor his/her e	, not incl as constructed and a he described vessel mployer makes any nspector nor his/her	cturer's Data Report with the describ- uded in the certificate of shop inspec ssembled this pressure vessel in ac was inspected and subjected to a hy warranty, expressed or implied, com employer shall be liable in any mann	tion, have been inspec cordance with the ASM /drostatic test of cerning the pressure ve	ted by me and to th E BOILER AND PR By essel described in th	e best of my knowledge and ESSURE VESSEL CODE, / signing this certificate neither is Manufacturer's Data Report.
Dai	te	Signed	(Authorized Inspector)	Commission	[National Board	d (incl. endorsements)]

2554614

I

exe: v6.4.28

U1-15