20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Nancy Chiasson

Date: 10/13/2023

From: ACI Central Inc.

\_\_\_\_\_

Manufacturer: Cryogenic Experts Inc.

Manufacturer #: PV-605

531 Sandy Circle Oxnard, CA 93036

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: Z6719.2

Unit Description	Drawing Number	Service	Design Code
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1

 Shell Side
 Tube Side

 MAWP @ TEMP
 MDMT @ MAWP
 MAWP @ TEMP
 MDMT @ MAWP

 495 PSI @ 400 F
 -320 F @ 495 PSI
 MDMT @ MAWP

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	2	100			W":	Outlet Header
Flanges	SA 182 F304/L							H":	1 1/2" sch 10s
						-		HS FT2:	1

### Notes:

- 1- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- 2- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- 3- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- 4- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-.72-02-LTCO ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

ACCEPTED

PROVINCE OF PRINCE EDWARD ISLAND COMMUNITIES, LAND & ENVIRONMENT

C.R.N.

DATE:

(174

INSPECTION SERVICES SECTION BOILER/PRESSURE VESSEL BRANCH

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Donnie Ehler

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

531 Sandy Circle Oxnard, CA 93036 Manufacturer #: PV-605

### Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under:

CRN: Z6719.2

Unit Description	Drawing Number	Service	Design Code	
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1	

 Shell Side
 Tube Side

 MAWP@TEMP
 MDMT@MAWP
 MAWP@TEMP
 MDMT@MAWP

 495 PSI@400 F
 -320 F@495 PSI
 AMWP@TEMP
 AMWP@TEMP

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	-	100			W":	Outlet Header
Flanges	SA 182 F304/L				11 1 6 2 2 2 2 2 2 2			H":	1 1/2" sch 10s
1 - 00 1 1 - 1 - 1 - 1 - 1					78 X - 3 X 10 X			HS FT2:	

#### Notes:

- 1- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-.72-O2-LTCO ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Eben Creaser

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

Manufacturer #: PV-605

531 Sandy Circle Oxnard, CA 93036

## Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under:

CRN: Z6719.2

Unit Description	Drawing Numbe	r Service	Design Code	
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1	
Shel	I Side	Tube	Side	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP	
495 PSI @ 400 F	- 320 F @ 495 PSI			

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	2	100			W":	Outlet Header
Flanges	SA 182 F304/L							H":	1 1/2" sch 10s
								HS FT2:	

## Notes:

- 1- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-.72-O2-LTCO ASME Stamp, National Board Registered

This space is for Jurisdictional stamp	and signature
Brunswick	
DEPT OF JUSTICE PUBLIC SAF BOILER & PRESSURE VESSEL	1000 to 1000 t
REGISTRATION ONLY	- 1
CRN 26719.2	1
CHIEF BOILER INSPECTO	3
DATE 10/13/20	1
□BLRs □PVs	
MEITTINGS MILICIEAD COME	PAIRMITRAY 1 06/2003

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

### Recommendation to Register - Pressure Vessel Design

To: Engineering&Inspection Service

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

531 Sandy Circle Oxnard, CA 93036 Manufacturer #: PV-605

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: Z6719.2

Unit Description	Drawing Number	er Service	Design Code
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1
Shel	l Side	Tub	e Side
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
495 PSI @ 400 F	-320 F @ 495 PSI		

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625		100			W":	Outlet Header
Flanges	SA 182 F304/L					NAME OF THE OWNER, WHEN		H":	1 1/2" sch 10s
								HS FT2:	1

#### Notes:

- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
   A copy of the Design bearing the CRN will be sent to the
- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- 4- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-.72-02-LTCO ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

Newformilland Labrador

Registered 26719.20

Desistand by FA

Registered by

UNDER THE AUTHORFTY OF THE PUBLIC SAFETY ACT AND THE BOILER, PRESSURE VESSEL AND COMPRESSED GAS REGULATIONS

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Blair Rawlings

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

531 Sandy Circle Oxnard, CA 93036 Manufacturer #: PV-605

### Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under:

CRN: Z6719.2

Unit Description	Drawing Number	Service	Design Code	
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1	
Shell S	ide	Tub	e Side	

01101	. 0.00	I UNO	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
495 PSI @ 400 F	- 320 F @ 495 PSI		

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100	- 7007-200		OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	-	100			W":	Outlet Header
Flanges	SA 182 F304/L							H":	1 1/2" sch 10s
								HS FT2:	

#### Notes:

- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- 3- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- 4- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-.72-O2-LTCO ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature



20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Matthias Mallman

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

531 Sandy Circle Oxnard, CA 93036 Manufacturer #: PV-605

Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: Z6719.2

Unit Description	Drawing Number	er Service	Design Code
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1
She	li Side	Tub	Side
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
495 PSI @ 400 F	- 320 F @ 495 PSI		

Test Pressure: Hydro: 704 PSI	Pneu:	Test Pressure: Hydro:	Pneu:	

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109		100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049		100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	·	100			W":	Outlet Header
Flanges	SA 182 F304/L		The second second					H":	1 1/2" sch 10s
								HS FT*:	

#### Notes:

- 1- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- 4- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

Description: Tube Bundle Assembly, SHWB-500-1.5x2-.72-O2-LTCO ASME Stamp, National Board Registered

Northwest
Territories
REGISTERED
UNDER THE AUTHORITY OF
THE BOYLER AND PRESSURE
VESSEL ACT.
C.R.N. 2.67/9.21
SIGNED
DATE OCH. 14. 7023

20 McAulay Court, Charlottetown, PE C1A 9M7
P.O. Box 53, Charlottetown, PE C1A 7K1. Phone: 902-566-1975, Fax: 902-566-3133

## Recommendation to Register - Pressure Vessel Design

To: Muhammad Wani

Date: 10/13/2023

From: ACI Central Inc.

Manufacturer: Cryogenic Experts Inc.

Manufacturer #: PV-605

531 Sandy Circle Oxnard, CA 93036

### Subject: ACI Central Design Review

The product described on this form has satisfied the requirements for review of pressure vessel designs established by the Directors of ACI Central at their September 1994 meeting in Moncton, New Brunswick. We recommend this design be registered in your Jurisdiction under;

CRN: Z6719.2

Unit Description	Drawing Number	Service	Design Code
Tube Bundle Assembly	B760029-2 Rev -	Non Lethal	ASME Sect VIII Div. 1
Shell S	Side	Tub	e Side
	5.400 5.600 etc 5.5.5.5.600	DEALLIE CONTRACT	DADBAT CO BANAIO

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
495 PSI @ 400 F	- 320 F @ 495 PSI	TABLE TABLE	

Test Pressure: Hydro: 704 PSI Pneu: Test Pressure: Hydro: Pneu:

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Headers	SA 312 TP304/L	0.095	0.109	-	100			OD": 57"	Inlet Header
Tubes	SA 249 TP304/L	0.049	0.049	-	100			OAL":	1" sch 10s
Cover	SA 479 304	0.159	0.625	-	100			W":	Outlet Header
Flanges	SA 182 F304/L							H":	1 1/2" sch 10s
	1				1			HS FT2:	

#### Notes:

- The return of this form, bearing the signature and stamp of the Jurisdiction will legally establish the CRN shown on this form.
- 2- A copy of the Design bearing the CRN will be sent to the Manufacturer.
- Details including service conditions will be posted on the 'Silent Inspector' Bulletin Board.
- Copies of the Design and Specifications are available to ACIC Members on demand.
- 5- The form will be a permanent ACIC record.
- 6- To reduce turnaround times to a minimum fax your response to 902-566-3133.

ACIC Log#: 34688

<u>Description:</u> Tube Bundle Assembly, SHWB-500-1.5x2-,72-02-LTCO ASME Stamp, National Board Registered

7 me space	is for Juradictional stamp	- '
Nunavut	Plassure Vesse	's Act
1	REGISTERED	
RN_ 76	719-2N	
ate	2023-10-13	3
Signed	Last h.	
	Chiefinspector	