	Р	°O#			FOF	RM U-1 MANU	FACTURE	R'S DATA	A RE	PORT	FOR PRESS	JRE \	/ESSEI	LS	-				
_	Tag and	/or Pro	oject	A	As Required	by the Provision	ns of the ASN	ME Boiler a	Ind P		Vessel Code Ru	ules, S	ection V	III, Divi	sion 1	\$4			
1. IV	lanufacture	d and	certified	a by <u> </u>	ayioi i o	ige Liigilleel	eu Systen	iis, iiic.,	(Na	ame and	address of Ma	nufacti	urer)	ia, 14	117, 0	54			
2. N	lanufacture	d for	KP EN	IGINE	ERING,	5555 OLD JA	CKSONVI	LLE HW	Y, T	YLER,	Texas, 7570	<b>3, U</b>	SA						
3. L	ocation of ir	nstalla	<sub>ation</sub> U	NKNC	OWN			(14)	anne a			01)							
4 -										(Name	and address)					1000.0			
4. 1	ype(Hor	rizonta	Horizont al, vertica	<b>al</b> I, or sph	nere)		(Tank, sepa	rator, jkt. v	esse	NGER I, heat ex	(ch., etc.)				(Manufa	1203-0 acturer's se	4 erial numbe	er)	
			N/A				1203-04-A1	REV 7					30/	40				2016	
-			(CRN)				(Drawing nu	imber)				(Nat	ional Bo	ard nur	nber)		()	/ear buil	lt)
5.	ASME Code	e, Se	ction VII	l, Div.	1	20	015/ N/A	icable (dat	(م		(Code Ca		mber)		21	necial Ser	N/A	3-120(d)	)1
	Items 6-11	incl	to he co	mnlete	ed for sinc		iackets of	iacketed		sels sh	ell of heat ex	se nu	ers or	chaml	ber of m	ulticham	her vesse	u-120(u)	/]
6 S	nell: (a) Nu	mber	of cours	se(s)	າດ ເດເ ດແກ່ອ ເ		(b) Ove	rall length	1	5010, 011		401 7	750	onann		lantonann			
			<u>\</u>	<u> </u>	2	-	(ii) e t e.	knooo			ng loint (Cot A	19.7	.750 <sup>m</sup>	m loini	L(Cot A		- Hoot T	Tractmon	.+
No.	Diameter	uise(s	Leng	th	Spec /G	aterial	Nom.	Corr		Type F	ull, Spot, None	) Eff.	Type F	ull, Spc	t, None	Eff.	Temp.	Tin	ne
2	40.0" ID		9' 9.8	75"	SA	516-70N	1.250"	0.125	;"	1	FULL	1	1	FU	LL	1	N/A	N/	Α
•								Body Flan	ges o	n Shells								•	
No.	Туре		ID	OD	Flange Thk	Min Hub Thk	Mate	erial	H Att	How ached	Location	Num	& Size	В	E Iolting	Bolting Washer	(OD, ID,	Wash	ner
1	RFWN		40.0"	49.625	5" 5-7/16	' 1-1/4"	SA350LF2		WEI	DED	END	52 - 1	-3/8"	SA19	33B7	N/A	r.)		
7.1	leads: (a)				S 45	16.70N					(b)				N/A				
	· · <u> </u>	(N	laterial sp	ec. nun	nber, grade	e or type) (H.T	time and tem	ıp.)			(Ma	terial s	spec. nur	nber, g	grade or t	type) (H.T.	- time and	l temp.)	
	Location (To	op,	T	hicknes	s	Radiu	IS	Elliptica	I Co	onical Ape	ex Hemispheric	al	Flat	Side to	Pressure		Category	/ A	
()	DOLLOIII, EIIC	us)	Min.		Corr.	Crown	Knuckle	Ralio		Angle	Raulus			Convex	Concave	Туре			Eff.
(a) (b)			0.9542 N/A		N/A	N/A N/A	N/A	Z:1		N/A	N/A		N/A N/A	X	×	S N/A	NO	ne /A	NA N/A
(0)	N/A		11/17		N/A	11/0					11/6		N/A			11/A		~	11/A
							L Alia L Luk	ody Flanges on		h Heads		Bolting							
No.	Location	٦	Гуре	ID	OD	Flange Thk	Thk	Mate	erial	Н	ow Attached	Nur	m & Size	Bol	ting Mate	erial Wash ID,	er (OD, thk)	asher M	aterial
(a)	N/A	N/A		N/A	N/A	N/A	N/A	N/A		N/A				N//	A	N/A	N/	Α	
8. Ty	vpe of jacke	t				N/A				Jacke	et closure				N	/A			
If	har aivo dir	mono	iono: if h	oltod	doooribo	or akatab							(D	escribe	e as ogee	e & weld, b	oar, etc.)		
	bai, give ui	TICIIS	olons, ii c	oneu,	describe						N.41-1	N/A		. 1. 4					
9. MA	WP	<u>675 p</u>	psi		-15 psi	at max. tem	p. <u>72</u>	25 °F		725	PF IVIIN	. desi	gn meta	ai tem	p	-20 °F	at	675 p	si
10. Ir	npact test	(Interi	nai)		(External)		(Inter	rnal) NO		(Extern	aı)				at	test tem	perature	of N	IA
I1 Ц	(dro ppou c	or con	nh tast n	ossuro	Hydro	[Indicate yes	or no and the Proof to	e compone	nt(s) i	impact te	ested]		N	/^					
	ama 12 and	1 1 2 4	no. test pi	essure									IN.	A					
	ems iz anu	1130	o be con	(1) SA	350-I F2	sections.		43,750"			6.250"			0.250			BOI T	FD	
12. 1	ubesheet										3.200			0.200					
12. 1	ubesheet		[Station	nary (m	aterial spec	c. no.)]	[Diameter	(subject to	pres	ss.)]	(Nominal thickr	iess)	(C	orr. all	ow.)	Attach	iment (wel	ded or b	olted)
12. 1	ubesheet		[Station	nary (m	aterial spec	c. no.)]	[Diameter	(subject to	pres	s.)]	(Nominal thickr	iess)	(C	orr. all	ow.)	Attach	iment (wel	ded or b	olted)
12. 1	ubesheet		[Station [Float	nary (ma	aterial spec	no.)]	[Diameter	(subject to <b>N/A</b> Diameter)	pres	is.)]	(Nominal thickr <u>N/A</u> (Nominal thickr	iess) iess)	(C	orr. all <u>N/A</u> orr. all	ow.) ow.)	Attach	iment (wel N/A (Attachr	ded or b Ment)	olted)

## FORM U1-(Cont'd)

NB Number 3040

14. 5	Shell: (a) No. of	course(	ompietea s) <u>1</u>	tor innei	r cnampers of	Jacketed ve (b) Ove	e <i>sseis or</i> erall lengt	<i>cnanne</i> h	is of	neat excnan <b>0' 24.1875''</b>	gers.							
Course(s) Material			iterial	Thickness			Long. Joint (Cat. A			) Circum. Joint (Cat.			A. B. & C) Hea		Treatment			
No.	Diameter	Len	gth	Spec./Gra	ade or Type	Nom.	Corr	. Ту	pe F	ull, Spot, None	Éff.	Type F	ull, Spot,	None	Eff.	Temp.	Time	3
1	40.0" ID	2' 0.1	875"	SA5	516-70	1"	0.125	5"	1	FULL	1	1	FULL	-	1	1150°	1 HR	2
							Body Flan	ges on S	hells									
	_			Flange				Hov	/					B	olting			
NO.	. Туре			Thk	Min Hub Thk	Mate	erial	Attach	ied	Location	Nur	n & Size	Bol Mat	ting erial	Washer ( thk	OD, ID, ()	Washe Materia	r al
1	RFWN	40"	48.125"	4-5/8"	1"	SA105		WELDE	D	END	52 - <sup>-</sup>	-3/8"	SA193	-B7	N/A		N/A	
1	RFWN	40"	49.625"	5-7/8"	1"	SA105		WELDE	D	END	52 - 1	-3/8"	SA193	-B7	N/A		N/A	
15.	Heads: (a)	M = 4 = 1 = 1 =	FLA	THEAD	SA-51670N	4:				(b)(M	4! - 1			N/A	····	4:		
	(	Material s	pec. numb	er, grade	or type) (H. I	time and terr	1p.)	Carria		(IVI)		Spec. nu	mber, gra	ade or t	уре) (Н.Т.	- time ar		
	Bottom. Ends)	Min	C	orr	Crown	IS Knuckle	Ratio	Ar	ai Ape iale	Radius		iameter	Convex C	Concave	Type		not None	Fff
(a)	END	4.5"	0.1	25"	N/A	N/A	N/A		/A	N/A		8-1/8"			N/A		N/A	N/A
()																		
							Body Flang	ges on H	eads					E	Bolting			
No.	Location	Туре	ID	OD	Flange Thk	Min Hub Thk	Mate	erial	н	ow Attached	Num & Size		e Boltir	ng Mate	erial Washe	er (OD, thk) Washer Material		terial
N/A	N/A N/A	\	N/A	N/A	N/A	N/A	N/A		N/A		N/A		N/A		N/A	,	N/A	
17. I 18.	Impact test Hydro., pneu.,	or comb	. test pre	[Ir essure	ndicate yes or <b>Hvdro</b>	no and the	NO compone si	ent(s) in Proof t	npac est	t tested]			N	_ at te	est tempe	erature	of <u>N/A</u>	<u>د</u>
19.	Nozzles, inspec	tion, and	safety va	alve oper	nings:													_
Purpo	se (Inlet, Outlet, Drair	1, No	Diameter			Material		No	ozzle T	Thickness	Reinford	ement	Atta	chment	Details		Location	
-	etc.)	INO.	or Size	IY	Noz	zle	Flange	No	om.	Corr.	Mate	rial	Nozzl	e	Flange	(	Insp. Open.)	
	SH INLET	1	12"	RF\	NN SA1	06B	SA105	0.6	88"	0.125"	SA516	-70N	UW16.	.1C \	NELDED			
	SH OUTLET	1	6"	RF\	NN SA1	06B	SA105	0.4	32"	0.125"	SA516	-70N	UW16.	.1C \	NELDED			
	CHINLET	1	10"	RF	NN SA1	06B	SA105	0.8	344	0.125"	INTEG	RAL	UW16.	1C \	NELDED			
		1	14"		VN SA1		SA105	0.0	J38" 50"	0.125"	NTEG		UW16.					
ت د		1	1		NN 5A1		SA105	0.3	00 58"	0.120			UW16.					
C		1	1"	RF\	NN SA1	06B	SA 105	0.3	58"	0.125	INTEG		UW16	10 1				
		1	1"	DEL	NN SA1	06B	SA105	0.3	58"	0.125"	INTEG	RAL	UW16.		NELDED			
L L								0.2	50"	0.125"								
C	SH VENT	1	1"	RF\	NN SA1	06B	SA105	0.3	<b>JO</b>	0.123	INTEG	KAL	UVV16.	10   1	NELDED			
20.3	SH VENT	1 1 (Yes o	1" 1" Lugs r no)	RFV 8 5 (Num	NN SA1	06B 2 (Number)	SA105 Oth	ers	30	N/A (Describe)	INTEG		Attac	<u>ال المرا</u> hed	WELDED WELDED 1 A (W	O CHA	NNEL, SHE VER d how)	ELL
20. 3 21. N Manu	SH VENT SH VENT Supports: Skirt Manufacturer's Parti	1 (Yes o al Data Re	1" Lugs r no) ports prope	RFV	NN SA1   Legs   ber)   ed and signed by	2 (Number) Commission	SA105 Oth	ers	been	N/A (Describe) furnished for the	e follow	KAL	Attack	hed	WELDED	TO CHA AND CO here and of part, ite	NNEL, SHE VER d how) em number,	ELL
20. 3 21. M Manu	SH VENT Supports: Skirt Manufacturer's Parti ufacturer's name, au	1 (Yes o al Data Re nd identify	1" Lugs r no) eports prope ing number)	RFV 8 (Numl erly identifi ):	WN SA1	06B 2 (Number) (Commission	SA105 Oth	ers	been	N/A (Describe) furnished for the	e follow	KAL	Attack	hed	WELDED	<b>O CHA</b> AND CO here and of part, ite	NNEL, SHE VER d how) em number,	:LL

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

NB Number 3040

FORM	U1-(C	ont'd)
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We cer	tify that the staten	nents in this report	CERTIFICATE OF SHOP	• COMPLIANCE , material, construction	n, and workmanshi	p of this vessel conform to the
ASIVIE	BUILER AND PR	ESSURE VESSEL	CODE, Section VIII, Division 1. U Certi	icate of Authorization i	Number 47294	Expires March 12, 2017
Date	07/07/2016	Name	Taylor Forge Engineered Syste	ms, Inc.	Signed	Fla & Buli
			(Manufacturer)			(Representative)
			CERTIFICATE OF SHO	P INSPECTION		
I, the u	Indersigned, hold	ding a valid comm	ssion issued by the National Board o	f Boiler and Pressure	Vessel Inspector	s and employed by
The Ha	artford Steam B	oiler Inspection	and Insurance Company of Connec	cticut, of Hartford, C	т	
have in	spected the press	sure vessel describ	ed in this Manufacturer's Data Report o	n June 30, 2016	6 , and state t	that,
to the b VESSE conceri manne	best of my knowled EL CODE, Section ning the pressure r for any personal	dge and belief, the VIII, Division 1. B vessel described in injury or property of	Manufacturer has constructed this pres y signing this certificate neither the Insp n this Manufacturer's Data Report. Furth damage or a loss of any kind arising fror	sure vessel in accordar ector nor his/her emplo nermore, neither the In n or connected with thi	nce with ASME BC over makes any wa spector nor his/he s inspection.	DILER AND PRESSURE arranty, expressed or implied, r employer shall be liable in any
Dat	te 07/07/201	6 Signed	Porald & Hunter	Commissions:	114	48AB. OK713
		<u> </u>	(Authorized Inspector)		[National Boar	d (incl. endorsements)]
of ASME	E BOILER AND PI	RESSURE VESSE	L CODE, Section VIII, Division 1. U Cer (Assembler)	lificate of Authorization	Number Signed	(Representative)
			CERTIFICATE OF FIELD ASSE		1	
I, the un	ndersigned, holdi	ng a valid commis	sion issued by The National Board of	Boiler and Pressure	Vessel Inspectors	s and employed by
have cor belief, th Section ' the Inspe Furthern from or o	mpared the staten he Manufacturer h VIII, Division 1. T ector nor his/her e nore, neither the h connected with thi	nents in this Manuf , not in as constructed and he described vesse employer makes an nspector nor his/he s inspection.	acturer's Data Report with the described cluded in the certificate of shop inspecti assembled this pressure vessel in accor el was inspected and subjected to a hyd y warranty, expressed or implied, conce r employer shall be liable in any manne	I pressure vessel and s on, have been inspecte ordance with the ASME rostatic test of orning the pressure ves r for any personal injur	state that parts refe ed by me and to th BOILER AND PR By sel described in th y or property dama	erred to as data items e best of my knowledge and RESSURE VESSEL CODE, y signing this certificate neither nis Manufacturer's Data Report. age or a loss of any kind arising
Dat	te	Signed	(Authorized Inspector)	Commission	[National Board	d (incl. endorsements)]

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exe: v6.4.28

U1-15