

CRN: CSA - 0 A2148 7.56

**Technical** 

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Safety Authority Registration Process FAX (306)798-7112 Toll Free: (866)760-9255

of Saskatchewan CSA Group per CSA B51

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CSA Group per CSA B51

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2202 2nd Ave.

## Statutory Declaration (Registration of Fittings)

	1 1	TSK-1008			
I. Declaration Information					
, Joel Feldman	- INSTANTANTANTANTANTANTANTANTANTANTANTANTANT	In this space, show facsimile of			
Vice President, Engineering	manufacturer's logo or trademark as it will appear on the fitting.				
(company title, e.g. vice president,		Suggestels			
(must be in a position of authority in the manufit  of: Swagelok Company	acturing plant where me many is produced)	OMOGENOR			
	manufacturer)				
located at: Headquarters 29500 Solon F		44139 USA			
(Plant Address - Apt/Street) do solemnly declare that the fittings listed  Vessel Safety Act (check one)	(City, Prov) hereinunder, which are subject to the Sask	(Postal Code) atchewan Boiler and Pressure			
Comply with the requirements of	SME B31.1 and ASME B31.3 which	ch specifies the dimensions			
	(title of recognized North American Standard) / temperature ratings and identification mark	king of the fittings, or			
8.7		- 10			
to comply with	f a recognized North American standard an	as supported by the attached			
	s, materials of construction, pressure / temp	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
for such ratings, and the marking of					
verified by the following authority, BSI	hese fittings is controlled by a quality control as being as fittings covered by this declaration, for wh	ng suitable for the manufacturer			
Category A. Fitting	- set				
In support of this application, the following	information, calculations and / or test data	are attached:			
ISO 9001:2015 Certificate, Attachment A, Attachment B, Catalog Information and other Support Documents					
II. Declaration					
Control and interconsent property and the	to the Chole	Ab : D			
DECLARED before me at 500	In the State	of OUTO			
this, 146 day of march	- 2019				
Dienol Hamme	(Signature)	l C. Feel			
Breaks Frame					
(Signature of Commissioner of Oaths)					
III. Office Use Only					
	plication meets the requirements of the <i>Boller a</i> stration in Category	and Pressure Vessel Safety Act and			
CSA-0A21487.50	DV1.23-2019	Jun. 10-2029			
(Registration Number)	(Date Registered – MM DD YYYY) (For the Administrator / Chief Inspector)	(Expiry Date – MM DD YYYY)			
100 - 100 -	GROUP	A.BANWATT			

Canadian Registration Number Submittal #M-TUBEFIT-2019
Category A: Swagelok Monel Tube Fittings

March 14, 2019 Page 1 of 5

# Attachment B. Scope of Registration for Swagelok Alloy 400, (ASTM B164 / B564), Tube Fittings (Category A)

This document represents the scope of Swagelok Alloy 400 Tube Fittings covered by this submission for CRN approval. These Swagelok Tube Fittings have been evaluated in accordance with ASME B31.3 for unlisted components and ASME B31.1 for unlisted components.

#### **Summary Table**

Product Description Material or Series	Port Connections and Sizes	Maximum Allowable Working Pressure		Design Code
		Up to 100°F	At maximum temperature	of Construction
Gaugeable Tube (ASTM B164 / Adapter Fittings	Swagelok tube fitting 1/8 – 1 inch 6mm - 25mm	See Table on Page 2	See Table on Page 2	ASME B31.3 (Unlisted Components) ASME B31.1
	NPT Male 1/16 - 1 inch	9200-4400 psig	6900 – 3300 psig @ 800°F (426°C)	
	NPT Female 1/16 - 1 inch	5600-3700 psig	4200 – 2775 psig @ 800°F (426°C)	(Unlisted Components)



March 14, 2019 Page 2 of 5

#### Alloy 400 Swagelok Tube Fitting Pressure Rating Table

	Maximum Allowable Working Pressure (1)		
Swagelok End Connection Size	Up to 100°F	At maximum temperature 800°F (426°C)	
1/8	10,100 psig	7575 psig	
3/16	9500 psig	7125 psig	
1/4	9500 psig	7125 psig	
5/16	7300 psig	5475 psig	
3/8	6100 psig	4575 psig	
1/2	4400 psig	3300 psig	
5/8	5600 psig	4200 psig	
3/4	4600 psig	3450 psig	
7/8	4500 psig	3375 psig	
1"	4300 psig	3225 psig	
6 mm	620 bar	465 bar	
8 mm	450 bar	337.5 bar	
10 mm	350 bar	262,5 bar	
12 mm	290 bar	217.5 bar	
14 mm	270 bar	202.5 bar	
15 mm	330 bar	247.5 bar	
16 mm	320 bar	240 bar	
18 mm	300 bar	225 bar	
20 mm	290 bar	217.5 bar	
22 mm	310 bar	232.5 bar	
25 mm	290 bar	217.5 bar	

Note (1): Values based on thickest wall alloy 400 tubing per Swagelok Tubing Data Sheet MS-01-107.



Canadian Registration Number Submittal #M-TUBEFIT-2019
Category A: Swagelok Monel Tube Fittings

March 14, 2019 Page 3 of 5

#### **Product Description**

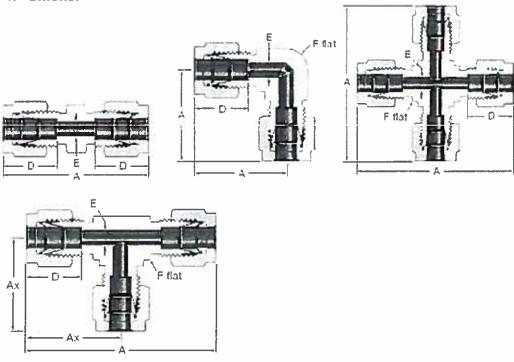
Swagelok Fittings are furnished in a variety of configurations and shapes (straight, elbow, tee or cross). Swagelok Fittings consist of at least one Swagelok End – a proprietary two-ferrule mechanical-grip design. The "Configurations" section covers other available end connections.



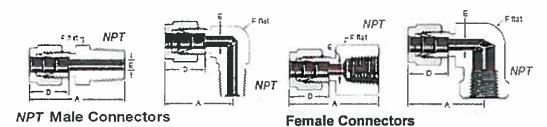


### **Configurations**

1. Unions.



2. Male and Female connectors / adapters.





Canadian Registration Number Submittal #M-TUBEFIT-2019
Category A: Swagelok Monel Tube Fittings

March 14, 2019 Page 5 of 5

#### **Product Options:**

Some of the product options listed below affect the pressure-temperature ratings in the "Scope of Registration" section above, but in all cases the pressure ratings are the same or less than those shown in the table.

- 1. Tapered pipe threads (NPT) with sealant.
  - a. Curable resin with PTFE
  - b. PTFE tape
- 2. Bored through fittings
- 3. Plastic ferrules (Nylon, Teflon, Peek)

Additional options that do not affect pressure and/or temperature ratings may be made available within the scope of this approval. Examples of these would include the following:

- 1. Special marking
- 2. Special cleaning
- 3. Wire drills
- 4. bulkhead configurations
- 5. Snubbers/frits and orifice plates
- 6. Equivalent metric or fractional hex sizes

Other options, not shown above, with pressure/temperature ratings equal to or less than shown in the Summary Table or do not affect pressure/temperature ratings may be made available under the scope of this approval

#### **Quality System**

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

#### References

The product catalog does not represent the full scope of the registration but rather details some of the most common options.

- Gaugeable Tube Fittings and Adapter Fittings MS-01-140 Rev. Y
- Swagelok Tubing Data Sheet MS-01-107, Rev Q



# Attachment A. Swagelok Manufacturing Locations

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

Swagelok Company	Swagelok Company (Falon 1)
29500 Solon Road	348 Bishop Road
Solon, Ohio 44139	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (Highland)	Swagelok Company (Falon 2)
318 Bishop Road	358 Bishop Road
Highland Heights, Ohio 44143	Highland Heights, Ohio 44143
USA	USA
Swagelok Company (OFC)	Swagelok Company (HPF)
29495 F.A. Lennon Drive	6050 Cochran Road
Solon, Ohio 44139	Solon, Ohio 44139
USA	USA
Swagelok Company (Atlantic)	Swagelok Company (Snow Metal)
26651 Curtiss Wright Parkway	6060 Cochran Road
Willoughby Hills, Ohio 44092	Solon, Ohio 44139
USA	USA
Swagelok Company (Micro) 26653 Curtiss Wright Parkway Willoughby Hills, Ohio 44092 USA	Swagelok Company (Alfred) 29500 Ambina Drive Solon, Ohio 44139
Swagelok Hose Services Company (SHSC)	Swagelok Company (Strongsville)
29900 Solon Industrial Parkway	15400 Foltz Road
Solon, Ohio 44139	Strongsville, Ohio 44119
Swagelok (China) Fluid System Technologies Ltd. Changshu Export Process Zone Changshu Economic Development Zone Changshu, Jiangshu 215513 China	Swagelok Limited Ballafletcher Road Tromode IM4 4RA Isle of Man

