

# 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: Nancy Chiasson

Date: 07/07/2023

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: Z8120.2**

Unit Description	Drawing Number	Service	Design Code
Heat Exchanger	1510-08-072-037 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	0.0625	85			OD": 8.625"	Type 500, 08072
T.Sheet	SA 516 70	0.669	0.875	0.125				OAL": 76.5"	
Tubes	SB 75 C12200	0.016	0.018	-	100			W":	
Head	SA 516 70N	0.817	1.250	0.0625	100			H":	
								HS FT <sup>2</sup> : 136.7	


**Notes:**

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- 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#: 34336

Description: Oil Cooler, 8.625" 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. 28120.29  
 DATE: JUL 7/23  
  
 INSPECTION SERVICES SECTION  
 BOILER/PRESSURE VESSEL BRANCH

# ACI Central Inc.

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 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:** 07/07/2023

**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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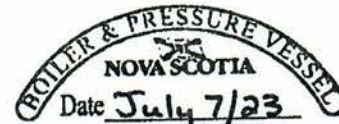
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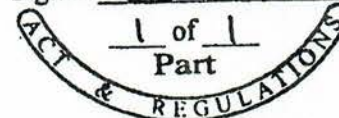
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C.R.N. Z8120.28

Dwg. 1510-08-072-037 rev 1

Signed [Signature]



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 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:** 07/07/2023

**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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New Brunswick  
**Brunswick**

DEPT OF JUSTICE PUBLIC SAFETY  
 BOILER & PRESSURE VESSEL ACT

REGISTRATION ONLY

CRN Z 8120.27

*Eben Creaser*  
 CHIEF BOILER INSPECTOR

DATE 7/7/23

BLRs  PVs

FITTINGS  NUCLEAR COMPONENTS

Sect. 2.0-BPV Rev. 1 06/2003

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## Recommendation to Register – Pressure Vessel Design

To: Engineering & Inspection Service

Date: 07/07/2023

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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ACIC Log# 34336

Description: Oil Cooler, 8.625" OD  
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Newfoundland  
 Labrador

Registered Z8120.20

Date July 7, 2023

Engineering and Inspection Services

Registered by

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

# ACI Central Inc.

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 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:** 07/07/2023

**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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## Recommendation to Register – Pressure Vessel Design

To: Matthias Mailman

Date: 07/07/2023

From: ACI Central Inc.

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

Manufacturer #: PV-9378

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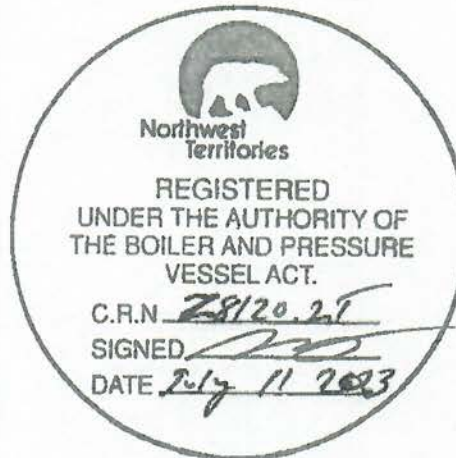
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## Recommendation to Register – Pressure Vessel Design

To: Muhammad Wani

Date: 07/07/2023

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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Boilers and  
Pressure Vessels Act

REGISTERED

CRN           Z8120.2N          

Date           2023-07-07          

Signed           *[Signature]*          

Chief Inspector

Territorial Registration Fee

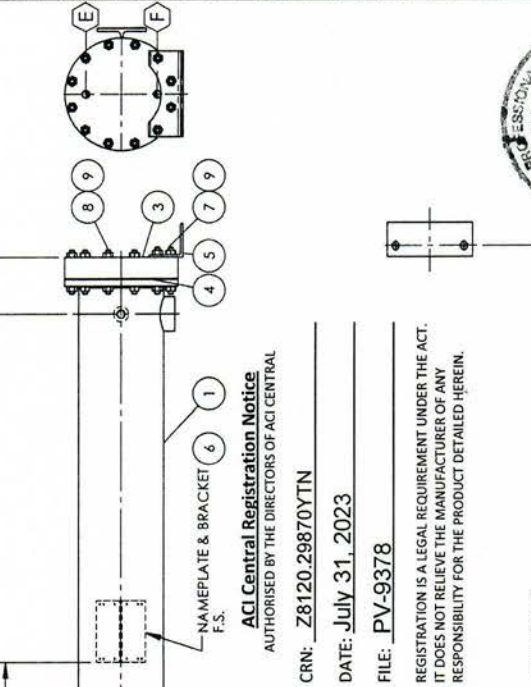
NO.	REVISION DESCRIPTION		BY	DATE	CHK
	RELEASED FOR FABRICATION				
1					

NOZZLE SCHEDULE		TAG	SIZE	TYPE	SERVICE
A	2-1/2"				
B	2-1/2"			SAE CRG.	SHELL SIDE INLET / OUTLET
C	2"			NPT	TUBE SIDE INLET / OUTLET
D	2"			NPT	TUBE SIDE INLET / OUTLET
E	1/2"			NPT	TUBE SIDE VENT / DRAIN
F	1/2"			NPT	TUBE SIDE VENT / DRAIN
G	1/2"			60028 NPT CRG.	SHELL SIDE DRAIN / VENT
H					
J					
K					
L					
M					
N					

DESIGN DATA	
DESIGN PRESSURE	300 PSIG
TEST PRESSURE	450 PSIG
DESIGN TEMP	20/200 °F
CORR. ALLOWANCE	1/16" ON C. STEEL
RADIOGRAPHY	NONE
PWHT	NONE
TUBE/TUBE SHEET JOINT =	ROLLED ONLY
MATERIALS OF CONSTRUCTION	
PART	SHELL SIDE
TUBES	SA-25 C122
TUBESHEETS	SA-516 70N
BAFFLES/SPINDS	STEEL
HEADS	SA-516 70N
SHELL	SA-516 70N
NOZZLE FLGS	SA-105
CF LGS	SA-192 B / SA-194 2H
BOLTS/NUTS	COMPRESSED FIBER
GASKETS	COMPRESSED FIBER
O-RINGS	
BODY FLGS	
DIMENSIONS & DATA CERTIFIED FOR	
CUST. ORDER:	
BASCO ORDER:	
CODES: ASME VIII Div. 1 2021, National CRN:	

CRN: 28120.29870YTN  
 DATE: July 31, 2023  
 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.



CRN: 28120.29870YTN  
 DATE: July 31, 2023  
 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.

ITEM NO.	QTY.	DESCRIPTION	MATERIAL	PART NUMBER
11	5	PLUG PIPE FST 1/2IN.NPT SQHD	SA-105	4020-94-0109-00
10	2	PLUG PIPE STL 2-1/2IN. SAE HEX HEAD	SA-105	4020-25-0101-02
9	48	HEAVY HEX NUT: 1/2-13 UNC	SA-194 2H	4026-32-0203-00
8	16	STUD: 1/2-13UNC X 4.50" LG	SA-193 B7	4022-32-3602-00
7	8	STUD: 1/2-13UNC X 4.75" LG	SA-193 B7	4022-32-3802-00
6	1	NAMEPLATE (ASME/ADDITIONAL)		4072-01-0106-01
5	2	CRADLE	STEEL	3051-08-319-002
4	2	GASKET RING NAB 2 9.63IN.OD 8.88IN.ID	COMPRESSED FIBER	4014-08-0101-02
3	1	BONNET HOG-OUT STL 8IN.DIA 4P RVS 1/2IN.NPT	SA-516 70N	3042-08-201-297
2	1	BONNET HOG-OUT STL 8IN.DIA 4P SPLY 2IN.NPT	SA-516 70N	3042-08-201-298
1	1	CORE ASSEMBLY: 08072 TYPE 500 (232)-3/8		2510-08-072-044

NOTES:  
 1. SEE DOC. NO. 1510-08-072-037-CMR FOR CONTRACT NOTES.  
 2. ESTIMATED WEIGHTS:  
 EMPTY: 450 LBS (204.1 KG)  
 FLOODED: 580 LBS (263.1 KG)  
 3. ITEMS MARKED WITH \* ARE RECOMMENDED SPARE PARTS.

API BASCO DEFAULTS (UNLESS OTHERWISE SPECIFIED)  
 ALL DIMENSIONS IN INCHES UNLESS TOLERANCES LISTED  
 DIMENSIONS AS METRIC (MM) PER FEMA STANDARDS  
 1" = 1 INCH = 25.4MM  
 ALL HOLES STRAIGHT VERTICAL CENTERLINE.  
 3/8 ANGLE  
 THE DRAWING COMPRISES THE INFORMATION AND DATA REQUIRED FOR THE FABRICATION AND ASSEMBLY OF THE EQUIPMENT. THE DRAWING IS THE PROPERTY OF API HEAT TRANSFER.

NO.	DATE	CHK
1	2/22/2023	BPM

NO.	DATE	CHK
1	2/22/2023	BPM

**API HEAT TRANSFER**  
 TYPE 500 OIL COOLER  
 SIZE: 08072 4-PASS  
 1510-08-072-037