

April 23, 2025

Attention: Cecylia Garbacz
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, Tracking Number 2025-01114, Web Portal Number 2025-S0915, originally received on February 20, 2025 was surveyed and accepted for registration as follows:

CRN : 0D09034.52 **Accepted on:** April 23, 2025

Reg Type: ADDITION TO ACC. FITTING **Expiry Date:** July 24, 2034

Drawing No. : Scope of Registration (6 January 2024) As Noted

Fitting type: Hose assemblies.

Design registered in the name of : TRI-CANADA IND LTD

The registration is conditional on your compliance with the following notes:

As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction is other engineering analysis.

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration or AB-351 Declaration of Conformity as supported by the attached data which identifies the dimensions, materials of construction, press./temp. ratings and the basis for such ratings, and the identification marking of the fittings.*
- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration or AB-351 Declaration of Conformity form.*
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency, and maintains a valid Certification of Authorization Permit if required by the jurisdiction where manufacturing takes place, until that date.*
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (587) 943-8743 or fax (403) 291-4545 or e-mail Rokanuzzaman@absa.ca.

Sincerely,



ROKANUZZAMAN, MOHAMMAD, P.
Eng.
DOP Cert. No. D00010592



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings

I, Sue Abaza, Vice President Sales / Quality Control Manager

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Tri-Canada Industries Ltd

(Name of Manufacturer)

Located at 1000 Edgeley Blvd #2, Vaughan, ON, L4K 4V4

(Plant Address)

905-677-9000

(Telephone No.)

(Fax No.)



do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of
CSA B51 + Rubber Manufacturers Association Handbook

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;



or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of Tri-Canada Quality Control which has been verified by the following authority, Technical Standards + Safety Authority (TSSA).

The items covered by this declaration, for which I seek registration, are category D type fittings. In support of this application, the following information and/or test data are attached as follows:

Updated scope of registration dated for CRN OD9034.5R4

(drawings, calculations, test reports, etc.)

Declared before me at the city of Vaughan in the province of Ontario
the 3rd day of January AD 2025.

Commissioner for Oaths:

Khuran Danial

(Printed name)

[Signature]

(Signature)

[Signature]

(Signature of Declarer)

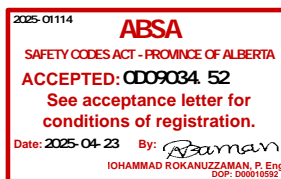
FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category _____.

CRN: _____

Registered by: _____

Dated: _____



This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act



NOTE: This registration expires on: **2034-JUL-24**

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.



Tri-Canada Industries Ltd
1000 Edgeley Blvd #2
Vaughan, Ontario, L4K 4V4



6 January 2025

Scope of Registration Tri-Canada CRN OD9034.5R4

Description	Sizes	End Connections	Liquid, Air & Gas Service MAWP at RT	Max Temp
Pharmaline-N	1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2", 2"	Tri-Clamp, Male NPT, Female JIC	230 psig	150 °C
WCS	3/8", 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2", 2"	Tri-Clamp, Male NPT, Female JIC	250 psig	230 °C
FGR	1/2", 3/4", 1", 1-1/2", 2"	Tri-Clamp, Male NPT	250 psig	121 °C
FGR	2-1/2", 3"	Tri-Clamp, Male NPT	150 psig	121 °C
TS	3/8"	Compression, Male NPT	250 psig	260 °C
Gates Stallion	2"	Tri-Clamp, Female JP/Nut	190 psig	149 °C
TLCT	1/2", 3/4", 1", 1-1/4", 1-1/2"	Tri-Clamp, Male NPT	250 psig	177 °C
TLCT	2", 2-1/2"	Tri-Clamp	200 psig	177 °C
Pure-Fit SBP	1/2"	Tri-Clamp, Male NPT	95 psig	260 °C
Pure-Fit SBP	3/4"	Tri-Clamp	75 psig	260 °C

Description	Sizes	End Connections	Liquid, Air & Gas Service MAWP at RT	Max Temp
Pure-Fit SBP	1"	Tri-Clamp, Male NPT	55 psig	260 °C
RubberFab RFRT	1/2", 3/4", 1", 1-1/2", 2"	Tri-Clamp, Male NPT	250 psig	149 °C
RubberFab RFRT	3"	Tri-Clamp	200 psig	149 °C
RubberFab RFSB	1/2"	Tri-Clamp	105 psig	195 °C
RubberFab RFSB	3/4"	Tri-Clamp, Male NPT	90 psig	195 °C
RubberFab RFSB	1"	Tri-Clamp, Male NPT	60 psig	195 °C
RubberFab RFCTL P	1/2", 3/4", 1", 1-1/2", 2"	Tri-Clamp, Male NPT	250 psig	177 °C

Tri-Canada

Tri-Canada Industries Ltd

1000 Edgeley Blvd #2

Vaughan, ON, L4K 4V4

Updated Hose Component Part Numbers for Proof Tests CRN OD9034.5R4

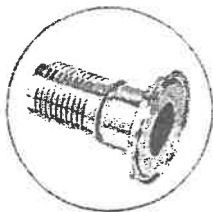
Hose	Size	Hose Part #	Crimp Ferrule #	Connection Part #	X	Connection Part #
Pharmaline	1/2"	08-PHAN-GP	PL-08-01-DC	Fem JIC # AF-08-0-DC	X	Triclamp # AF-08-11-DC-SF4, TC5050
	1"	16-PHAN-GP	PL-16-01-DC	Male NPT # AF-6-03-DC	X	Triclamp # AF-16-10/S-DC-SF4, TC1010
	2"	32-PHAN-GP	PL-32-01-DC	Triclamp # AF-32-10-DC-SF4, A-TC32	X	Triclamp # AF-32-10-DC-SF4, A-TC32
WCS	3/8"	2706WCS00	270600SKL	Male NPT # 160603SK0	X	Female JIC # 160602SKN
	2"	2732WCS00	273200SKL	Triclamp # A-TC32	X	Male NPT # 383203SK0
FGR	1/2"	HOSFGR-08	990800SK0	Triclamp # TC5050	X	Male NPT # 160803SK0
	3"	HOSFGR-48	994800SK0	Triclamp # A-TC48	X	Triclamp # A-TC48
TS	3/8"	1606TS400	160600SK0	Compression Tube Adapter w/ Nut and ferrules # 160632FNS	X	Male NPT # 160603SK0
Gates Stallion	2"	4698-0014	993200FGR	Triclamp A-TC32	X	Female JP/Nut # A-JPN32
TLCT	1/2"	3808TLCT0	380800SK0	Triclamp # 160811SK0, TC5050	X	Male NPT # 160803SK0
	2.5"	3840TLCT-2.5	384000SK0	Triclamp # 384010SKE	X	Triclamp # 384010SKE
Pure-Fit SBP	1/2"	HOSSBP-08	880800SK0	Triclamp # 160811SK0	X	Male NPT # 160603SK0
	3/4"	HOSSBP-12	881200SK0	Triclamp # TC7575	X	Male NPT # 381203SK0
	1"	HOSSBP-16	881600SK0	Triclamp # 381610SK0	X	Male NPT # 381603SK0

Hose	Size	Hose Part #	Crimp Ferrule #	Connection Part #	X	Connection Part #
Rubberfab	1/2"	08RFT	08CL-FDAE	Triclamp # 08HB-08TC-SS	X	Male NPT # 08HB-08MPT-SS
RFRT	2"	32RFT	32CL-RT-SS	Triclamp # 32HBL-32TC-SS	X	Male NPT # 32HBL-32MPT-SS
	3"	48RFT	48CL-RT-SS	Triclamp # 48HBL-32TC-SS	X	Triclamp # 48HBL-32TC-SS
Rubberfab	1/2"	08RFSB	08CL-SB-SS	Triclamp # 08HB-08TC-SS	X	Male NPT # 08HB-08MPT-SS
RFSB	3/4"	12RFSB	12CL-SB-SS	Triclamp # 12HB-12TC-SS	X	Male NPT # 12HB-12MPT-SS
	1"	16RFSB	16CL-SB-SS	Triclamp # 16HB-16TC-SS	X	Male NPT # 16HB-16MPT-SS
Rubberfab	1/2"	08RFCTL	08CL-CLTP-SS	Triclamp # 08HB-08TC-SS	X	Male NPT # 08HB-08MPT-SS
RFCTL	2"	32RFCTL	32CL-CLTP-SS	Triclamp # 32HBL-32TC-SS	X	Male NPT # 32HBL-32MPT-SS

Versilon™ Fitting End Connections

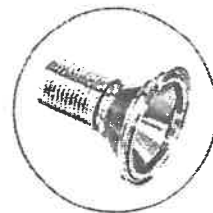
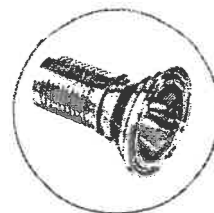
Sanitary

Sanitary clamp style, 316L stainless steel
Style 10



Sanitary "jump" styles clamp style, 316L stainless steel

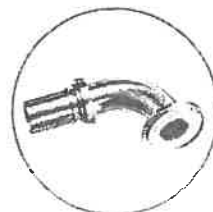
Style 10U - 1 step up
Style 10UU - 2 steps up



Sanitary clamp style 90° elbow, 316L stainless steel

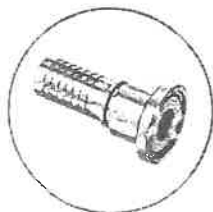
Style 10L

Sanitary & hose barb same size

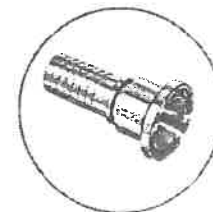


Sanitary "mini", 316L stainless steel

Style 11



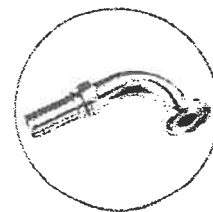
Sanitary "mini" jump size, 316L stainless steel
Style 11U



Sanitary 90° elbow "mini", 316L stainless steel

Style 11L

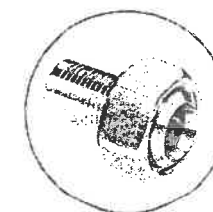
Mini sanitary & hose barb same size



Note: 45° elbows also available full size (style 10L45) & "mini" size (style 11L45)

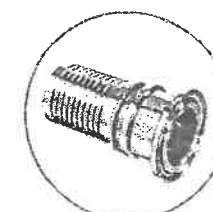
Bevel seat/nut, 316L stainless steel insert 304 stainless steel nut

Style 20



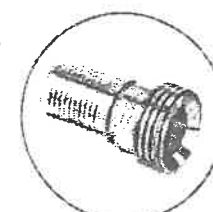
Sanitary "maxi" size for Sani-Tech® Rigid connections, 316L stainless steel

Style 25



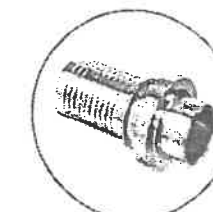
Bevel seat, male threads, 316L stainless steel

Style 40

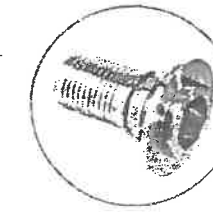


ButtWeld, sanitary tube size 316L stainless steel

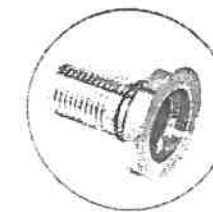
Style 41



Male I-line, 316L stainless steel
Style 50



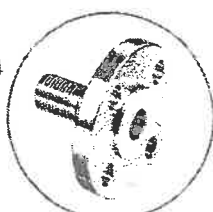
Female I-line, 316L stainless steel
Style 51



Fittings made from other materials such as high nickel alloys and PVDF are available. Contact us for more information.

Flanged Connections Class 150 Lap Joint Flanges Shown • Class 300 Lap Joint Flanges Available

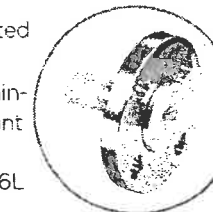
316L Flange retainer with: 304 or 316L lap joint flanges
Style 12S6 - 316L flange
Style 12S4 - 304 flange



PFA Encapsulated flange retainer: 304 or 316L stainless steel lap joint flange

Style 12T6 - 316L flange

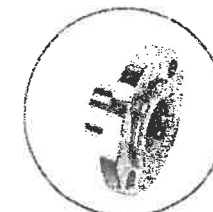
Style 12T4 - 304 flange



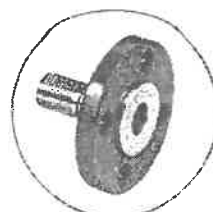
"Flare-Thru" flange retainer: fluoropolymer lined

Style 12FTC - epoxy coated carbon steel

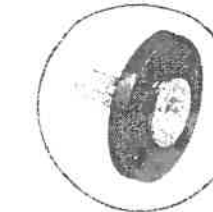
Style 12FT6 - 316L flange
Style 12FT4 - 304 flange



Epoxy coated carbon steel lap joint flange
Style 12C - epoxy carbon steel flange



PFA encapsulated flange retainer:
Style 12TC - epoxy coated carbon steel



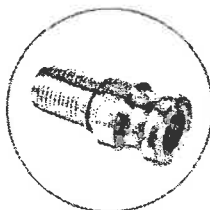
C/F for hose type with Flare-Thru flange option.
Note: Class 300# flanged assemblies must be cross checked for hose/fitting pressure rating.

Male Cam & Groove

316L stainless steel male cam & groove

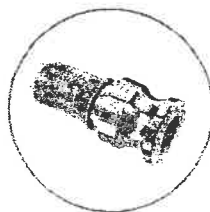
Style 17 - Male & hose barb same size

Style 17U - Male is one size larger than Hose Barb



PFA Encapsulated male cam & groove

Style 17T - male & hose barb same size



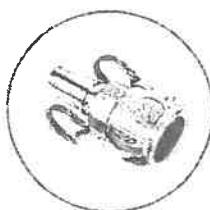
Fluoropolymer encapsulated male cam & groove fittings available on selected hose styles & sizes. C/F for availability

Female Cam-Lock (Cam & Groove)

Female cam-lock, swivel style non-locking arms

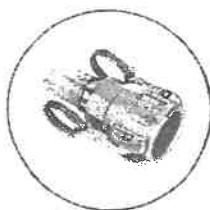
316L insert 316 stainless steel body

Style 16



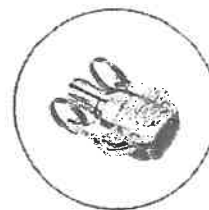
Female cam-lock, swivel style non-locking arms PFA encapsulated insert with 316 stainless steel body

Style 16T



Female cam-lock swivel style locking arms 316L insert 316 stainless steel body

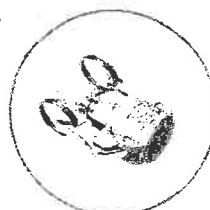
Style 16LK



Female cam-lock, swivel style locking arms

PFA encapsulated insert 316 stainless steel body

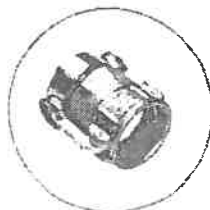
Style 16TLK



Female cam-lock, swivel style locking and nonlocking arms "Flare-Thru" option

Style 16FTLK - locking arms

Style 16FTS6 - non-locking arms



Fluoropolymer Flare-Thru female cam & groove fittings available on selected hose styles & sizes. C/F for availability

Compression, O-Ring and Vacuum

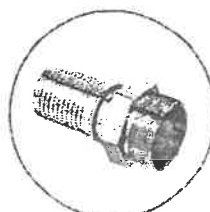
Compression connector 316L stainless steel

Style 31

1/4" to 1" sizes

hose barb & connector same size

Step-up & step-down sizes available: C/F

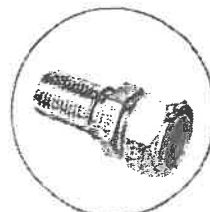


Compression connector w/nut & ferrules 316L stainless steel 1/4" to 1" sizes

Style 31FN

Hose barb & connector same size

Step-up & step-down sizes available: C/F

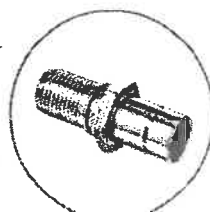


Compression tube adapter 316L stainless steel 1/4" to 1" sizes

Style 32

Hose barb & tube same size

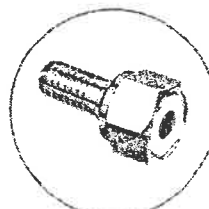
Step-up & step-down sizes available: C/F



O-ring style 316L stainless steel

1/4"-1/2" sizes

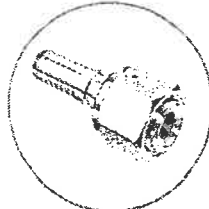
Style 33



Vacuum fitting, female 316L stainless steel

1/4" & 1/2" sizes

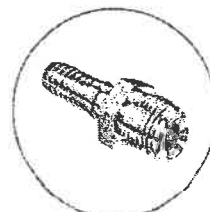
Style 34



Vacuum fitting, male 316L stainless steel

1/4" & 1/2" sizes

Style 35

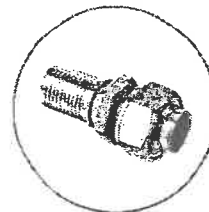


Compression tube adapter w/nut & ferrule 316L stainless steel

1/4" - 1" sizes

Available preswaged from factory

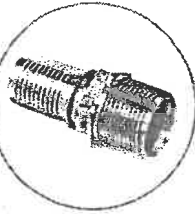
Style 32FN



NPT

Male NPT; 316 L stainless steel hex style

Style 03 - MNPT & hose barb same size

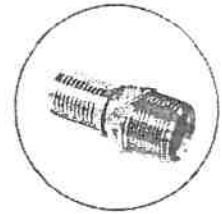
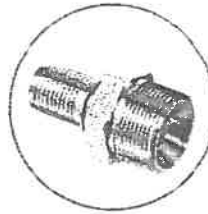


Male NPT jump sizes hex style; 316L stainless steel

Style 03U - step-up

Style 03D - step-down 2-1/2" & larger fittings have "wrench flats"

Style 04 - male NPT, plain

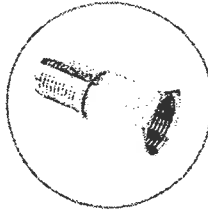


Female NPT

Style 06 - Hex style; 316L stainless steel

Hose barb & female NPT same size

Style 05 - female NPT, plain



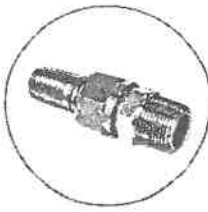
Unions/Female JIC

Male union, 316L stainless steel JIC x male NPT pipe adapter

Style 08 - hose and MNPT barb same size

Style 08U - step-up

Style 08D - step-down



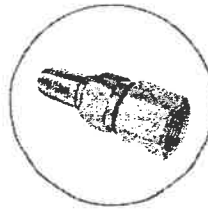
Female union 316L stainless steel

JIC x female pipe adapter

Style 07 - same size FNPT pipe x hose barb

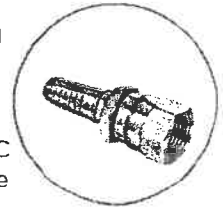
Style 07U - step-up

Style 07D - step-down



Female JIC swivel anti-torque style 316L stainless steel

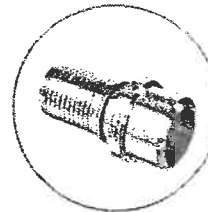
Style 02HSN - JIC & hose barb same size



ButtWeld, 316L stainless steel "pipe size"

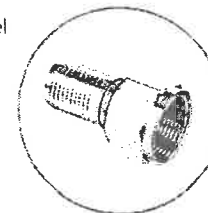
Style 01

Pipe size & hose barb same size. Length & pipe schedule can be custom manufactured. C/F



Female JIC swivel 316L stainless steel insert, 304 stainless steel swivel nut

Style 02 - JIC & hose barb same size

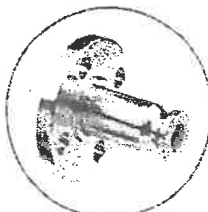


Versilon™ Adapters

PFA encapsulated 316 male cam & groove x 150# Lap joint (swivel) flange adapter

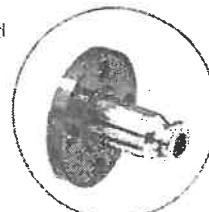
Style 18T6 - 316L stainless steel flange

Style 18T4 - 304 stainless steel flange



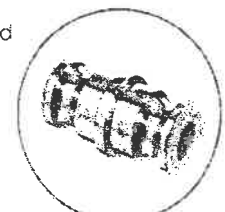
PFA encapsulated 316 male cam & groove x 150# lap joint (swivel) flange adapter

Style 18TC - epoxy coated carbon steel flange C/F for 300# flange



PFA encapsulated 316 stainless steel "spool" adapter for connecting two fluoropolymer-lined female cam & groove fittings

Style 19T





TSSA
345 Carlingview Drive
Toronto, ON M9W 6N9

January 6, 2025

Re: Modification of existing CRN OD9034.5R4. Dated July 24, 2024. Expires July 24, 2034

Our aspects of the design and scope of this renewal are identical to our registration of OD9034.5R4 as issued by TSSA on July 24, 2024, the only change is location of our facility.

The following documents are enclosed with this cover letter.

- Completed application request for a Canadian Registration Number (CRN) in multiple jurisdictions for fittings D expansion joints/flexible connections/hose assemblies.
- Certificate number QA-00498
- Quality Control Manual for current address approved on Dec 27, 2024, expires on Oct 16, 2028
- Signed and notarized TSSA Statutory declaration form
- Two original, signed and notarized copies of Uniform Statutory Declaration Form for the Registration of Fitting Design
- Scope of registration with new address
- Hose Component Part Numbers
- Versilon fitting diagrams
- CRN Proof Test Pressure Calculation for hose assemblies Dated July 3, 2018
- Payment receipt for previous incorrect application Receipt #
MASTERCARDPP-2024-09-15-004

Upon receipt and consideration of the above, please direct any questions to my email address sue@tricanada.com or please call 905-677-9000

Regards,

A handwritten signature in black ink, appearing to read 'S. Abaza', written in a cursive style.

Sue Abaza
Vice President
Quality Control Manager



345 Carlingview Drive
Toronto, Ontario
Canada M9W 6N9
Tel.: 416.734.3300
Fax.: 416.231.6183
Toll Free: 1.877.682.8772

www.tssa.org

TECHNICAL STANDARDS AND SAFETY AUTHORITY

CERTIFICATE OF AUTHORIZATION

This is to certify the named company as having had the adequacy of their quality program verified for the scope shown below in accordance with the *Ontario Technical Standards and Safety Act, 2000* and the Boilers and Pressure Vessels Regulation.

Company Name: TRI-CANADA INDUSTRIES LTD.
1000 Edgeley Blvd Unite 2
Concord ON L4K 4V4
Canada

Scope: Fabrication of Non-Welded Category D type Fittings only at the Above Location Only. In accordance with CSA Standard B51 Boiler, Pressure Vessel and Pressure Piping Code.

Authorized: Dec 27, 2024

Expires: Oct 16, 2028

Certificate Number: QA-00498



Kim Semper, Director
Boilers and Pressure Vessels Safety
Program