Québec ==

REGISTERED	GROUP.
CRN: CSA-	OA21840.56

Statutory Declaration Registration of Fittingson Process administered by

CSA Group per CSA B51

(a) Design Qualification
1 Joel Feldman
Vice President, Engineering
(Position eg, president, plant manager, chief eng.)
Of Swagelok Company
(name of company)
Located at Headquarters: 29500 Solon Road, Solon, Ohio 44139 USA (See Attachment A)
(plant address)
do solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:
comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required: Or
are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with code and standard, and are designed to the best current engineering practice, as shown by the supporting test data.
(b) Quality control of Manufacture
I further declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of ISO 9001:2015, and has been verified by the following authority or authorized agency BSI The fittings² covered by this declaration, for which I seek registration, are Category A. Fitting
In support of the 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 Declared before me at
In the of Stole of Ono
The Day of Sine AD 20 19
Beide Hamel A (commissioner for oaths) Signature of Declarer
For Official Use Only
Δ
The application is accepted for registration in Category in accordance with the Boilers and Pressure Vessels Act and CSA Standard B51.
CSA Standard B51. This registration must be revalidated after the type ars from the date of acceptance. EXP: OCT 47,2029
CSA Standard B51.

All fittings are required to be registered in the name of the Manufacturer. 3

Three completed copied of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.

This form shall be completed and signed by the president of highest official in the manufacturing plan where the fitting is produced.

Canadian Registration Submittal #ATW-MW-TB- 2019 Category A: Swagelok ATW, MW, TB Weld Fittings

Attachment B: Scope of CRN Registration for Swagelok ATW, MW, and TB Series Weld Fittings (Category A)

Date: June 10, 2019

Page 1 of 5

This document represents the scope of Swagelok® Automatic Tube Weld (ATW), Micro-Fit Weld (MW), and Tube Butt Weld (TB) Fittings covered by this submission for CRN registration. These weld fittings were designed and evaluated in accordance with ASME B31.1-2016 for unlisted components and ASME B31.3-2016 for unlisted components.

Table 1 – Summary Table – ATW FITTINGS

		W FITTINGS	Maximum Allowable Working Pressure (psig)		Design Code
Product Series* Material (Size) (Standard)	End Connections and Sizes	Up to 100°F	At Maximum Temperature (850°F)	of Construction	
-4 ATW (1/4")	4 5	Tube Fitting 1/4", 3/8",1/2" Tube Butt Weld 1/4"	5100	2390	
-6 ATW (3/8")		Tube Fitting 3/8" Tube Butt Weld 1/4" 3/8"	3300	1550	
-8 ATW (1/2")		Tube Fitting 1/4" 1/2" Tube Butt Weld 1/4",3/8",1/2"	3700	1730	
-12 ATW (3/4")	316L SS (ASTM A479) for straight	Tube Fitting 3/4"	2400	1120	ASME B31.1
-16 ATW (1")	fittings, hardware	Tube Fitting 1"	2400	1120	(Unlisted Components)
-6 MATW (6mm)	F316L SS (ASTM A182)		6095	2860	ASME B31.3 (Unlisted
-8 MATW (8mm)	for shaped fittings		4499	2110	Components)
-10 MATW (10mm)		N/A	3483	1630	
-12 MATW (12mm)			2902	1360	
-18 MATW (18mm)	31		2902	1360	11.50

^{* &}quot;MATW" denotes metric sized Automatic Tube Welds



Swagelok

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Canadian Registration Submittal #ATW-MW-TB- 2019 Category A: Swagelok ATW, MW, TB Weld Fittings Date: June 10, 2019 Page 2 of 5

Table 2 - Summary Table - MW FITTINGS

Product Series* Material (Standard)	Material	Maximum Allowable Working Pressure (psig)		Design Code
	Up to 100°F	AtiMaximum Temperature (850°F)	of Construction	
-2MW (1/8")	316L SS (SEMI F20)	8500	3990	
-4MW (1/4")		5100	2390	
-6MVV (3/8")		3300	1550	ASME B31.1 (Unlisted
-8MW (1/2")		3700	1730	Components)
-12MW (3/4")		2400	1120	and
-16MW (1")		2400	1120	ASME B31.3
-6MMW (6mm)		6095	2860	(Unlisted
-8MMW (8mm)		4499	2110	Components)
-10MMW (10mm)		3483	1630	
-12MMW (12mm)		2902	1360	

^{*} End connections are all micro-fit weld end connections. "MMW" denotes metric sizes.

Table 3 - Summary Table - TB FITTINGS

Product Series* Material (Standard	Maximum Allowable Working Material Pressure (psig)		Design Code of	
	(Standard)	Up to 100°F	At Maximum Temperature (850°F)	Construction
-2TB (1/8")	316L SS (ASTM A479) for straight fittings F316L SS (ASTM A182) for shaped fittings	8500	3990	
-4TB (1/4")		5100	2390	
-6TB (3/8")		3300	1550	ASME B31.1
-8TB (1/2")		3700	1730	(Unlisted
-12TB (3/4")		2400	1120	Components) and
-16TB (1")		2400	1120	
-6MTB (6mm)		6095	2860	ASME B31.3
-8MTB (8mm)		4499	2110	(Unlisted Components)
-10MTB (10mm)		3483	1630	
-12MTB (12mm)		2902	1360	
-18MTB (18mm)		2902	1360	

^{*} End connections are all tube butt weld end connections. "MTB" denotes metric sizes.





Smadelok

Canadian Registration Submittal #ATW-MW-TB- 2019 Category A: Swagelok ATW, MW, TB Weld Fittings

Figure 1 - ATW Product Illustration

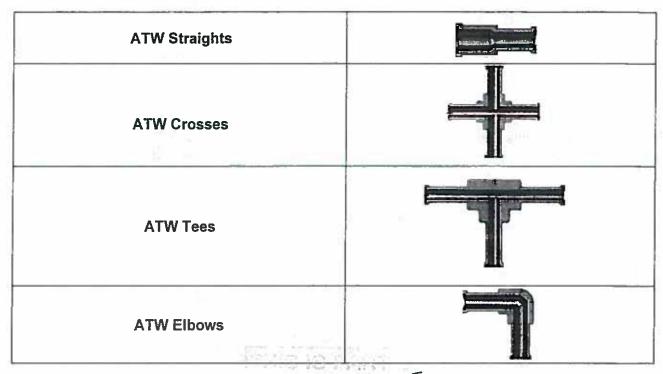
Precisely finished diameter matches tube diameter.

Date: June 10, 2019

Page 3 of 5

Integral filler ring aids in alignment.

ATW Fitting Configurations



DA 21840,5

ATW Body End Connections



Swagelok

Canadian Registration Submittal #ATW-MW-TB- 2019 Category A; Swagelok ATW, MW, TB Weld Fittings CSA - OA 21840,56

Date: June 10, 2019 Page 4 of 5

Figure 2 - MW Product Illustration

Square, sharp, burrfree tube weld ends enhance alignment, maintain tube wall uniformity, and promote weld repeatability.



Radius junction allows for a smooth flow transition and eliminates pockets and entrapment zones.

MW Fitting Configurations

MW Straights	
MW Tees	
MW Elbows	
MW Tribows and Quadbows	
MW Crosses	#

Figure 3 - TB Product Illustration

Tube ends are machined with a square face and corners to enhance alignment and maintain tube wall uniformity.



TB Fitting Configurations

TB Straights	
TB Tees	
TB Crosses	
TB Elbows	

Swadelok

Canadian Registration Submittal #ATW-MW-TB- 2019 Category A: Swagelok ATW, MW, TB Weld Fittings

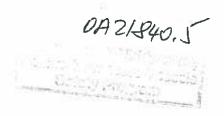
Quality System

The Swagelok Company quality system complies with the requirements of ISO 9001:2015. Swagelok Company maintains BSI Certificate of 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.

Weld Fittings Product Catalog MS-01-149 Rev. M



Date: June 10, 2019

Page 5 of 5



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.	Swagelok Company A.G. (European Technology	
Changshu Export Process Zone	Center)	
Changshu Economic Development Zone	St. GallerstraBe 84	
Changshu, Jiangshu	Lachen, Switzerland 8853	
215513 China	Switzerland	
Swagelok Limited Ballafletcher Road Tromode		
IM4 4RA Isle of Man	CD CSA 2 OF 5	

ATTACHMENT TO

C.R.N: CSA - OA 2/840.56

Signed:

1/8 Rexdale Boulevard, Toronto, ON Canada M9W 1R3