GENERAL DATA

Name and address of manufacturer	Section A1, sheet 1 of 1 : Wuxi Chemical Equipment Co.,Ltd.								
Name and address of mandiacturer									
B. Carlotte and the Control of the C	Huayi road,Hua Zhuang Town,Wuxi, Jiangsu. China.								
Principal's purchase order No.	: 4505729451 Item No.: 18-X-1811								
Equip. tag No. and name	: T-2002 Recirculating Exchanger								
Manufacturer's production order No.	: WHA22-122-1								
	ASME SECTION VIII DIV.1 2021 ED								
Applicable design code	: TEMA Tenth Edition Class R API660-2020								
Year of manufacture	2023 Manufacturer's serial No. : WHA22-122-1								
Name of design org.	: Wuxi Chemical Equipment Co.,Ltd.								
Name of inspection org.	: Wuxi Chemical Equipment Co.,Ltd.								
Type of vessel	: Heat Exchange								
P = -(g)	g) : SHELL SIDE:180/15[12.41/1.03] TUBE SIDE:232/15[16/1.03]								
Design temperature deg F :XT.) 1	°C : SHELL SIDE:430[221.1]/300[148.89] TUBE SIDE:430[221.1]/400[204.44]								
ID inch m	m : 202.7 show shell and tube side								
Wall thickness, inch ctual m	m : 12 show shell and tube								
Corrosion allowance, inch mi	SHELL SIDE:1/16"[1.588] TUBE SIDE:1/8"[3.175]								
Overall length of vessel inch	m :								
Weight of vessel (empty lbs.	1485[675]								
Weight of vessel incl. internals (empty)	:								
Heat treatment	: YES When yes, type of heat treatment: Solution(Elliptical head/Tube bends)								
Pressure test date	: SHELL SIDE:2023-05-08 TUBE SIDE:2023-03-29/2023-05-12								
Position	: Horizontal								
Test pressure show psig Bar(g	g) : SHELL SIDE:54 TUBE SIDE: 67								
Test medium values	: Water								
Γemperature of medium ℉[℃	SHELL SIDE: 23.3 TUBE SIDE: 21/24								
NDE: - radiography (X-ray/Gamma-	-ray) : YES;100%								
- ultrasonic	: 1								
- magnetic/particle	: YES;100%								
- dye penetrant	: YES;100%								
Joint efficiency	: SHELL SIDE: 1.0 TUBE SIDE: 1.0								
Type of equipment support	: Skirit Saddle								
Number(s) of approved drawing(s)	: WXCE6884-00 Rev. No.: 05								
	: WXCE6884-01 Rev. No.: 03								
	: WXCE6884-02 Rev. No.: 03								
	: WXCE6884-03 Rev. No.: 03 : WXCE6884-04 Rev. No.: 03								
	: WXGE6884-05, Rev. No.: 03								
	: WXCE6884-06 Rev. No.: 03/02								
	: WXCE6884-07 Rev. No.: 02								
Delete what does not apply									
For manufacturer: WCE	For inspection organization:								
Name: Xuyao	Name:								
Position: QC Engineers	Position:								
Place and date:	Name of company:								
Huayi road,Hua Zhuang	Town, Wuxi, Jiangsu, China Place and date:								
	Signature and stamp Signature and stam								

Mfr. Representative:

Authorized Inspector:

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

Date:

=				As R	equired	by the P	rovision	s of th	e AS	MEB	oiler ar	nd Pres	sure Ve	ssel Co	de R	ules, S	Section	on VIII, [Divisi	on 1		
1.	Manu	ıfactu	red	and	certified	by	Nuxi Che	mical l	Equip	ment	Co., Lt	d.										
						3	6 Huayi F	Road, E	Binhu	Distri	ct, Wux	i, Jiang	su Provi	nce 214	131, [P. R. 0	China.					
2	Manu	foot	rod	for									e and addr									
2.	Manu	iraciu	rea	TOF			Air Prod	ducts N	/lanuf	acturi						lentov	vn PA	18106-5	500,	USA	۸.	
3.	Locat	ion o	f ins	tallat	ion		(Name and address of Purchaser) Not Known Not Known 14700 Downey Ave, Paramount, California, USA															
													(Name and	nown address)			o723		Cai	ΙΙΟ	rnia, t	JSA
4.	Туре				H	lorizontal						Heat	exch.					V	/HA2	2-12	2-1	
					-lorizontal,	vertical, or s						rator, jkt. v	essel, heat	exch., etc.)			(Manufa	cturer's	s seria	al number)	
			-	NA			V	/XCE6			v. 05			54	90.						2023	
5	ASME (Code		(CRN)	VIII, Div	. 1		(Dra	wing n 202	umber) 21			(1)	lational Bo	ard nur N					(Y	ear built)	
			17:07:0	1790707-14			[Editio	and Ad	5505.00		cable (dat	e)I	-	(Cor	17,000	e numbe	ar)			aial O	NA	
Itei	ms 6–1	1 incl	. to	be co	mplete	d for singl							s, shell o	f heat ex	char	igers,	or cha	amber of	lspe f mult	ciai s icha	ervice per mber ve	UG-120(d
	Shell:				of cours				1				(b) Over						4.134		11001 10	00010.
		Co	urse	(s)			Material			Thick	2000	T .			S				4447.0410	_		
No	, Di	amete			Length	Spec	./Grade or	Type	N	om.	- 58		ong. Joir				T	int (Cat. A			Heat Ti	eatment
1		7.981			74.134"	1,000	SA-182 F6		1 000	394"	Corr.		Full, Spo		Eff.	Туре	-	Spot, Nor		ff.	Temp.	Time
N/	-	NA			NA NA		NA NA	,		NA	1/16" NA	S NA	N.		1.0 NA	1 NA	F	Full RT NA		.0 A	None	None
						111 - 21 07				Body	/ Flange	s on Sh				11/1		1975	110	A I	NA	NA
											Ĭ	17.00					В	olting				
No.	Туре	ID		OI	D Fla	ange Thk M	in Hub Thk	Mate	rial	How A	ttached	Location		Num & Siz	:e		Bolting	Material	Wasi (OD, ID		Wash	er Material
1	NA	7.981		14.9	61"	2.165"	0.394"	SA-182	2 F60	We	lded	Left		3"-9UNC-24			SA-193	3 Gr.B7	.718", (0.938"	ASM	E PCC-1
NA	NA	NA		NA			I, L=13	.583	N		0.219" Type 4 NA NA											
7. -	leads: (a)			5	6A-240 S3	2205, Re	mark 1	1			(b)						NA	11/			IVA
				(Mate	erial spec.	number, grad	e or type) (F	I.T. — tir	ne and	temp.)		-		(Mater	ial spe	c. numb	er, grad	de or type)	(H.T. –	- time	and temp)
	Location Bottom, E	1300		Thick			adius		liptical Ratio		Conical		spherical	Flat		Side	to Pre	ssure		C	ategory	Α
(a)	Right E	- 6		in. 15"	1/16"	Crown	Knuckl	e '	2:1	1	oex Angle NA	1	adius	Diamet	er	Conve	x C	Concave	Туре	F	ull, Spot, No	10000
(b)	NA			IA	NA	NA	NA		NA		NA		NA NA	NA NA	+	Yes	+	Yes NA	S NA	+	NA	1.0
										Body	Flanges	s on Hea			_	1.42.4		14/4	INA	-	NA	NA
													1	1/2-191	r			Bolting		_		
	Location			ID	OD	Flange Th	90		10-57	aterial	Н	ow Attacl	ned Nur	n & Size	Bolt	ting Ma	terial	Was (OD, ID		1	Washer N	faterial
(a)	NA NA				-	NA	-	NA	NA		NA			NA								
-	pe of ja			14/1	14/5	IVA	NA NA			NA	Jack	NA et closu	re	NA		NA		NA NA	1		NA	-
	•						5.47.4		_		_	or ologo	_			(Descr	ihe as r	ogee and w	rold bo			
lf	bar, gi	ve dir	nen	sions	; If bolte	ed, describ	e or sket	ch							N.			ogoo ana w	eiu, ba	, etc.	E	
. M.	AWP	412	.2ps	sig		FV at	max. ten	ıp.	430	°F	30	00°F 1	Min. des	ign meta	l tem	ıp.	32	°F a	t	4	12.2psig	
		(Int	ernal)	(E)	kternal)		25	(Inter	nal)	(Ex	ternal)				6				Ť		
0. lr	mpact to	est			W 40		es, all pa					at test	tempera	ture of				thicknoted to ded				
1 4	ludro r	nou	or	comb		e <i>yes</i> or <i>no</i> ar ressure	d the compo						4400	-0.0 <u>4</u> 140=0403		only mach		side d	of			
					GC1.533.034.030.4.# 104	for tube se		CI,	yuro.	al 11	9.6psig		Pro	of test		- Indo		9.				
			o be				cuons.		7.00	20			192032-113	207								
4. I	ubeshe	θl	101	_	A-182	al spec. no.)]		liametre	7.98		>>	13 - 1 702	2.638				/16"				olted	
			ادا	auona	NA	ai spec. (10.)]	υ	Diameter	(subje		ess.)]	1)	Nominal this NA	ckness)			. allow.) VA	(At	ttachme		elded or b	olted)]
			(F	loating		spec. no.)]	-	(Diamet	and the second		- (1)	lominal thic	ckness)	-	-	allow.)				NA chmont)	
3. Tu	ubes	92-	-		789 S32			- 3	0.75				0.065"(A				10			ivila	chment) U	
	(Material spec. no., grade or to			e or type)	(O.D.)						(Nominal thickness)			(Number)			ITw	[Type (straight or U)]				

(Nominal thickness)

(Number)

[Type (straight or U)]

Authorized Inspector: FORM U-1 Page 2 of Manufactured by Wuxi Chemical Equipment Co., Ltd. Manufacturer's Serial No. WHA22-122-1 CRN NA National Board No. 547 Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers. 14. Shell: (a) No. of course(s) 1 b) Overall length 17.126" Course(s) Material Thickness Long. Joint (Cat. A) Circum. Joint (Cat. A, B & C) Heat Tree	3
Manufactured by Wuxi Chemical Equipment Co., Ltd. Manufacturer's Serial No. WHA22-122-1 CRN NA National Board No. 547 Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers. 14. Shell: (a) No. of course(s) 1 b) Overall length 17.126"	3
Manufacturer's Serial No. WHA22-122-1 CRN NA National Board No. 547 Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers. 14. Shell: (a) No. of course(s) 1 b) Overall length 17.126"	
Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers. 14. Shell: (a) No. of course(s) 1 b) Overall length 17.126"	
14. Shell: (a) No. of course(s) 1 b) Overall length 17.126"	_
14. Shell: (a) No. of course(s) 1 b) Overall length 17.126"	
Course(s) Material Thickness Long Joint (Cat A) Circum Joint (Cat A D a C)	
Long. John (Oat. A) Cilcum. John (Cat. A, B & C) Heat Tre	atment
No. Diameter Length Spec./Grade or Type Nom. Corr. Type Full, Spot, None Eff. Type Full, Spot, None Eff. Temp.	Time
1 ID 7.981" 17.126" SA-266 Gr.2N 0.472" 1/8" S NA 1.0 1 Full RT 1.0 None	None
NA	NA
Body Flanges on Shells	
Bolting	
No. Type ID OD Flange Thk Min Hub Thk Material How Attached Location Num & Size Bolting Material Washer (OD, ID, Thk) Washer	Materi
1 NA 7.981" 14.961" 2.559" 0.472" SA-266 Gr. 2N Welded Left 16Nos 7/8"-9UNC-2A, L=10.236" SA-193 Gr. B7 1.718", 0.938", ASME	2.2
1 NA 7.981" 14.961" 2.559" 0.472" SA-266 Gr. 2N Welded Right 12Nos 7/8"-9UNC-2A, L=12.598" SA-193 Gr. 87 1.718", 0.938", ASME	
5. Heads: (a) SA-266 Gr.2N, No H.T. (b) NA	14
(Material spec. number, grade or type) (H.T. — time and temp.) (Material spec. number, grade or type) (H.T. — time and temp.)	-
Location (Top, Thickness Radius Elliptical Conical Hemispherical Flat Side to Pressure Category A	
Bottom, Ends) Min. Corr. Crown Knuckle Ratio Apex Angle Radius Diameter Convex Concave Type Full, Spot, Non	Eff.
(a) Left End 2.362" 1/8" NA NA NA NA NA 14.961" Yes Yes S NA	1.0
(b) NA	NA
Body Flanges on Heads	
Location Type ID OD Flange Thk Min Hub Thk Material How Attached Num & Size Bolting Material Washer Washer Washer Num & Size Bolting Material Washer Num & Size Bolting Washer Num &	across of
(OD, ID, Thk) Washer N	terial
(A) NA NA NA NA NA NA NA NA NA	-
(6) NA	
(Internal) (External) (External)	_
7. Impact test No, exempted per UCS-66 at test temperature of NA	
[Indicate yes or no and the component(s) impact tested] 3. Hydro., pneu., or comb. test pressure Hydro. at 961.6psig Proof test NA	
9. Nozzles, inspection, and safety valve openings:	
Purpose No. Diameter Type Material Nozzle Thickness Reinforcement Attachment Details Local	ion
Inlet, Outlet, Drain, etc.) or Size	pen.)
Nozzle Flange Nom. Corr. Material Nozzle Flange (Insp. Corr.)	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803* 1/8* Inherent Fig. UW-16.1(c) NA	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA S1, SS Inlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803* 1/8* Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803* 1/8* Inherent Fig. UW-16.1(c) NA S1, SS Inlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803* 1/16* Inherent Fig. UW-16.1(c) NA S2, SS Outlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803* 1/16* Inherent Fig. UW-16.1(c) NA S2, SS Outlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803* 1/16* Inherent Fig. UW-16.1(c) NA	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA S1, SS Inlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA S2, SS Outlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA TV, TS Inlet 1 NPS 1 CL.600 LWN/RF SA-106 Gr.B SA-105N 0.4" 1/8" Inherent Fig. UW-16.1(c) None RT, eff.1.0	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA S1, SS Inlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA S2, SS Outlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA TV, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-106 Gr.B SA-105N 0.4" 1/8" Inherent Fig. UW-16.1(c) None RT, eff.1.0 Aux 1-2, Auxiliary 2 NPS 2 CL.300 WN/RF SA-106 Gr.B SA-105N 0.218" 1/8" Inherent Fig. UW-16.1(c) None RT, eff.1.0	
T1, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA T2, TS Outlet 1 NPS 3 CL.600 LWN/RF SA-105N SA-105N 0.803" 1/8" Inherent Fig. UW-16.1(c) NA S1, SS Inlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA S2, SS Outlet 1 NPS 3 CL.600 LWN/RF SA-182 F60 SA-182 F60 0.803" 1/16" Inherent Fig. UW-16.1(c) NA TV, TS Inlet 1 NPS 3 CL.600 LWN/RF SA-106 Gr.B SA-105N 0.4" 1/8" Inherent Fig. UW-16.1(c) None RT, eff.1.0 Aux 1-2, Auxiliary 2 NPS 2 CL.300 WN/RF SA-106 Gr.B SA-105N 0.218" 1/8" Inherent Fig. UW-16.1(c) None RT, eff.1.0	

None

22. Remarks
See attached Form U-4.

				Mfr. Representative	黄代的	Date:	Sep 22	, 2023
				Authorized Inspector	: 3	Date:	Sp.2	2.223
			FO	RM U-1	Pa	age	3 of	. ,
Manufa	actured by Wuxi Ch	emical Equipment Co.,	Ltd.			3-		
Manufa	acturer's Serial No.	WHA22-122-1	CRN	NA	National Board N	0.	547	
		16	CERTIFICATE (OF SHOP COMPLIANCE				
We certi	ify that the statements	s in this report are cor	rect and that al	I details of design, mate	erial, construction, ar	nd workma	anship of this	s vesse
conform	to the ASME BOILER	AND PRESSURE VESS	SEL CODE, Secti	ion VIII, Division 1.			11.70%	
U Certific	cate of Authorization Nu	ımber	30,972	Expires	April 16, 2026	-1		
Date	Sep. 22, 2023	Name	Wuxi Cher	mical Equipment Co., Ltd.		- #	10A3	
				(Manufacturer)		#	42 0	
			CERTIFICATE (OF SHOP INSPECTION			Representative)	
I, the und	dersigned, holding a v	alid commission issue	ed by the Nation	nal Board of Boiler and	Pressure Vessel Insi	nectors an	d employed	hu
		APAVE SA		of		/	a employed	БУ
have insp	pected the pressure ves	sel described in this Ma	anufacturer's Dat	a Report on	July 06, 20	722		
				nas constructed this pres				, and
or implied	f, concerning the pressu	ure vessel described in	this Manufacture	te neither the Inspector nor or's Data Report. Furtherm coss of any kind arising fro Come	nore, neither the Inspe	ctor nor his	s/her employe ion.	er shall
			(Authorized In	nspector)	(National Board	Authorized Insp	pector Commission	n number)
				D ASSEMBLY COMPLIA	ANCE			
We certify	that the statements in	this report are correct a	nd that the field a	assembly construction of	all parts of this vessel	conforms	with the requi	irement
of ASME E	BOILER AND PRESSUR	E VESSEL CODE, Sect	ion VIII, Division 1	. U Certificate of Authoriza	tion Number		kpires	
Date		Name			Signed		-	
				(Assembler)		/R	tepresentative)	-
		CERTII	FICATE OF FIEL	D ASSEMBLY INSPECT	ΓΙΟΝ	(1)	cepresentative)	
, the und	ersigned, holding a va			al Board of Boiler and F		ectors and	d amployed	hu
					more and a second miles	rectors and	a employed	БУ
of		, have co	mpared the state	ments in this Manufacture	er's Data Report with	the describ	ed pressure	wossel.
nd state t	hat parts referred to as				uded in the certificate			
spected	by me and to the best	of my knowledge and b	elief, the Manufa	acturer has constructed	and assembled this p	receire ve	ccol in	, neen
ith the A	SME BOILER AND P	RESSURE VESSEL C	ODE, Section \	/III, Division 1. The des	scribed vessel was in	resoure ve	sser in accor	uance
ydrostatic				either the Inspector nor h				
50		vessel described in the	nis Manufacture	r's Data Pasert First	morner employer make	s arry warra	anty, express	ed or
,	3.1g the pressure		no manulacture	r's Data Report. Further	more, neither the Ins	pector nor	his/her emp	loyer

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)

Commissions

(National Board Authorized Inspector Commission number)

Signed

(07/17)

Date

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. Man	ufactured and certifi		emical Equipm	nent Co., Ltd.	ngsu Province 21413	21 D. D. China							
9		301140	(N	ame and address of Ma	gsu Frovince 21413 anufacturer)	i, P. R. China.							
2. Man	ufactured for	Air P	roducts Manuf	acturing LLC., 1940	Air Products Blvd.,	Allentown PA 18106	-55 14700 Downey						
				(Name a	nd address of Purchase	r)	Ave, Paramount,						
3. Loca	tion of installation				Not Known		California, USA						
4. Type	e Horizo	ontal		Heat exch.	(Name and address)	10/11/	90723.						
i. 17pc	(Horizontal, vertical		(Tank.	separator, heat exch.,	etc.)	(Manufacture	A22-122-1 er's serial number)						
					ccciy	(Mandracture	a serial number)						
_	NA (CRN)			-00 Rev. 05	547		2023						
	(CRN)		(Drawing	number)	(National Board	I number)	(Year built)						
Data R	eport												
Item Nu				Re	emarks								
22. Rema	arks: 1. She	ell side head is co	ld formed by o	thers with certificat	e indicating solution	annealing heat trea	tment after cold forming wa						
	perfori	med at 1958~198°	1.4°F, holding	30mins.			The sold forming wa						
	2. Noz	zle(TV) blind flan	ge: 1No., SA-	105N, ASME B16.5	-2017 NPS 1-1/2 CI	L.300 BL/RF, fixed v	with full thread studs SA-19						
	Gr. B7	, 3/4"-10 UNC-2A	L=5.51", total	4 pcs., and heavy h	nex nuts SA-194 Gr.	2H, 1/2"-13UNC-2B	total 16 ncs						
	3. Noz	zzle(Aux 1/Aux 2)	blind flange:	2Nos. SA-105N. AS	ME B16.5-2017 NE	PS 2 CL 300 BL/RF	, fixed with full thread stud						
	SA-19	3 Gr. B7, 5/8"-11	UNC-2A, L=5.	91", 8 pcs for each	nozzle, and heavy h	ex nuts SA-194 Gr	2H, 5/8"-11 UNC-2B, 32 pc						
	for eac	ch nozzle.		un services (SES DELETE)			, 5/0 11 0140-2B, 32 pc						
			olind flange: 2N	Vos. SA-182 F60 A	SME B16.5-2017 NF	PS 2 CL 300 BL/RF	fixed with full throad at it-						
	SA-19	4. Nozzle(Aux 3/Aux 4) blind flange: 2Nos, SA-182 F60, ASME B16.5-2017 NPS 2 CL.300 BL/RF, fixed with full thread study SA-193 Gr. B8, 5/8"-11 UNC-2A, L=5.91", 8 pcs for each nozzle, and heavy hex nuts SA-194 Gr. 8, 5/8"-11 UNC-2B, 32 pcs											
		for each nozzle.											
	5. Bod	5. Body flanges were used as inspection opening.											
		6. The overpressure protection system not supplied by the vessel Manufacturer.											
			outer, eyetem	not supplied by the	vesser manufacture	la:							
				The state of the s									
10000													
ertificate of	of Authorization: Type	e U	No.	30,972	Expires	April 46	2026						
				50,512	— Lypires —	April 16	0, 2020						
ate	Sep. 22, 2023	Name	Musi Ch	amical Equipment C	o Itd Ci	艺上	PRS/						
	Jop. 22, 2023	Ivalle	- VVUXI CITE	emical Equipment C (Manufacturer)	o., Ltd. Signed	- 121	*7/						
				(ivialidiacturer)		(R	Representative)						
							1						
ate	Sep. 22. 2023	Signed		De	Commission	ND	15677						