



345 Carlingview Drive  
Toronto, Ontario  
CANADA M9W 6N9  
Tel.: 416.734.3300  
Fax.: 416.231.1626  
Toll Free: 1.877.682.8772  
[www.tssa.org](http://www.tssa.org)

May 10, 2018

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

Service Request Type.: BPV-National ACI Central  
Service Request No.: 2273152  
Your Reference No.: R-0893  
Registered to.: API HEAT TRANSFER

Dear SCOTT ISLIP,

Please find enclosed the original response from PEI,NS,NB,NFLD,YK,NWT,NU, registered under the CRN No.: R4731.59870YTN.

As all jurisdictional fees are handled by the Technical Standards and Safety Authority (TSSA), you do not pay any jurisdictions directly.

Should you have any questions or require further assistance, I will be happy to assist you. For general enquiries, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Tanya Francis  
Administrative Assistant\_ BPV Engineering  
Tel. : 416-734-3423  
Fax : 416-231-6183  
Email : [tfrancis@tssa.org](mailto:tfrancis@tssa.org)

# ACI Central Inc.

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: Steve Townsend

Date: 04/12/2018

From: ACI Central Inc.

Manufacturer: API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

Manufacturer #: PV-9378

**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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

**Shell Side**

**Tube Side**

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI Pneu:	Test Pressure: Hydro: 195 PSI Pneu:
-------------------------------------	-------------------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD: 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.016	-	100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT²:	


**Notes:**

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- 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#: 26803

Description: Aftercooler, 8.63" OD  
 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. R4731.59  
 DATE: April 13 2018  
  
**INSPECTION SERVICES SECTION**  
**BOILER/PRESSURE VESSEL BRANCH**

# ACI Central Inc.

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: 04/12/2018

From: ACI Central Inc.

Manufacturer: API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

Manufacturer #: PV-9378

### 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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

**Shell Side**

**Tube Side**

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI Pneu:	Test Pressure: Hydro: 195 PSI Pneu:
-------------------------------------	-------------------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD": 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.018	-	100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT":	

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ACIC Log#: 26803

Description: Aftercooler, 8.63" OD  
 ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature



Date April 13/18

C.R.N. R4731.58

Dwg. 1510-08-036-022 Rev. 1

Signed Yvonne Perry



# ACI Central Inc.

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:** 04/12/2018

**From:** ACI Central Inc.

**Manufacturer:** API Heat Transfer  
2777 Walden Ave  
Buffalo, NY 14225

**Manufacturer #:** PV-9378

**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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

Shell Side		Tube Side	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI Pneu:	Test Pressure: Hydro: 195 PSI Pneu:
-------------------------------------	-------------------------------------

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD": 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.018	-	100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT²:	

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ACIC Log#: 26803

Description: Aftercooler, 8.63" OD  
ASME Stamp, National Board Registered

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**New Brunswick**

DEPT OF PUBLIC SAFETY  
BOILER & PRESSURE VESSEL ACT

REGISTRATION ONLY

CRN R 4731.57

EXAMINER:

or  
**CHIEF BOILER INSPECTOR**

DATE:

4/13/2018

BLRs  PVs

FITTINGS  COMPONENTS

# ACI Central Inc.

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: Stephen Hlgdon

Date: 04/12/2018

From: ACI Central Inc.

Manufacturer: API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

Manufacturer #: PV-9378

**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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

Shell Side		Tube Side	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI Pneu:	Test Pressure: Hydro: 195 PSI Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD": 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.018		100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT":	

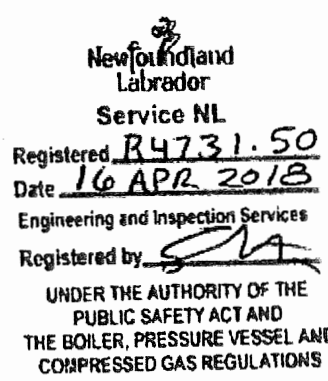
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**ACIC Log#:** 26803

**Description:** Aftercooler, 8.63" OD  
 ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature



Newfoundland  
Labrador  
Service NL  
Registered R4731.50  
Date 16 APR 2018  
Engineering and Inspection Services  
Registered by [Signature]

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

# ACI Central Inc.

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:** Paul Christensen

**Date:** 04/12/2018

**From:** ACI Central Inc.

**Manufacturer:** API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

**Manufacturer #:** PV-9378

**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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

**Shell Side**

**Tube Side**

MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI Pneu:	Test Pressure: Hydro: 195 PSI Pneu:
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Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD": 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.018		100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT²:	

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**ACIC Log#:** 26803

**Description:** Aftercooler, 8.63" OD  
 ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

# ACI Central Inc.

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 Mailman

Date: 04/12/2018

From: ACI Central Inc.

Manufacturer: API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

Manufacturer #: PV-9378

### 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: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1
<b>Shell Side</b>		<b>Tube Side</b>	
<b>MAWP @ TEMP</b>	<b>MDMT @ MAWP</b>	<b>MAWP @ TEMP</b>	<b>MDMT @ MAWP</b>
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

<b>Test Pressure: Hydro: 390 PSI Pneu:</b>	<b>Test Pressure: Hydro: 195 PSI Pneu:</b>
--	--


Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
Shell	SA 53 B	0.242	0.277	0.063	100			OD": 8.63"	
T.Sheet	SA 516 70	0.638	0.938	0.125				OAL": 40.5"	
Tubes	SB 75 C12200	0.016	0.018	-	100			W":	
Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT <sup>2</sup> :	

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**ACIC Log#:** 26803  
**Description:** Aftercooler, 8.63" OD  
 ASME Stamp, National Board Registered

This space is for Jurisdictional Stamp and signature



Northwest Territories

**REGISTERED**

UNDER THE AUTHORITY OF  
 THE BOILER AND PRESSURE  
 VESSEL ACT.

C.R.N. R4731.5

SIGNED [Signature]

DATE April 16/2018

\$82.00

# ACI Central Inc.

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:** 04/12/2018

**From:** ACI Central Inc.

**Manufacturer:** API Heat Transfer  
 2777 Walden Ave  
 Buffalo, NY 14225

**Manufacturer #:** PV-9378

**Subject: ACI Central Design Review**

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**CRN: R4731.5**

Unit Description	Drawing Number	Service	Design Code
Aftercooler	1510-08-036-022 rev 1	Non Lethal	ASME Sect VIII Div. 1

Shell Side		Tube Side	
MAWP @ TEMP	MDMT @ MAWP	MAWP @ TEMP	MDMT @ MAWP
300 PSI @ 300 F	+ 20 F @ 300 PSI	150 PSI @ 300 F	+ 20 F @ 150 PSI

Test Pressure: Hydro: 390 PSI    Pneu:	Test Pressure: Hydro: 195 PSI    Pneu:
--	--

Part	Material	Des. t"	Act. t"	CA"	% EF	RT	PWHT	Dimensions	Notes
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Cover	SA 516 70N	2.188	2.188	0.063	100			H":	
								HS FT?:	

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**ACIC Log#:** 26803

**Description:** Aftercooler, 8.63" OD  
 ASME Stamp, National Board Registered

This space is for Jurisdictional stamp and signature

NUNAVUT

Boilers and  
Pressure Vessels Act

REGISTERED

CRN R4731.5 N

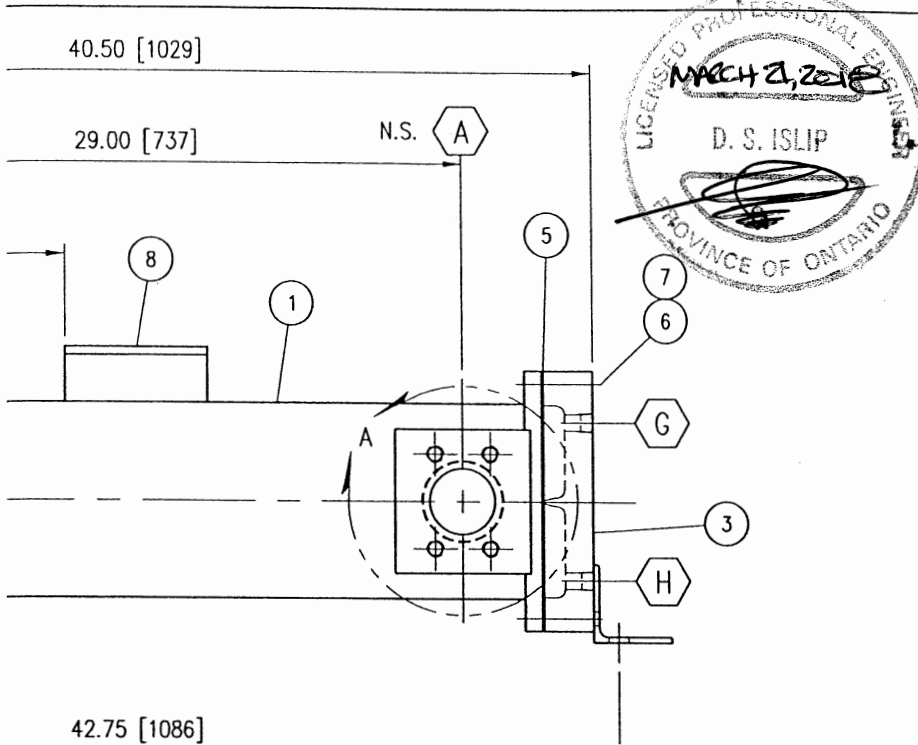
Date April 13, 2018

Signed   
Chief Inspector

---

Territorial Registration Fee





NOZZLE SCHEDULE			
TAG	SIZE	TYPE	SERVICE
A	3	SAE FLANGE	SHELL SIDE INLET
B	3"	SAE FLANGE	SHELL SIDE OUTLET
C	2"	NPT	TUBE SIDE INLET
D	2"	NPT	TUBE SIDE OUTLET
E			
F	3/8"	6000# HALF CPLG	SHELL SIDE DRAIN
G	1/2"	NPT	TUBE SIDE VENT
H	1/2"	NPT	TUBE SIDE DRAIN
J	3/8"	NPT	TUBE SIDE DRAIN
K			
L			
M			
N			

DESIGN DATA		
	SHELL SIDE	TUBE SIDE
DESIGN PRESSURE	300 PSIG / 20.7 Bar	150 PSIG / 10.3 Bar
TEST PRESSURE	390 PSIG / 26.9 Bar	195 PSIG / 13.4 Bar
DESIGN TEMP	+20/300F -6.7/149C	+20/300F -6.7/149C
CORR. ALLOWANCE	.063 [1.5] on C'SU.	.063 [1.5] on C'SU.
RADIOGRAPHY	NONE	NONE
PWHT	NONE	NONE

MATERIALS OF CONSTRUCTION		
PART	SHELL SIDE	TUBE SIDE

**ACIC DESIGN REVIEW**  
 AUTHORIZED BY THE DIRECTORS OF ACI CENTRAL  
 CRN: R4731.598704TN  
 DATE: 04/23/2018  
 FILE: PV-9378  
 REGISTRATION IS A LEGAL REQUIREMENT UNDER THE ACT.  
 IT DOES NOT RELIEVE THE MANUFACTURER OF ANY  
 RESPONSIBILITY FOR THE PRODUCT DETAILED HEREIN.

NOTES CONT:  
 9. OPERATING CONDITIONS:  
 SHELL SIDE FLUID: AIR  
 SHELL SIDE FLOW RATE  
 SHELL SIDE INLET TEMP  
 SHELL SIDE OUTLET TEM  
 TUBE SIDE FLUID: WATER  
 TUBE SIDE FLOW RATE:  
 TUBE SIDE INLET TEMPE  
 TUBE SIDE OUTLET TEM  
 10. THIS HEAT EXCHANGER  
 CONDITION REPRESENTS  
 IT SHALL BE REEVALUA  
 BEING OPERATED AT TH

REL	SA-105	
REL	SA-105	
		A
	SA-194 2H	
	SA-193 B7	
IER		A
IER		A
		B
		B
EL		B
	Specification	Size

		3060-03-3101-004
		501-07-2726-000
		501-07-2726-000
		501-07-2726-000
		501-07-2726-000
	9-008	3015-08-319-008
	-201-000	3010-08-201-000
		501-06-2626-01900
		501-06-2626-03600
	3054-07-119-000	3054-07-119-000
		4008-93-6101-00
		505-03-8002-00700
		505-08-3001-03425
ation	Size	Dwg No
		Part No

**API HEAT TRANSFER**

CORE ASSEMBLY  
 (2) 3" SAE CONN'S

JM  
 / DAG

SIZE	DWG NO	REV
B	2510-08-036-026	1