

Montréal, 27 juillet 2022.

MADAME TANYA FRANCIS  
TECHNICAL STANDARDS & SAFETY AUTHORITY  
345 CARLINGVIEW DRIVE  
TORONTO ON  
CANADA M9W 6N9

Fabricant : CONAX TECHNOLOGIES LLC  
2300 WALDEN AVE  
BUFFALO NEW YORK  
USA 14225

Numéro de dossier : 947448  
Numéro(s) de dessin(s) : TSD 59006 / Cat 5001 D Ed 2016

**Objet : Enregistrement des plans et devis – Confirmation de l'enregistrement**

Bonjour,

Nous vous informons que votre demande d'enregistrement de plans et devis a été traitée et que cette conception a été enregistrée sous le numéro d'enregistrement canadien (NEC\CRN) suivant : **0H02915.56**.

Nous portons votre attention sur certaines exigences réglementaires concernant les installations sous pression, ainsi que des codes et normes qui y sont associés :

- Le fabricant doit maintenir un programme de contrôle de la qualité valide pour fabriquer un équipement selon ce NEC;
- Ce numéro d'enregistrement demeure valide tant et aussi longtemps que les paramètres de conception demeurent inchangés. Dans le cas d'accessoires, l'enregistrement est valide pour une durée de 10 ans à partir de la date de conception doivent alors être resoumis pour validation;
- Le fabricant doit nous transmettre une copie de l' *Déclaration de conformité du constructeur (Manufacturer's Data Report)* pour chaque appareil ou chaudière fabriqué selon ce NEC dans les 30 jours suivant la signature de cette déclaration;
- Le numéro de dessin enregistré et le numéro de révision doivent être indiqués sur la déclaration de conformité pour les équipements fabriqués selon ce NEC.

Le présent avis d'approbation ne dégage pas le fabricant de ses responsabilités quant à la conception ou à la construction des équipements ou d'accessoires fabriqués selon un NEC.

Bureau d'expertise et d'homologation en équipements sous pression

Montréal, le 27 juillet 2022.

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2300 WALDEN AVE  
BUFFALO NEW YORK  
USA 14225

OUR REFERENCE : 947448  
Design number : TSD 59006 / Cat 5001 D Ed 2016

**Subject: Design registration confirmation**

Hi,

We wish to inform you that your design registration application has been evaluated and that it was registered under the following Canadian Registration Number (CRN): **0H02915.56**.

The following is a reminder of your obligations regarding certain requirements of the regulation respecting pressure vessels, and the referenced codes and standards:

- The manufacturer must maintain a valid quality control program to manufacture equipment according to the CRN.
- The CRN remains valid as long as there are no changes to the design calculations that might affect the pressure boundary. The design registration of fittings expires 10 years after acceptance. It must, therefore, be resubmitted for validation.
- The manufacturer shall submit a copy of the *Manufacturer's Data Report* to us for each equipment manufactured according to this CRN within 30 days following the signing of this report.
- The drawing number and the revision number registered under this CRN must be indicated on the *Manufacturer's Data Report* for equipment manufactured according to the CRN.

This notice of approval does not relieve the manufacturer of their responsibilities with respect to the design or fabrication of equipment manufactured according to this CRN.

Yours sincerely,

Bureau d'expertise et d'homologation en équipements sous pression

**Montréal**

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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, Scott Kroon (Sr. Product Design Engineer)  
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Conax Technologies LLC  
(Name of Manufacturer)

Located at 2300 Walden Avenue, Buffalo NY, 14225 716-684-4501 x348 716-684-7433  
(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

(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 Proof Pressure Test 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 AS9100D w/ ISO 9001:2015 which has been verified by the following authority, NSF-ISR.

The items covered by this declaration, for which I seek registration, are category H type fittings. In support of this application, the following information and/or test data are attached as follows:  
Conax TSD Report #59.006 Rev. Orig & TSD Report #59.009 Rev. Orig

(drawings, calculations, test reports, etc.)

Declared before me at Buffalo in the State of NY  
 the 5<sup>th</sup> day of May AD 2022.

COLLEEN M. KAJDAS  
 Notary Public State of New York  
 Commission No. 01KA6316056  
 Qualified in Erie County  
 Commission Expires on December 8, 2022

Commissioner for Oaths:

Colleen M. Kajdas  
(Printed name)

Colleen M. Kajdas  
(Signature)

Scott M. Kroon  
(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: \_\_\_\_\_

**NOTE: This registration expires on:** \_\_\_\_\_



<b>Introduction to Conax Technologies®</b>		4-5
<b>Introduction to Conax Compression Seal Fittings</b>		6-13
<b>Selection Guide to Compression Seal Fittings</b>		14-17
<b>Single Element Sealing</b> Use these products when you need to seal a single element such as a temperature probe, tubewell, pipe, etc. These products are capable of sealing on items made of materials such as metal, glass, ceramic or plastic.		
	<b>Packing Gland (PG) Series</b> <ul style="list-style-type: none"> <li>• For sealing on anything from fragile tubes and soft cables to solid probes or instruments</li> <li>• Element diameters range from 0.040" (1.0mm) to 1.50" (47.5mm) pipe</li> </ul>	18-25
	<b>Midlock (MK) Series</b> <ul style="list-style-type: none"> <li>• Best used for sealing on metal elements and/or high vibration environments</li> <li>• Stainless steel throughout – single ferrule is self-aligning</li> </ul>	26-27
	<b>Electrode (EG) Series</b> <ul style="list-style-type: none"> <li>• Fully isolating for electrical power or instrument isolation to 2000V</li> <li>• High pressure, high temperature and current capabilities</li> </ul>	28-31
	<b>Electrode PTFE (EGT) Series</b> <ul style="list-style-type: none"> <li>• Fully isolating for bare electrical power leads or instrumentation isolation to 8000V</li> <li>• PTFE insulation and sealant material for high performance and chemical resistance</li> </ul>	32-35
	<b>Split (PGS) Series</b> <ul style="list-style-type: none"> <li>• Seals cables and leads when larger probes or connectors are attached</li> <li>• See Split (PGS/SPG/DSPG) Series in Multiple Element Sealing section – pages 64-67</li> </ul>	64-67
<b>Multiple Element Sealing – With Factory Installed Leadwires</b> Use these products when multiple wire feedthroughs are required to carry power or instrumentation signals into pressure or vacuum environments. These compression seal fittings are manufactured with factory installed leadwires.		
	<b>High Density (HD) Feedthrough Series</b> <ul style="list-style-type: none"> <li>• A compact and reliable wire sealing design - does not use epoxy or potting</li> <li>• Seals from 12 to 60 wires per unit, 24 AWG, PTFE insulated</li> </ul>	36-37
	<b>High Pressure (HPPL / HPEG) Series</b> <ul style="list-style-type: none"> <li>• For sealing on power leads or instrument leads in high pressure environments</li> <li>• For applications with pressures to 30,000 psi (2,070 bar)</li> </ul>	38-39
	<b>Power Lead (PL) Series</b> <ul style="list-style-type: none"> <li>• For high performance sealing from 1 to 18 larger gage wires sizes 8 to 20 AWG</li> <li>• Rated 600Vac/850VDC @ 55A max – available with or without conductors</li> </ul>	40-45
	<b>Transducer Gland PTFE (TG24T) Series</b> <ul style="list-style-type: none"> <li>• Utilizes 24 AWG PTFE insulated copper or thermocouple leads rated at 100VDC</li> <li>• Seals up to 24 PTFE insulated, 24 AWG instrument leads per fitting to 8000 psi (551 bar)</li> </ul>	46-47
	<b>Transducer Gland Fiberglass (TGF / TGM) Series</b> <ul style="list-style-type: none"> <li>• Utilizes fiberglass insulated thermocouple wire for applications &gt; 450°F (232°C)</li> <li>• Seals up to 24 high temperature insulated 20/24 AWG wires per fitting</li> </ul>	48-49

<b>Multiple Element Sealing – Without Factory Installed Lead Wires</b> Use these products when you want to seal multiple elements of the same or different diameters such as metal tubing, ceramic or rigid plastic tube or pipe, temperature probe, a tubewell, low voltage instrumentation wire or a power supply feedthrough. These compression seal fittings are generally manufactured without factory installed leadwires.		
	<b>Transducer ( TG ) Series</b> <ul style="list-style-type: none"> <li>• For bare wire sealing where elements remain fully electrically isolated throughout the fitting</li> <li>• Seals up to 16 solid wire conductors in wires sizes from 8 to 24 AWG</li> </ul>	50-53
	<b>Multi-hole Ceramic ( MHC ) Series</b> <ul style="list-style-type: none"> <li>• Non-isolating fitting for multiple elements up to .125" (3.0mm) diameter</li> <li>• Seals 1 to 16 elements – adjustable immersion length for each element</li> </ul>	54-57
	<b>Multi-hole Metal ( MHM ) Series</b> <ul style="list-style-type: none"> <li>• Flexible design for special hole patterns, irregular shapes and mixtures of element sizes</li> <li>• Seals 1 to 27 elements - adjustable immersion length for each element</li> </ul>	58-63
	<b>Split ( PGS / SPG / DSPG ) Series</b> <ul style="list-style-type: none"> <li>• For sealing elements that can pass through gland body but not the internal components</li> <li>• PGS seals a single element, SPG seals 2 to 11 elements and DSPG seals 4 to 17 elements</li> </ul>	64-67
	<b>Sensor Wire Seal ( BSWS ) Series</b> <ul style="list-style-type: none"> <li>• Designed specifically for sealing on sensor leads in low temperature and pressure apps</li> <li>• Ideal for embedded bearing temperature sensors, vibration sensors and proximity probes</li> </ul>	68-69
<b>Application Specific Assemblies</b> <ul style="list-style-type: none"> <li>• Products in this section are for special use applications that Conax Technologies has custom designed</li> <li>• Conax Technologies can provide the innovation you require to produce a custom design for your application</li> </ul>		
	<b>Fiber Optic ( FSA / FCA ) Gland Series</b> <ul style="list-style-type: none"> <li>• FSA is for sealing fiber optic cable inside a stainless steel sheath and without using epoxy</li> <li>• FCA is for sealing fiber optic terminations</li> </ul>	70-73
	<b>Special Assemblies – Custom Engineered Solutions</b> <ul style="list-style-type: none"> <li>• In this section are examples of special use products designed for custom applications</li> <li>• Conax Technologies can custom design a sealing solution to meet your exact requirements</li> </ul>	74-79
<b>Flange Mounting Options</b> <ul style="list-style-type: none"> <li>• Conax Technologies provides a wide variety of convenient optional flanges to mount your fitting</li> <li>• Four flange categories: Vacuum (two types), Sanitary and ASME/ANSI Solutions</li> </ul>		80-101
<b>Accessories</b>		102-105
<b>Assembly Instructions</b>		106-119
<b>Technical Data</b>		120-123