



REGISTRATION OF A PRESSURE FITTING DESIGN

November 18, 2025

TSSA
345 Carlingview Dr.
Toronto, ON
Canada
M9W 6N9

Attention: Cecylia Garbacz

File Number: 103965

Re: Manufacturer: Tylok International, Inc.
Item: Instrumentation Tube Fittings
Catalog or Drawing: Scope of CRN Registration (07-Oct-25) & Design Report R-2175B Rev. 0

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

0A17734.53

Expiry Date: 2035-10-14

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,

Athan Syrgiannis, P.Eng.

Codes and Standards Compliance

Remarks:

CRN renewal - previously registered in Saskatchewan through CSA.

CRN issuance based upon registration by another province under the interprovincial agreement. Conditional upon compliance with the notes on the TSSA registration.

Statutory Declaration (Registration of Fittings)

TSK-1008

I. Declaration Information

I, Luke DiFranco,

Engineer

(company title, e.g. vice president, plant manager, chief engineer)
(must be in a position of authority in the manufacturing plant where the fitting is produced)

of: Tylok International, Inc.

(name of manufacturer)

located at: 26000 Lakeland Boulevard, Euclid, OH, 44132, USA

(Plant Address – Apt/Street)

(City, Prov)

(Postal Code)

In this space, show facsimile of
manufacturer's logo or trademark as it will
appear on the fitting.



do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel Safety Act** (check one)

- ☒ Comply with the requirements of ASME B31.1, B31.3 which specifies the dimensions,
(title of recognized North American Standard)
Materials of construction, pressure / temperature ratings and identification marking of the fittings, 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, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, ISO 9001: 2015 SCB as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are CATEGORY A - TUBE FITTINGS

In support of this application, the following information, calculations and / or test data are attached:

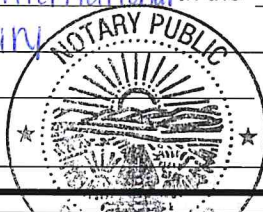
SCOPE OF CRN, DRAWINGS, CALCULATIONS, REPORTS

II. Declaration

DECLARED before me at Tylok International In the City, State of Euclid, Ohio
this 28th day of January, 2025

Elizabeth Kirby
(print name)

Elizabeth Kirby
(Signature of Commissioner of Oaths)



ELIZABETH KIRBY
(Signature)

Notary Public, State of Ohio
My Commission Expires
September 8, 2027

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Safety Act** and CSA B51, Clause 4.2, and is accepted for registration in Category _____



Registration No. 0A17734.53

File No. 103965

Registered

Date: November 18, 2025

Expiry Date: October 14, 2035

Codes & Standards Compliance Office

(Date Registered – MM DD YYYY)
(For the Administrator / Chief Inspector)

(Expiry Date – MM DD YYYY)

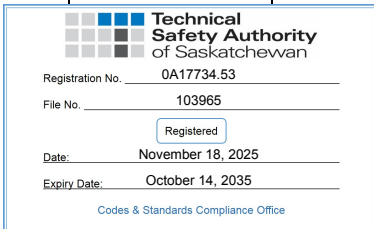
SCOPE OF CRN REGISTRATION

Design Report	R-2175B Rev. 0				
Product Description	Tylok CS-LOK Product Families				
Instrumentation Tube Fittings	SATPF, SATPM, SHBA, SBHFP, SBHMP, SBHU, SBUANF, SCAP, SF PLUG, SFC, SMC, SMC-ORS, SMC-ORT, SPCU, SRATT, SRPC, SRU, STBW, STSW, SU, SUANF, SELU SFE, SME, STBWE, STSWE, STFT, STMT, STTF, STTM, STTT, SCR				
Design Code	Available Material of Construction	Tylok Size	Tube Size	ASME B31.3 MAWP at 100°F (psig)	ASME B31.1 MAWP at 100°F (psig)
ASME B31.3, ASME B31.1	Stainless Steel ASTM A479-316/316L, ASTM A182-F316/316L	2	1/8"	10900	10900
		3	3/16"	10200	10200
		4	1/4"	10200	10200
		5	5/16"	8000	8000
		6	3/8"	6500	6500
		8	1/2"	6700	6700
		10	5/8"	6000	6000
		12	3/4"	5800	5800
		14	7/8"	4800	4800
		16	1"	4700	4700
	Steel ASTM A105, ASTM A108 Grade 12L14, 1137, 1141, 1045	2	1/8"	10200	8700
		3	3/16"	9600	8200
		4	1/4"	9600	8200
		5	5/16"	7600	6400
		6	3/8"	6200	5300
		8	1/2"	5900	5000
		10	5/8"	5300	4600
		12	3/4"	5100	4300
		14	7/8"	4300	3600
		16	1"	4100	3500
	Brass ASTM B16-C36000, ASTM B283-C37700	2	1/8"	3600	3600
		3	3/16"	3400	3400
		4	1/4"	3500	3500
		5	5/16"	2700	2700
		6	3/8"	2200	2200
		8	1/2"	2100	2100
		10	5/8"	1900	1900
		12	3/4"	1800	1800
		14	7/8"	1500	1500
		16	1"	1500	1500

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature, MDMT = Minimum Design Metal Temperature.

Note 2: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 3: The tube fitting maximum allowable working pressure shown is the tube fitting maximum allowable working pressure at 100°F for fittings with tube end process connections. See **Note 6** for fittings supplied with MNPT or FNPT process connections. See **Note 7** for elevated temperature derating factors to be used when the temperature exceeds 100°F.





SCOPE OF CRN REGISTRATION CONTINUED

Note 4: The tube fitting maximum allowable working pressure may be limited by the strength of the tube material that the fittings are installed on. The pressure ratings shown are for fittings installed on the following tube materials:

ASME B31.3 Code

- Stainless Steel pressure ratings based on Tylok calculated ASTM A213 and ASTM A269 Tube ratings using an ASME B31.3 allowable stress equal to 20,000 psig
- Carbon Steel pressure ratings based on Tylok calculated ASTM A179 Tube ratings using an ASME B31.3 allowable stress equal to 15,700 psig
- Brass pressure ratings based on Tylok calculated ASTM B75 Temper O Tube ratings using an ASME B31.3 allowable stress equal to 6000 psig

ASME B31.1 Code

- Stainless Steel pressure ratings based on Tylok calculated ASTM A213 Tube ratings using an ASME B31.1 allowable stress equal to 20,000 psig
- Carbon Steel pressure ratings based on Tylok calculated ASTM A179 Tube ratings using an ASME B31.1 allowable stress equal to 13,400 psig
- Brass pressure ratings based on Tylok calculated ASTM B75 Temper O Tube ratings using an ASME B31.1 allowable stress equal to 6000 psig

Note 5: The tube fitting maximum allowable working pressure may be limited by the thickness of the tube material that the fittings are installed on. The pressure ratings shown are for fittings installed on the following tube thickness:

Tube Size	Tube Thk. in.
2 (1/8")	0.035
3 (3/16")	0.049
4 (1/4")	0.065
5 (5/16")	0.065
6 (3/8")	0.065
8 (1/2")	0.083
10 (5/8")	0.095
12 (3/4")	0.109
14 (7/8")	0.109
16 (1")	0.120



SCOPE OF CRN REGISTRATION CONTINUED

Note 6: Tube fittings shall be limited to the following maximum allowable working pressures when the fitting is supplied with a MNPT or a FNPT process connection.

MNPT End Maximum Pressure - Temperature Ratings			
Size	Stainless Steel	Carbon Steel	Brass
	MAWP at 100°F, psig	MAWP at 100°F, psig	MAWP at 100°F, psig
2 (1/8")	10100	10100	5000
4 (1/4")	8000	8000	4000
6 (3/8")	7800	7800	3900
8 (1/2")	7700	7700	3800
12 (3/4")	7300	7300	3600
16 (1")	5300	5300	2600

FNPT End Maximum Pressure - Temperature Ratings			
Size	Stainless Steel	Carbon Steel	Brass
	MAWP at 100°F, psig	MAWP at 100°F, psig	MAWP at 100°F, psig
2 (1/8")	6500	6500	3200
4 (1/4")	6600	6600	3300
6 (3/8")	5300	5300	2600
8 (1/2")	4900	4900	2400
12 (3/4")	4600	4600	2300
16 (1")	4400	4400	2200

SCOPE OF CRN REGISTRATION CONTINUED

Note 7: When used at elevated temperatures the following Pressure Derating Factors apply to the tube fittings. The Pressure Deratings Factor for the tube the fittings are installed on is depended on the tube material. It is the responsibility of the end user to determine the tube pressure-temperature ratings as this is depended on the tube material and tube thickness. Reference the Tylok catalog for guidance.

Stainless Steel: ASTM A479-316/316L, ASTM A182-F316/316L

Temperature (°F)	Derating Factor
100	1.000
200	1.000
300	1.000
400	0.965
500	0.895
600	0.850
650	0.830
700	0.815
750	0.805
800	0.795
850	0.785
900	0.775
950	0.770
1000	0.765

Example:

Part # SS-2-SMC-2 constructed from stainless steel has a pressure rating at 100°F equal to 10,100 psig. To determine the fitting pressure ratings at 500°F locate the Derating Factor for stainless steel from the charts. This factor is determined to be 0.895. Therefore, the pressure rating of Part # SS-2-SMC-2 at 500°F is equal to 10,100 x 0.895 = 9040 psig.

Brass: ASTM B16-C36000, ASTM B283-C37700

Temperature (°F)	Derating Factor
100	1.000
150	0.940
200	0.900
250	0.870
300	0.830
350	0.750
400	0.200

Steel: ASTM A105, ASTM A108 Grade 12L14, 1137, 1141, 1045

Temperature (°F)	Derating Factor
100	1.000
200	1.000
250	1.000

Note 8: When used under the ASME B31.1 code ASTM B283-C37700 is limited to 200°F maximum.

Note 9: See Attached ISO certificate for applicable manufacturing locations.

QUALITY MANAGEMENT SYSTEM CERTIFICATE

This certifies that the quality system of

Tylok International, Inc.

26000 Lakeland Boulevard, Euclid, OH 44132, USA

is registered by IAPMO SCB in recognition of a
Quality Management System, which fulfills the requirements of

ISO 9001:2015

Scope of Registration

Design and manufacture fittings, valves, and other fluid system components related to
tube, pipe, and hose for domestic and global partners.

Certificate No: 1117996

Certificate Decision/Re-Issue Date: 06/04/2024

Certificate Issue Date: 07/02/2024

Certificate Expiry: 07/01/2027

Site Structure: Multiple Sites



SHIRLEY DEWI, SR. VICE PRESIDENT OF
MANAGEMENT SYSTEM REGISTRATION SERVICES

909.230.5526 | WWW.IAPMOSCB.ORG
5001 E. PHILADELPHIA ST, ONTARIO, CA 91761-2816



QUALITY MANAGEMENT SYSTEM CERTIFICATE

Appendix to Certificate No: 1117996

Includes Facilities Located At (Multiple Sites):

Central Function: Tylok International, Inc.

26000 Lakeland Boulevard, Euclid, OH 44132, USA

Scope of Registration: *Company headquarters with management responsibility and authority for the Quality Management System, administration, strategic planning, strategic sourcing, continual improvement, communication processes, resource allocation, and training & development. Support activities at this location include quoting & ordering, customer & technical servicing, procuring, scheduling, designing, and product support engineering for Tylok products.*

Site #1: Tylok International, Inc.

26260 Lakeland Boulevard, Euclid, OH, 44132 USA

Scope of Registration: *The primary activities at this location include component manufacturing of Tylok products.*

Site #2: Tylok International, Inc.

1055 East 260th Street, Euclid, OH, 44132 USA

Scope of Registration: *Storage of yard equipment.*

Site #3: Tylok International, Inc.

1061 East 260th Street, Euclid, OH, 44132 USA

Scope of Registration: *The primary activities at this location include receiving, assembling, stocking, and distributing Tylok products.*

Site #4: Tylok International, Inc.

1071-1081 East 260th Street, Euclid, OH, 44132 USA

Scope of Registration: *The primary activities at this location include component manufacturing of Tylok products.*

Certificate Decision/Re-Issue Date:	06/04/2024
Certificate Issue Date:	07/02/2024
Certificate Expiry:	07/01/2027
Site Structure:	Multiple Sites