

October 19, 2023

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

The design submission, Tracking Number 2023-03444, Web Portal Number 2023-S2061, originally received on May 30, 2023 was surveyed and accepted for registration as follows:

**CRN :** 0A24574.52 **Accepted on:** October 19, 2023

**Reg Type:** NEW DESIGN **Expiry Date:** May 12, 2033

**Drawing No. :** Attachment A & Attachment B Scope of CRN Registration

**Fitting type:** Swagelok TTW Series Thermowell Tees

Design registered in the name of : SWAGELOK COMPANY

**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 are ASME B31.1 and ASME B31.3.*

- *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 (780) 433-0281 ext 3360 or fax (780) 437-7787 or e-mail [Issa@absa.ca](mailto:Issa@absa.ca).

Sincerely,



ISSA, SAMIR, P. Eng.  
DOP Cert. No. D00009269



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

Swagelok

## STATUTORY DECLARATION Registration of Fittings

I, Joel Feldman, Vice President of Engineering  
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Swagelok Company  
(Name of Manufacturer)

Located at 29500 Solon Road, Solon, Ohio 44139 USA (440) 248-4600 (440) 349-5970  
(Plant Address) (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 ASME B31.1 for unlisted components, and ASME B31.3 for unlisted components  
(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 ISO 9001:2015 which has been verified by the following authority, BSI.

The items covered by this declaration, for which I seek registration, are category A. Fittings type fittings. In support of this application, the following information and/or test data are attached as follows:  
ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents  
(drawings, calculations, test reports, etc.)

Declared before me at SOLON in the STATE of OHIO

the 31 day of JANUARY AD 20 23.

Commissioner for Oaths:

JEFFREY C TRUMBULL  
(Printed name)

[Signature]  
(Signature)



**JEFFREY C. TRUMBULL**  
 Notary Public  
 State of Ohio  
 Recorded in Lake County  
 Certificate # 2020-RE-813693  
 My Commission Expires  
 April 15, 2025

[Signature]  
(Signature of Declarer)

### FOR OFFICE USE ONLY

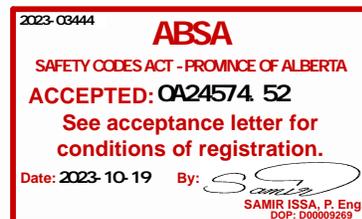
To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category A.

CRN: 0A24574.52

Registered by: \_\_\_\_\_

Dated: 2023-10-19

**NOTE: This registration expires on: 2033-05-12**



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.

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



Canadian Registration Number Submittal  
 Category: Swagelok TTW Thermowell Tees



Date: September 12, 2023  
 Page 1 of 2

## Attachment B: Scope of CRN Registration for Swagelok TTW Series Thermowell Tees (Category A)

This document represents the scope of the TTW Series Thermowell Tees covered by this submission for CRN approval. The products have been evaluated in accordance with ASME B31.1-2020 for unlisted components and ASME B31.3-2020 for unlisted components.

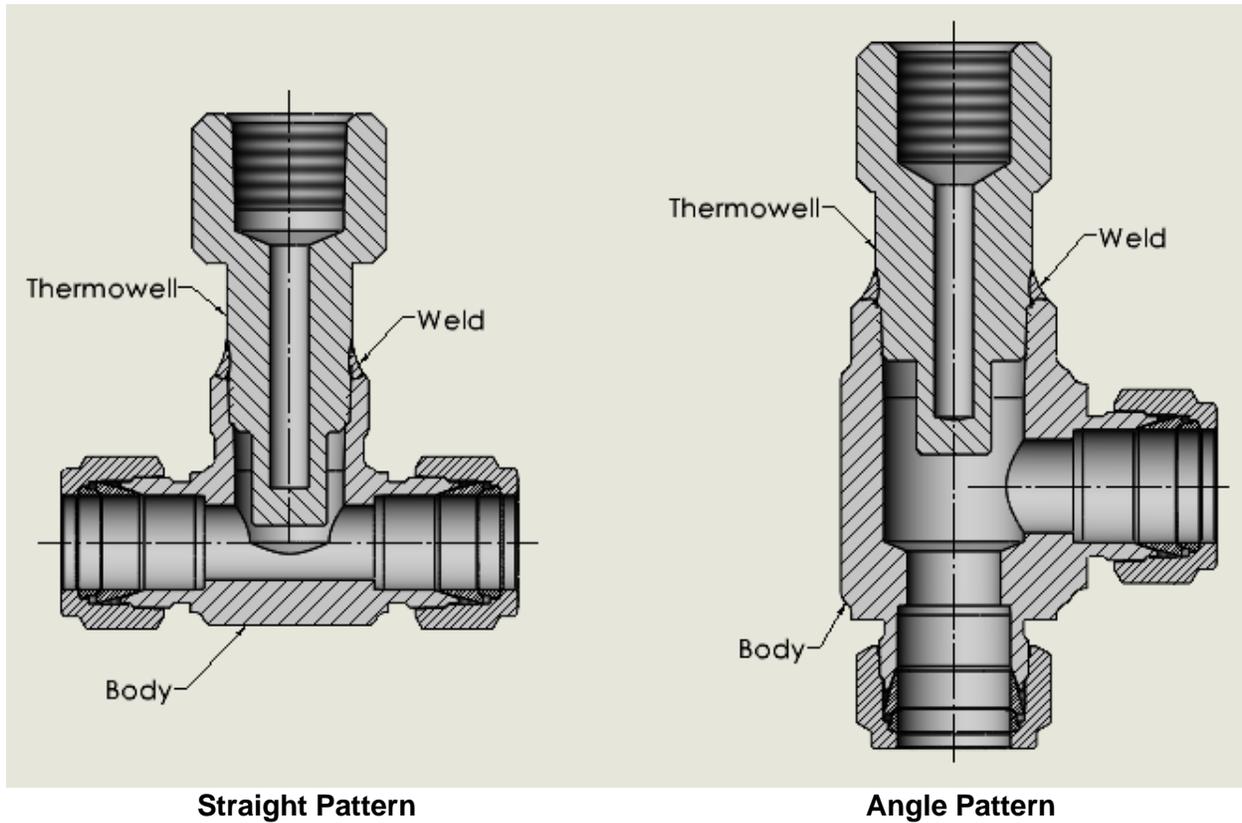
### Summary Table

| Product Description or Series                           | Main Pressure Bearing Component | Main Pressure Bearing Material (Standard)         | Port Connections and Sizes                         | Maximum Rated Pressure (psig) |                          |                          | Design Code of Construction   |
|---|---------------------------------|---|--|-------------------------------|--------------------------|--------------------------|---|
|   |                                 |   |  | Up to 100°F (1)               | At 1000°F per ASME B31.1 | At 1000°F per ASME B31.3 |   |
| TTW Series Thermowell Tees (Straight and Angle Pattern) | Body                            | F316 SS (ASTM A182) and S31600/S31603 (ASTM A479) | Swagelok Tube Fitting 3/8", 1/2", 5/8", 12MM, 16MM | 4900                          | 2760                     | 3720                     | ASME B31.1 (Unlisted Components) and ASME B31.3 (Unlisted Components) |
|   |                                 |   | Female 1/2" NPT seal welded                        |                               |                          |                          |   |
|   |                                 |   | Swagelok Tube Fitting 3/4", 1", 18MM               | 4600                          | 2590                     | 3490                     |   |
|   |                                 |   | Female 3/4" NPT seal welded                        |                               |                          |                          |   |
| Female NPT 1/2"<br>Male NPT 1/2"                        | 4400                            | 2480  | 3360   |                               |                          |                          |   |
| Female 1/2" NPT seal welded                             |                                 |   |  |                               |                          |                          |   |
|   |                                 |   | Female NPT 3/4"<br>Male NPT 3/4"                   | 4000                          | 2260                     | 3060                     |   |
|   |                                 |   | Female 3/4" NPT seal welded                        |                               |                          |                          |   |

#### Notes:

- (1) The low temperature rating (MDMT) for Swagelok TTW Thermowell Tees is not specified in the catalog. However, a thermometer typically used with the TTW is rated down to -100°F.

## Product Illustration



## Typical Product Characteristics

Additional options that do not affect pressure-temperature ratings may be made available within the scope of this registration.

## Quality System

The Swagelok Company quality system complies with the requirements of BS EN ISO 9001:2015. The Swagelok Company maintains BSI Certificate of Registration Number FM 01729, which applies to all locations listed on the Certificate.

## References

Temperature Measurement Devices TTW Series Thermowell Tees Catalog MS-02-353, Rev F

CRN: 0A24574.52  
Date: 2023-10-19

## Attachment A. Swagelok Manufacturing Locations

This document lists the Swagelok locations where end item or component level manufacturing activities take place.

|  |   |
|--|---|
| Swagelok Company<br>29500 Solon Road<br>Solon, Ohio 44139<br>USA                                   | Swagelok Company (HPF)<br>6050 Cochran Road<br>Solon, Ohio 44139<br>USA   |
| Swagelok Company (OFC)<br>29495 F.A. Lennon Drive<br>Solon, Ohio 44139<br>USA                      | Swagelok Company (Snow Metal)<br>6060 Cochran Road<br>Solon, Ohio 44139<br>USA  |
| Swagelok Precision Machining Services<br>1924 East 337th Street<br>Eastlake, OH 44095<br>USA       | Swagelok (China) Fluid System Technologies Ltd.<br>Changshu Export Process Zone<br>Changshu Economic Development Zone<br>Changshu, Jiangshu<br>215513 China |
| Swagelok Company (Highland)<br>318 Bishop Road<br>Highland Heights, Ohio 44143<br>USA              | Swagelok Company (Strongsville)<br>15400 Foltz Road<br>Strongsville, Ohio 44119   |
| Swagelok Company (Atlantic)<br>26651 Curtiss Wright Parkway<br>Willoughby Hills, Ohio 44092<br>USA | Swagelok Company (Alfred)<br>29500 Ambina Drive<br>Solon, Ohio 44139  |
| Swagelok Company (Micro)<br>26653 Curtiss Wright Parkway<br>Willoughby Hills, Ohio 44092<br>USA    | Swagelok Hose Services Company (SHSC)<br>29900 Solon Industrial Parkway<br>Solon, Ohio 44139  |
| Swagelok Company (Falon 1)<br>348 Bishop Road<br>Highland Heights, Ohio 44143<br>USA               | Swagelok Limited<br>Ballafletcher Road<br>Tromode<br>IM4 4RA<br>Isle of Man   |
| Swagelok Company (Falon 2)<br>358 Bishop Road<br>Highland Heights, Ohio 44143<br>USA               | <b>CRN: 0A24574.52</b><br><b>Date: 2023-10-19</b>   |