

July 14, 2025

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

The design submission, Tracking Number 2025-04285, Web Portal Number 2025-S3508, originally received on June 27, 2025 was surveyed and accepted for registration as follows:

CRN : 0F17572.52 **Accepted on:** July 14, 2025

Reg Type: RENEWAL **Expiry Date:** June 10, 2035

Drawing No. : Scope of Registration-Sanitary Thermowell

Fitting type: THERMOWELL TT411 & TT412

Design registered in the name of : ENDRESS + HAUSER WETZER GMBH + CO KG

The registration is conditional on your compliance with the following notes:

- It is our understanding that the fittings shall be pressure tested in accordance with the Code of construction prior to initial operation.

As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction is 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 (587) 686-9302 or fax (780) 437-7787 or e-mail Radisavljevic@absa.ca.

Sincerely,



RADISAVLJEVIC, ZANA, P. Tech. (Eng.)
DOP Cert. No. D00003136

UVZ-Nr. M00523/2025



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

Endress+Hauser 

STATUTORY DECLARATION

Registration of Fittings

I, Bernd Kunert, Quality Manager

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Endress+Hauser Wetzlar GmbH + Co. KG

(Name of Manufacturer)

Located at Obere Wank 1, 87484 Nesselwang, Germany

(Plant Address)

+49 8361 3080

(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 **ASME B31.3 & ASME BPE** 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

which has been verified by the following authority, SQS

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of

this application, the following information and/or test data are attached as follows:

DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805; PRESSURE BURST TEST REPORT #14011472, CALCULATIONS FILE # MW-EH-4325-001

(drawings, calculations, test reports, etc.)

Declared before me at Nesselwang in the _____ of _____

the 8 day of April AD 20 25.

Commissioner for Oaths:

(Printed name)

(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 F.

CRN: 0F17572.52

Registered by: _____

Dated: 2025-07-14

NOTE: This registration expires on: 2035-06-10

2025-04285

ABSA

SAFETY CODES ACT - PROVINCE OF ALBERTA

ACCEPTED: 0F17572.52

See acceptance letter for conditions of registration.

Date: 2025-07-14

By: Zana Radisavljevic

ZANA RADISAVLJEVIC, P. Tech. (Eng.)
DOP: D00003136

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.

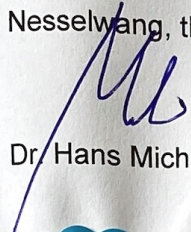
UVZ-Nr. M00523 /2025

I hereby certify that the above standing is the true signature, signed before
me of

Mr. Bernd Josef KUNERT,
born on the 22nd of December 1962,
resident in Oy-Mittelberg,
located in 87484 Nesselwang, Obere Wank 1,

personally known to me.

Nesselwang, the 8th of April 2025


Dr. Hans Michael Malzer, notary public



SCOPE OF REGISTRATION
Sanitary Thermowells

Code of Construction: ASME B31.3

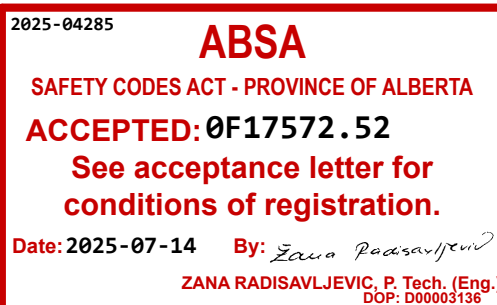
Catalogue: iTHERM TT411, TT412(see note 1 below)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
Tri-Clamp Sanitary Ferrule [1]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN8 – 18 (0.5" – 0.75")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN12 – 21.3 (1/2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25 – 38 (1" – 1.5") DN40 – 51 (2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN63.5 (2.5"), DN70 – 76.5 (3")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN32, DN40, DN50	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical- Cylindrical Weld-in adapter [3]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x D40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical Weld-in adapter [3]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	D25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Cylindrical Weld-in adapter [3]	10000007051 10000007052 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x 40 mm (D1" NPS) D1/2" NPS, D3/4" NPS	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Weld-in adapter	10000007051	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D12 x 40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
ISO228 Thread-in adapter	10000007051 10000007052 [2]	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G3/8 M12x1 metal-to-metal G1/2 metal-to-metal	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
ISO228 Thread-in adapter	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G1 for FLT50 G3/4 for FLT50 G3/4 for FLT20	40 bar [6] (580 psi)	-40 to 500 °C (-40 to 632 °F)
Type B Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	31 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
Type F, N Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	50 mm, 68 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
DN11864-1-A [1]	10000007052	A276/A476 316L A266 TP316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN40	40 bar (580 psi)	-40 to 500 °C (-40 to 632 °F)
SMS1147	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN38, DN51	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
APV	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN50	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Ingold	10000007052	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	Ø25 mm x 30 mm, Ø25 mm x 46 mm	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Neumo Biocontrol	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D25, D50, D65	16 bar (232 psi)	-40 to 600 °C (-40 to 1112 °F)

1. TT411 brand name includes drawings 10000007051, 10000007052, 10000007053, 10000007064. The TT412 brand name includes drawing 10000008805. In drawing 10000008805 the only difference of design that differs from TT411 brand name are the instrumentation connections to the thermowells at the top side of the thermowells (outside the pressure boundary). These thermometer/thermocouple instrumentation connections are outside the pressure boundary and are not subject to process pressure.

2. Assemblies with clamps and gasket limitations are not part of this registration. Thermowell of this registration will be installed between clamps utilizing gaskets. The MAWP & MAX temperature of such assembly shall be determined by end user by verifying MAWP and MAX temperature of each component. The overall MAWP/MAX temperature for the assembly shall be that of the lowest rated component.



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.

UR-Nr. M00524/2025

UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

☒ New Brunswick ☒ Nova Scotia ☒ Prince Edward Island ☒ Newfoundland and Labrador
☒ Nunavut ☒ Yukon ☒ Northwest Territories

Manufacturers Name: Endress+Hauser Wetzlar GmbH + Co. KG	
Manufacturers Address: Obere Maink 1, 87484 Nesselwang, Germany	
Plant Locations: Nesselwang, Germany; Greenwood, USA; Suzhou, China; Chhatrapati Sambhaji Nagar, India; Passano con Bomago (MI), Italy.	
Category of Fittings to be registered. Circle one Category only. A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over-pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure-retaining components that do not fall into one of the above categories I Nuclear components: Class 1 ☐ Class 2 ☐ Class 3 ☐ (Meeting CNSC or ASME requirements)	Title of the Standard of Construction ASME B31.3, ASME BPE
Show Manufacturers Name, Trademark, or Logo as it will appear on the product	
Endress+Hauser 	
Type of Construction Forged ☐ Welded ☐ Wrought ☐ Cast ☐ Other ☐ Describe other:	
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT # 14011472. CALCULATIONS FILE # MW-EH-4325-001	

Declaration:

I, Bernd Kunert, (as note: as employed by Endress+Hauser Wetzlar GmbH + Co. KG) and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure/temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SOS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 

Declared before me at: Nesselwang

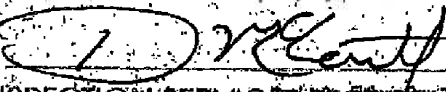
This 8 day of April AD 2025

Use this space for the Official Seal

Commissioner of Oaths

Or Notary Public (sign)

(Affix Official seal to the right)

CRN: OF17572.5 Rev.2 FID#: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope: CRN renewal; Sanitary Thermowells TT411, TT412, includes: Tri-Clamp Sanitary; Tri-Clamp, ISO2852; DIN11851; Spherical-Cylindrical Weld-in Adapter; Spherical Weld-in Adapter; Cylindrical Weld-in Adapter; Weld-in Adapter; Thread-in Adapter; Type B Variant; Type F, N Variant; DIN1864-1-1; SMS1147; APV; Ingold; Neumo Blocontrol Product types; (DGalent)	This space for Regulatory Authority use. This registration must be revalidated after ten (10) years from the date of acceptance. ACCEPTED PROVINCE OF PRINCE EDWARD ISLAND C.R.N.: OF17572.59 REV 2 DATE: JUL 4/25 SIGNED:  INSPECTION SERVICES SECTION BOILER/PRESSURE VESSEL BRANCH
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UV2-Nr. M00524/2025

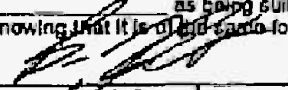
UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

☒ New Brunswick
 ☒ Nova Scotia
 ☒ Prince Edward Island
 ☒ Newfoundland and Labrador
☒ Nunavut
☒ Yukon
☒ Northwest Territories

Manufacturers Name: Endress+Hauser Wetzlar GmbH + Co. KG	
Manufacturers Address: Obere Wank 1, 67484 Nesselwang, Germany	
Plant Locations: Nesselwang, Germany; Greenwood, USA; Suzhou, China; Chhatrapati Sambhajinagar, India; Pessano con Barnago (MI), Italy,	
Category of Fittings to be registered. Circle one Category only A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps ☒ F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories I Nuclear components: Class 1 ☐ Class 2 ☐ Class 3 ☐ (Meeting CNSC or ASME requirements)	Title of the Standard of Construction ASME B31.3, ASME BPE
Show Manufacturers Name, Trademark, or Logo as it will appear on the product Endress+Hauser 	Type of Construction Forged ☐ Welded ☐ Wrought ☐ Cast ☐ Other ☐ Describe other:
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT #14011472. CALCULATIONS FILE # MW-EH-4325-001	

Declaration:

I, Bened Kuehn (see note 3) employed by Endress+Hauser Wetzlar GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SGS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of full legal force and effect as if made under oath.

Signature of Declarer: 

Declared before me at Nesselwang

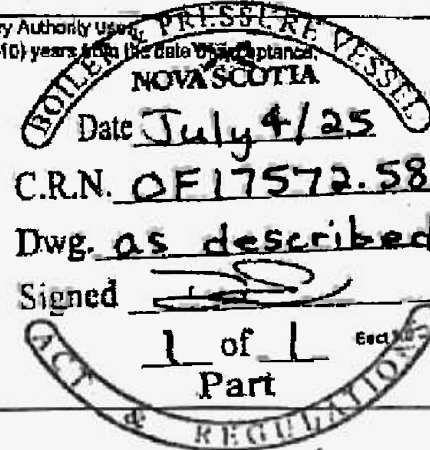
This 8 day of April AD 2025

Use this space for the Official Seal

Commissioner of Oaths

Or Notary Public (sign) _____

(Affix Official seal to the right)

CRN: <u>OF17572.5 Rev.2</u> FID#: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope-CRN renewals: Sanitary Thermowells TT411, TT412. Includes: Tri-Clamp Sanitary, Tri-Clamp, ISO2852, DIN11851; Spherical-Cylindrical Weld-in Adapter; Spherical Weld-in Adapter; Cylindrical Weld-in Adapter; Weld-in Adapter; Thread-in Adapter, Type B Variant; Type F, N Variant; DIN11864-1-1; SMS1147, APV; Ingold; Neumo Biocontrol Product types. (Gallant)	This space for Regulatory Authority use This registration must be revalidated after ten (10) years from the date of acceptance. 
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UV2-Nr. M00524/2025

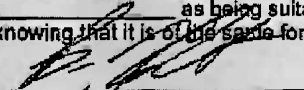
UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

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Manufacturers Address: Obere Wank 1, 87464 Nesselwang, Germany	
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Show Manufacturers Name, Trademark, or Logo as it will appear on the product Endress+Hauser 	Type of Construction Forged ☐ Welded ☐ Wrought ☐ Cast ☐ Other ☐ Describe other:
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT #14011472, CALCULATIONS FILE # MW-EH-4325-001	

Declaration:

I Bernd Kunert (see note 3) employed by Endress+Hauser Wetzlar GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SQS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 

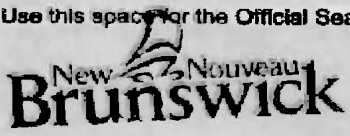
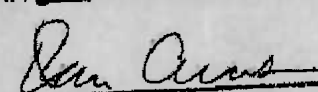
Declared before me at Nesselwang

This 8 day of April AD 2025

Commissioner of Oaths

Or Notary Public: (sign)

(Affix Official seal to the right)

This space for Regulatory Authority use This registration must be revalidated after ten (10) years from the date of acceptance. CRN: <u>OF17572.5 Rev.2</u> FID#: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope=CRN renewal Sanitary Thermowells TT411, TT412. Includes: Tri-Clamp Sanitary, ISO2852; DIN11851; Spherical-Cylindrical Weld-in Adapter; Spherical Weld-in Adapter; Cylindrical Weld-in Adapter; Weld-in Adapter; Thread-in Adapter; Type B Varivent, Type F, N Varivent; DN11864-1-1, SMS1147; APV; Ingold; Neumo Biocontrol Product types. (DGallant)	Use this space for the Official Seal  DEPT OF JUSTICE PUBLIC SAFETY BOILER & PRESSURE VESSEL ACT REGISTRATION ONLY CRN <u>OF17572.5 Rev.2</u>  CHIEF BOILER INSPECTOR DATE <u>7/14/25</u> Sect 1.0 - Fittings Rev.2
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☐ BLRs

☐ PVs

☒ FITTINGS

☐ NUCLEAR COMPONENTS

✓ U2-Nr. M00524/2025

UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

✓ New Brunswick ✓ Nova Scotia ✓ Prince Edward Island ✓ Newfoundland and Labrador
 ✓ Nunavut ✓ Yukon ✓ Northwest Territories

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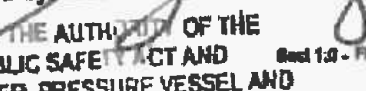
Declaration:

I, Bened Kuzari (see note 3) employed by Endress+Hauser Wetzlar GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SGS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 
 Declared before me at Neesswang
 This 8 day of April AD 2025
 Commissioner of Oaths
 Or Notary Public: (sign) _____

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CRN: <u>OF17572.5 Rev.2</u> FIDR: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope: CRN renewal, Sanitary Thermowells TT411, TT412 includes Tri-Clamp Sanitary, Tri-Clamp, ISO2852, DIN11851, Spherical-Cylindrical Weld-In Adapter, Spherical Weld-In Adapter, Cylindrical Weld-In Adapter, Weld-In Adapter, Thread-In Adapter, Type B Variant, Type F, N Variant, DN11964-1-1: SMS1147, APV, Ingold, Heuno Biocontrol Product types, (DGallant)	This space for Regulatory Authority Seal This registration must be revalidated after ten (10) years from date of acceptance. Registered <u>OF17572.50 Rev2</u> Date <u>July 4, 2025</u> Engineering <u></u> Registered by <u></u> UNDER THE AUTHORITY OF THE PUBLIC SAFETY ACT AND THE BOILER PRESSURE VESSEL AND COMPRESSED GAS REGULATIONS
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UVZ-Nr. M00524/2025

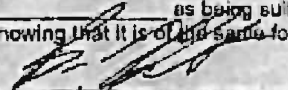
UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

☒ New Brunswick
 ☒ Nova Scotia
 ☒ Prince Edward Island
 ☒ Newfoundland and Labrador
☒ Nunavut
 ☒ Yukon
 ☒ Northwest Territories

Manufacturers Name: Endress+Hauser Wetzlar GmbH + Co. KG	
Manufacturers Address: Obere Wark 1, 87484 Nesselwang, Germany	
Plant Locations: Nesselwang, Germany; Greenwood, USA; Suzhou, China; Chhatrapati Sambhajinagar, India; Passano con Bernago (MI), Italy.	
Category of Fittings to be registered. Circle one Category only A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps ☒ F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 ☐ Class 2 ☐ Class 3 ☐ (Meeting CNSC or ASME requirements)	Title of the Standard of Construction ASME B31.3, ASME BPE
Show Manufacturers Name, Trademark, or Logo as it will appear on the product Endress+Hauser 	Type of Construction Forged ☐ Welded ☒ Wrought ☐ Cast ☐ Other ☐ Describe other:
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT #14011472. CALCULATIONS FILE # MW-EH-4325-001	

Declaration:

I, Bernd Kurier, (see note 3) employed by Endress+Hauser Wetzlar GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by 50s as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 
 Declared before me at Nesselwang
 This 8 day of April AD 2025
 Commissioner of Oaths
 Or Notary Public: (sign) _____

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(Affix Official seal to the right)

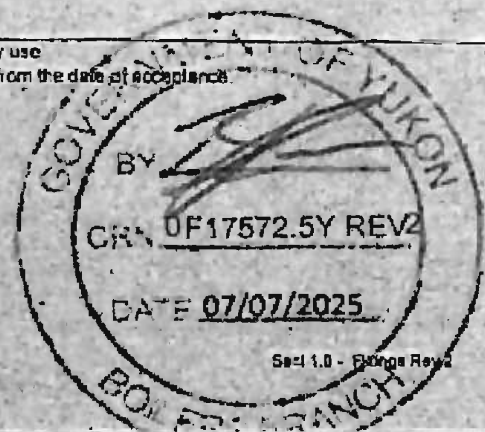
CRN: 0F17572.5 Rev.2

FID#: _____

Notes:

- All Fittings shall be registered in the name of the Manufacturer.
- Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
- The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.

Scope: CRN renewal. Sanitary Thermowell TT411, TT412. Includes: Tri-Clamp Sanitary; Tri-Clamp, ISO2852, DIN11851; Spherical-Cylindrical Weld-in Adapter; Spherical Weld-in Adapter; Cylindrical Weld-in Adapter; Weld-in Adapter; Thread-in Adapter; Type B Varivent; Type F, N Varivent; DN11864-1-1; SMS1147, APV, Ingold, Neumo Biocontrol Product types (Ogallala)



UV2-Nr. M00524/2025

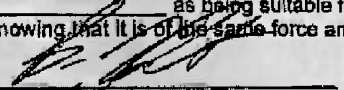
UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

☒ New Brunswick ☒ Nova Scotia ☒ Prince Edward Island ☒ Newfoundland and Labrador
☒ Nunavut ☒ Yukon ☒ Northwest Territories

Manufacturers Name: Endress+Hauser Wetzlar GmbH + Co. KG	
Manufacturers Address: Obere Wank 1, 87484 Nesselwang, Germany	
Plant Locations: Nesselwang, Germany; Greenwood, USA; Suzhou, China; Chhatrapati Sambhaji Nagar, India; Pessano con Bormio (MI), Italy.	
Category of Fittings to be registered. Circle one Category only A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps ☒ F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 ☐ Class 2 ☐ Class 3 ☐ (Meeting CNSC or ASME requirements)	Title of the Standard of Construction ASME B31.3, ASME BPE
Show Manufacturers Name, Trademark, or Logo as it will appear on the product Endress+Hauser 	Type of Construction Forged ☒ Welded ☒ Wrought ☒ Cast ☐ Other ☐ Describe other:
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT #14011472, CALCULATIONS FILE # MW-EH-4325-001	

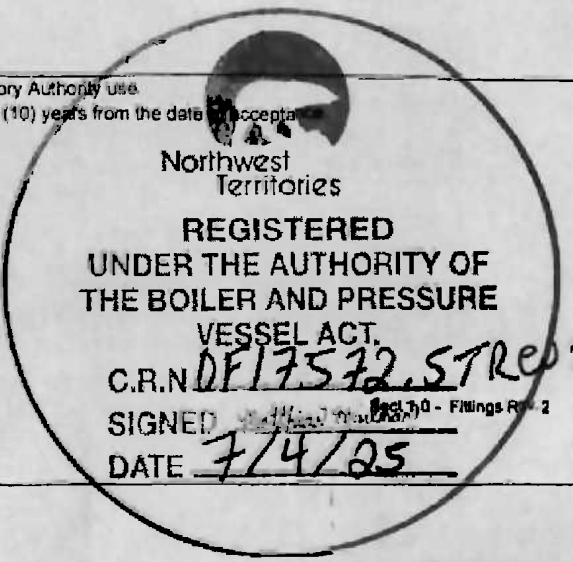
Declaration:

I Bernd Kunert (see note 3) employed by Endress+Hauser Wetzlar GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SQS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 
 Declared before me at Nesselwang
 This 8 day of April AD 2025
 Commissioner of Oaths
 Or Notary Public: (sign) _____

Use this space for the Official Seal

(Affix Official seal to the right)

This space for Regulatory Authority use This registration must be revalidated after ten (10) years from the date of acceptance CRN: <u>OF17572.5 Rev.2</u> FID#: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope- CRN renewal: Sanitary Thermowells TT411, TT412 Includes: Tri-Clamp Sanitary, Tri-Clamp, ISO2852, DIN11851; Spherical-Cylindrical Weld-in Adapter, Spherical Weld-in Adapter, Cylindrical Weld-in Adapter; Weld-in Adapter; Thread-in Adapter; Type B Varivent; Type F, N Varivent; DN11864-1-1; SMS1147; APV; Ingold; Neumo Biocontrol Product types (DGallant)	 Northwest Territories REGISTERED UNDER THE AUTHORITY OF THE BOILER AND PRESSURE VESSEL ACT. C.R.N. <u>OF17572.5</u> <u>STRE 2</u> SIGNED <u>[Signature]</u> DATE <u>7/4/25</u>
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UW2-NV. M00524/2025

UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

☒ New Brunswick
☒ Nova Scotia
☒ Prince Edward Island
☒ Newfoundland and Labrador
☒ Nunavut
☒ Yukon
☒ Northwest Territories

Manufacturers Name: Endress+Hauser Wetter GmbH + Co. KG Manufacturers Address: Obere Markt 1, 87484 Nesselwang, Germany Plant Locations: Nesselwang, Germany; Greenwood, USA; Suzhou, China; Chhachrap Santhapur, India; Pressano con Somaso (MN), Italy.	
Category of Fittings to be registered. Circle one Category only A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges of flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies all types E Strainers, filters, separators, and steam traps ☒ F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories I Nuclear components: Class 1 ☐ Class 2 ☐ Class 3 ☐ (Meeting CNSC or ASME requirements)	Title of the Standard of Construction ASME B31.3, ASME BPE
Show Manufacturers Name, Trademark, or Logo as it will appear on the product Endress+Hauser 	Type of Construction Forged ☐ Welded ☐ Wrought ☐ Cast ☐ Other ☐ Describe other:
List of supporting documentation and identification of the actual items to be registered: DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805. PRESSURE BURST TEST REPORT#14011472. CALCULATIONS FILE # MW-EH-4325-001	

Declaration:

I, David Luxon, Owner ☒ Authorized employee ☐ of Endress+Hauser Wetter GmbH + Co. KG and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure/temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by SGS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the force and effect as if made under oath.

Signature of Declarer: [Signature]
 Declared before me at Nesselwang
 This 8 day of April AD 2025
 Commissioner of Oaths
 Or Notary Public (sign) _____

Use this space for the Official Seal

(Affix Official seal to the right)

This space for Regulatory Authority Use This registration must be revalidated after ten (10) years from date of acceptance. CRN OF 17572.5 Rev.2 FIDR: _____ Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. Scope - CRN covers: Sanitary Thermowells T1411, T1412, including Tri-Clamp Sanitary, Tri-Clamp, ISO2852, DIN11861, Spentost-G1, Integral Weld-in Adapter, Spherical Weld-in Adapter, Cylindrical Weld-in Adapter, Weld-in Adapter, Tri-clamp Adapter, Type B Venturi, Type F, N Venturi, DN 100, 1-1/2, 2, 3, 4, 6, 8, 10, 12, 14, 16, 20, 24, 30, 36, 42, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180, 192, 204, 216, 228, 240, 252, 264, 276, 288, 300, 312, 324, 336, 348, 360, 372, 384, 396, 408, 420, 432, 444, 456, 468, 480, 492, 504, 516, 528, 540, 552, 564, 576, 588, 600, 612, 624, 636, 648, 660, 672, 684, 696, 708, 720, 732, 744, 756, 768, 780, 792, 804, 816, 828, 840, 852, 864, 876, 888, 900, 912, 924, 936, 948, 960, 972, 984, 996, 1008, 1020, 1032, 1044, 1056, 1068, 1080, 1092, 1104, 1116, 1128, 1140, 1152, 1164, 1176, 1188, 1200, 1212, 1224, 1236, 1248, 1260, 1272, 1284, 1296, 1308, 1320, 1332, 1344, 1356, 1368, 1380, 1392, 1404, 1416, 1428, 1440, 1452, 1464, 1476, 1488, 1500, 1512, 1524, 1536, 1548, 1560, 1572, 1584, 1596, 1608, 1620, 1632, 1644, 1656, 1668, 1680, 1692, 1704, 1716, 1728, 1740, 1752, 1764, 1776, 1788, 1800, 1812, 1824, 1836, 1848, 1860, 1872, 1884, 1896, 1908, 1920, 1932, 1944, 1956, 1968, 1980, 1992, 2004, 2016, 2028, 2040, 2052, 2064, 2076, 2088, 2100, 2112, 2124, 2136, 2148, 2160, 2172, 2184, 2196, 2208, 2220, 2232, 2244, 2256, 2268, 2280, 2292, 2304, 2316, 2328, 2340, 2352, 2364, 2376, 2388, 2400, 2412, 2424, 2436, 2448, 2460, 2472, 2484, 2496, 2508, 2520, 2532, 2544, 2556, 2568, 2580, 2592, 2604, 2616, 2628, 2640, 2652, 2664, 2676, 2688, 2700, 2712, 2724, 2736, 2748, 2760, 2772, 2784, 2796, 2808, 2820, 2832, 2844, 2856, 2868, 2880, 2892, 2904, 2916, 2928, 2940, 2952, 2964, 2976, 2988, 3000, 3012, 3024, 3036, 3048, 3060, 3072, 3084, 3096, 3108, 3120, 3132, 3144, 3156, 3168, 3180, 3192, 3204, 3216, 3228, 3240, 3252, 3264, 3276, 3288, 3300, 3312, 3324, 3336, 3348, 3360, 3372, 3384, 3396, 3408, 3420, 3432, 3444, 3456, 3468, 3480, 3492, 3504, 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9492, 9504, 9516, 9528, 9540, 9552, 9564, 9576, 9588, 9600, 9612, 9624, 9636, 9648, 9660, 9672, 9684, 9696, 9708, 9720, 9732, 9744, 9756, 9768, 9780, 9792, 9804, 9816, 9828, 9840, 9852, 9864, 9876, 9888, 9900, 9912, 9924, 9936, 9948, 9960, 9972, 9984, 9996, 10008, 10020, 10032, 10044, 10056, 10068, 10080, 10092, 10104, 10116, 10128, 10140, 10152, 10164, 10176, 10188, 10200, 10212, 10224, 10236, 10248, 10260, 10272, 10284, 10296, 10308, 10320, 10332, 10344, 10356, 10368, 10380, 10392, 10404, 10416, 10428, 10440, 10452, 10464, 10476, 10488, 10500, 10512, 10524, 10536, 10548, 10560, 10572, 10584, 10596, 10608, 10620, 10632, 10644, 10656, 10668, 10680, 10692, 10704, 10716, 10728, 10740, 10752, 10764, 10776, 10788, 10800, 10812, 10824, 10836, 10848, 10860, 10872, 10884, 10896, 10908, 10920, 10932, 10944, 10956, 10968, 10980, 10992, 11004, 11016, 11028, 11040, 11052, 11064, 11076, 11088, 11100, 11112, 11124, 11136, 11148, 11160, 11172, 11184, 11196, 11208, 11220, 11232, 11244, 11256, 11268, 11280, 11292, 11304, 11316, 11328, 11340, 11352, 11364, 11376, 11388, 11400, 11412, 11424, 11436, 11448, 11460, 11472, 11484, 11496, 11508, 11520, 11532, 11544, 11556, 11568, 11580, 11592, 11604, 11616, 11628, 11640, 11652, 11664, 11676, 11688, 11700, 11712, 11724, 11736, 11748, 11760, 11772, 11784, 11796, 11808, 11820, 11832, 11844, 11856, 11868, 11880, 11892, 11904, 11916, 11928, 11940, 11952, 11964, 11976, 11988, 12000, 12012, 12024, 12036, 12048, 12060, 12072, 12084, 12096, 12108, 12120, 12132, 12144, 12156, 12168, 12180, 12192, 12204, 12216, 12228, 12240, 12252, 12264, 12276, 12288, 12300, 12312, 12324, 12336, 12348, 12360, 12372, 12384, 12396, 12408, 12420, 12432, 12444, 12456, 12468, 12480, 12492, 12504, 12516, 12528, 12540, 12552, 12564, 12576, 12588, 12600, 12612, 12624, 12636, 12648, 12660, 12672, 12684, 12696, 12708, 12720, 12732, 12744, 12756, 12768, 12780, 12792, 12804, 12816, 12828, 12840, 12852, 12864, 12876, 12888, 12900, 12912, 12924, 12936, 12948, 12960, 12972, 12984, 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16428, 16440, 16452, 16464, 16476, 16488, 16500, 16512, 16524, 16536, 16548, 16560, 16572, 16584, 16596, 16608, 16620, 16632, 16644, 16656, 16668, 16680, 16692, 16704, 16716, 16728, 16740, 16752, 16764, 16776, 16788, 16800, 16812, 16824, 16836, 16848, 16860, 16872, 16884, 16896, 16908, 16920, 16932, 16944, 16956, 16968, 16980, 16992, 17004, 17016, 17028, 17040, 17052, 17064, 17076, 17088, 17100, 17112, 17124, 17136, 17148, 17160, 17172, 17184, 17196, 17208, 17220, 17232, 17244, 17256, 17268, 17280, 17292, 17304, 17316, 17328, 17340, 17352, 17364, 17376, 17388, 17400, 17412, 17424, 17436, 17448, 17460, 17472, 17484, 17496, 17508, 17520, 17532, 17544, 17556, 17568, 17580, 17592, 17604, 17616, 17628, 17640, 17652, 17664, 17676, 17688, 17700, 17712, 17724, 17736, 17748, 17760, 17772, 17784, 17796, 17808, 17820, 17832, 17844, 17856, 17868, 17880, 17892, 17904, 17916, 17928, 17940, 17952, 17964, 17976, 17988, 18000, 18012, 18024, 18036, 18048, 18060, 18072, 18084, 18096, 18108, 18120, 18132, 18144, 18156, 18168, 18180, 18192, 18204, 18216, 18228, 18240, 18252, 18264, 18276, 18288, 18300, 18312, 18324, 18336, 18348, 18360, 18372, 18384, 18396, 18408, 18420, 18432, 18444, 18456, 18468, 18480, 18492, 18504, 18516, 18528, 18540, 18552, 18564, 18576, 18588, 18600, 18612, 18624, 18636, 18648, 18660, 18672, 18684, 18696, 18708, 18720, 18732, 18744, 18756, 18768, 18780, 18792, 18804, 18816, 18828, 18840, 18852, 18864, 18876, 18888, 18900, 18912, 18924, 18936, 18948, 18960, 18972, 18984, 18996, 19008, 19020, 19032, 19044, 19056, 19068, 19080, 19092, 19104, 19116, 19128, 19140, 19152, 19164, 19176, 19188, 19200, 19212, 19224, 19236, 19248, 19260, 19272, 19284, 19296, 19308, 19320, 19332, 19344, 19356, 19368, 19380, 19392, 19404, 19416, 19428, 19440, 19452, 19464, 19476, 19488, 19500, 19512, 19524, 19536, 19548, 19560, 19572, 19584, 19596, 19608, 19620, 19632, 19644, 19656, 19668, 19680, 19692, 19704, 19716, 19728, 19740, 19752, 19
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August 12, 2025

TSSA
345 Carlingview Drive
Toronto, ON M9W 6N9

Dear Cecylia Garbacz,

Re: Reciprocal CRN Registration in Manitoba

As indicated by the Regulatory Reconciliation and Cooperation Table and the Reconciliation Agreement for the Canadian Registration Number (CRN) for Pressure Equipment, the design reviews conducted and accepted by the Canadian province or territory, or their delegated safety authority, will be mutually recognized in the Province of Manitoba. If a registration is conditionally based on compliance with the notes set by the original issuing Jurisdiction, such compliance shall be applied the same to this Province.

Your submission has been registered, as follows:

File Number:	74-R5291
CRN:	0F17572.54
Scope:	Scope of Registration - Sanitary Thermowells
Manufacturer:	ENDRESS + HAUSER WETZER GMBH+CO. KG
Expiry Date:	10 June 2035

Along with this letter is the invoice for registration.

In addition, every Pressure Vessel, Boiler, and Heat Exchanger shall be stamped with the registration number and as required by CSA Code B51, a Manufacturer's Data Report (MDR) must be forwarded to this office immediately at the time a unit is shipped to Manitoba. Send your MDR to gasupport@gov.mb.ca. In your subject line, indicate "*Manufacturer's Data Report-CRN No.*" A fee shall be billed to the Manufacturer to process data reports in accordance with the Steam and Pressure Plants Regulation section 17.1.

Please contact gasupport@gov.mb.ca for any questions or concerns.

Inspection and Technical Services

Labour and Immigration
508 – 401 York Avenue, Winnipeg, MB R3C 0P8
T (204) 945-3373 | F (204) 948-2089

Montréal, 12 août 2025.

CECYLIA GARBACZ
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ON
CANADA M9W 6N9

Fabricant : ENDRESS + HAUSER CANADA GMBH + CO. KG
HAUPTSTRASSE 1
MAULBURG GERMANY
DE-79689

Numéro de dossier : 941775

Numéro(s) de dessin(s) : Scope of Registration - Catalogue: iTHERM TT411,
TT412

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 : **0F17572.56**.

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 d'enregistrement. Les documents de conception doivent alors être resoumis pour validation;
- Le fabricant doit nous transmettre une copie de la *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.

Salutations distinguées,

Direction des équipements sous pression

Montréal

255, boul. Crémazie Est, 2ième étage

Montréal (Québec) H2M 1L5

Téléphone : 514 873-2546

Sans frais : 1 866 262-2084

enregistrementdesplans@rbq.gouv.qc.ca

www.rbq.gouv.qc.ca

Montréal, le 12 août 2025.

CECYLIA GARBACZ
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ON
CANADA M9W 6N9

Manufacturer : ENDRESS + HAUSER CANADA GMBH + CO. KG
HAUPTSTRASSE 1
MAULBURG GERMANY
DE-79689

OUR REFERENCE : 941775

Design number : Scope of Registration - Catalogue: iTHERM TT411,
TT412

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): **0F17572.56.**

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 boiler or pressure vessel 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,

Direction des équipements sous pression

Montréal

255, boul. Crémazie Est, 2ième étage
Montréal (Québec) H2M 1L5
Téléphone : 514 873-2546
Sans frais : 1 866 262-2084
enregistrementdesplans@rbq.gouv.qc.ca
www.rbq.gouv.qc.ca

UV2-Nr. M00523/2025



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

Endress+Hauser 

STATUTORY DECLARATION Registration of Fittings

I, Bernd Kunert, Quality Manager

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Endress+Hauser Wetzler GmbH + Co. KG

(Name of Manufacturer)

Located at Obere Wank 1, 87484 Nesselwang, Germany

(Plant Address)

+49 8361 3080

(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 **ASME B31.3 & ASME BPE** 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

which has been verified by the following authority, SQS

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of

this application, the following information and/or test data are attached as follows:

DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805; PRESSURE BURST TEST REPORT #14011472.

CALCULATIONS FILE # MW-EH-4325-001

(drawings, calculations, test reports, etc.)

Declared before me at Nesselwang in the _____ of _____

the 8 day of April AD 20 25.

Commissioner for Oaths:

(Printed name)

(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 _____.

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: _____



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

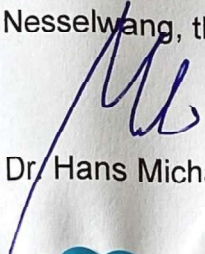
PV 09553 (04/17)

I hereby certify that the above standing is the true signature, signed before me of

Mr. Bernd Josef KUNERT,
born on the 22nd of December 1962,
resident in Oy-Mittelberg,
located in 87484 Nesselwang, Obere Wank 1,

personally known to me.

Nesselwang, the 8th of April 2025


Dr. Hans Michael Malzer, notary public



SCOPE OF REGISTRATION
Sanitary Thermowells

Code of Construction: ASME B31.3

Catalogue: iTHERM TT411, TT412(see note 1 below)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
Tri-Clamp Sanitary Ferrule [1]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN8 – 18 (0.5" – 0.75")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN12 – 21.3 (1/2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25 – 38 (1" – 1.5") DN40 – 51 (2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN63.5 (2.5"), DN70 – 76.5 (3")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN32, DN40, DN50	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical- Cylindrical Weld-in adapter [3]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x D40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical Weld-in adapter [3]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	D25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Cylindrical Weld-in adapter [3]	10000007051 10000007052 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x 40 mm (D1" NPS) D1/2" NPS, D3/4" NPS	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Weld-in adapter	10000007051	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D12 x 40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
ISO228 Thread-in adapter	10000007051 10000007052 [2]	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G3/8 M12x1 metal-to-metal G1/2 metal-to-metal	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
ISO228 Thread-in adapter	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G1 for FLT50 G3/4 for FLT20 FLT50 G3/4 for FLT20	40 bar [6] (580 psi)	-40 to 500 °C (-40 to 632 °F)
Type B Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	31 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
Type F, N Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	50 mm, 68 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
DN11864-1-A [1]	10000007052	A276/A476 316L A266 TP316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN40	40 bar (580 psi)	-40 to 500 °C (-40 to 632 °F)
SMS1147	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN38, DN51	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
APV	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN50	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Ingold	10000007052	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	Ø25 mm x 30 mm, Ø25 mm x 46 mm	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Neumo Biocontrol	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D25, D50, D65	16 bar (232 psi)	-40 to 600 °C (-40 to 1112 °F)

1. TT411 brand name includes drawings 10000007051, 10000007052, 10000007053, 10000007064. The TT412 brand name includes drawing 10000008805. In drawing 10000008805 the only difference of design that differs from TT411 brand name are the instrumentation connections to the thermowells at the top side of the thermowells (outside the pressure boundary). These thermometer/thermocouple instrumentation connections are outside the pressure boundary and are not subject to process pressure.

2. Assemblies with clamps and gasket limitations are not part of this registration. Thermowell of this registration will be installed between clamps utilizing gaskets. The MAWP & MAX temperature of such assembly shall be determined by end user by verifying MAWP and MAX temperature of each component. The overall MAWP/MAX temperature for the assembly shall be that of the lowest rated component.



REGISTRATION OF A PRESSURE FITTING DESIGN

July 8, 2025

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

Attention: Cecylia Garbacz

File Number: 103156

Re: Manufacturer: Endress+Hauser Wetzer GmbH + Co. KG

Item: Thermowells

Catalog or Drawing: Per Scope of Registration & Supporting Drawings

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:

0F17572.53

Expiry Date: 2035-06-10

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.

A valid quality control program must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

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

UVZ-Nr. M00523/2025



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

Endress+Hauser 

STATUTORY DECLARATION

Registration of Fittings

I, Bernd Kunert, Quality Manager

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Endress+Hauser Wetzler GmbH + Co. KG

(Name of Manufacturer)

Located at Obere Wank 1, 87484 Nesselwang, Germany

(Plant Address)

+49 8361 3080

(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 **ASME B31.3 & ASME BPE** 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

which has been verified by the following authority, SQS

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of

this application, the following information and/or test data are attached as follows:

DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805; PRESSURE BURST TEST REPORT #14011472, CALCULATIONS FILE # MW-EH-4325-001

(drawings, calculations, test reports, etc.)

Declared before me at Nesselwang in the _____ of _____

the 8 day of April AD 20 25

Commissioner for Oaths:

(Printed name)

(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 _____.

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: _____

 **Technical
Safety Authority**
of Saskatchewan

Registration No. 0F17572.53

File No. 103156

Registered

Date: July 8, 2025

Expiry Date: June 10, 2035

Codes & Standards Compliance Office

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

PV 09553 (04/17)

UVZ-Nr.

M00523

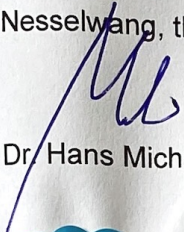
/2025

I hereby certify that the above standing is the true signature, signed before
me of

Mr. Bernd Josef KUNERT,
born on the 22nd of December 1962,
resident in Oy-Mittelberg,
located in 87484 Nesselwang, Obere Wank 1,

personally known to me.

Nesselwang, the 8th of April 2025


Dr. Hans Michael Malzer, notary public



**SCOPE OF REGISTRATION
Sanitary Thermowells**

Code of Construction: ASME B31.3

Catalogue: iTHERM TT411, TT412(see note 1 below)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
Tri-Clamp Sanitary Ferrule [1]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN8 – 18 (0.5" – 0.75")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN12 – 21.3 (1/2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25 – 38 (1" – 1.5") DN40 – 51 (2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN63.5 (2.5"), DN70 – 76.5 (3")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN32, DN40, DN50	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical- Cylindrical Weld-in adapter [3]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x D40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical Weld-in adapter [3]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	D25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Cylindrical Weld-in adapter [3]	10000007051 10000007052 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x 40 mm (D1" NPS) D1/2" NPS, D3/4" NPS	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Weld-in adapter	10000007051	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D12 x 40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
ISO228 Thread-in adapter	10000007051 10000007052 [2]	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G3/8 M12x1 metal-to-metal G1/2 metal-to-metal	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
ISO228 Thread-in adapter	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G1 for FLT50 G3/4 for FLT50 G3/4 for FLT20	40 bar [6] (580 psi)	-40 to 500 °C (-40 to 632 °F)
Type B Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	31 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
Type F, N Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	50 mm, 68 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
DN11864-1-A [1]	10000007052	A276/A476 316L A266 TP316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN40	40 bar (580 psi)	-40 to 500 °C (-40 to 632 °F)
SMS1147	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN38, DN51	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp (°C) (°F)
APV	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN50	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Ingold	10000007052	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	Ø25 mm x 30 mm, Ø25 mm x 46 mm	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Neumo Biocontrol	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D25, D50, D65	16 bar (232 psi)	-40 to 600 °C (-40 to 1112 °F)

1. TT411 brand name includes drawings 10000007051, 10000007052, 10000007053, 10000007064. The TT412 brand name includes drawing 10000008805. In drawing 10000008805 the only difference of design that differs from TT411 brand name are the instrumentation connections to the thermowells at the top side of the thermowells (outside the pressure boundary). These thermometer/thermocouple instrumentation connections are outside the pressure boundary and are not subject to process pressure.
2. Assemblies with clamps and gasket limitations are not part of this registration. Thermowell of this registration will be installed between clamps utilizing gaskets. The MAWP & MAX temperature of such assembly shall be determined by end user by verifying MAWP and MAX temperature of each component. The overall MAWP/MAX temperature for the assembly shall be that of the lowest rated component.


**Technical
Safety Authority
of Saskatchewan**

Registration No. 0F17572.53

File No. 103156

☒ Registered

Date: July 8, 2025

Expiry Date: June 10, 2035

Codes & Standards Compliance Office

ATTN: TSSA BPV NATIONAL REGISTRATION -
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DR
TORONTO ON M9W 6N9

Date: 30-Jul-2025
TSBC Account #: 061440
TSBC Admin Number: 118435
Canadian Registration Number: 0F17572.51

Re: Application for Design Registration

The design, as detailed in your Design Portal application 0F17572.5R2 - Endress+Hauser Wetzer GmbH + Co. KG for a Pressure Fitting is registered with the following notes and considerations:

Registered To:	Endress+Hauser Wetzer GmbH + Co. KG
Project Name:	0F17572.5R2 - Endress+Hauser Wetzer GmbH + Co. KG
Drawing #:	Scope of Registration- Sanitary Thermowells
Drawing Revision:	N/A

Conditions of Registration:

(1)Fitting Registration Expiry Date: 09-Jun-2035 (2) The registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of quality management system lapse before the expiry date indicated above, this registration shall become void.

Reviewer's Notes:

Any additional conditions and considerations from the initial province of registration shall apply to this BC registration.

Full details of this submission including the scope of registration, design conditions, fabrication details, and calculations pertaining to this design are located in the above Admin Number on the Design Portal. For all other enquiries, please contact eim@technicalsaftybc.ca.

The Engineering Information Management Team



345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

June 10, 2025

MAC-WELD MACHINING LTD
1324 LOUGAR AVE
SARNIA ON N7S 5N7

Workorder Type: Registration - Fitting(Conventional)
Workorder No: 14644049
Your Reference No.: 1001506490
Registered to: ENDRESS + HAUSER WETZER GMBH+CO. KG

Dear JOANNA STALMACH,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN : 0F17572.5R2
Main Design No.: Scope of Registration- Sanitary Thermowells
Expiry Date: Jun 10, 2035

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

Note: 10-year renewal to existing CRN fitting registration.

The stamped copy of the approved registration and the invoice are mailed separately (There will be no hard copies for electronic submissions). Should you have any questions or require further assistance, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Ruiming You P,ENG
Engineer, BPV
Tel. : +1 416-734-3428
Email : ryou@tssa.org

UVZ-Nr. M00523/2025



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

Endress+Hauser

STATUTORY DECLARATION

Registration of Fittings

I, Bernd Kunert, Quality Manager

(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Endress+Hauser Wetzlar GmbH + Co. KG

(Name of Manufacturer)

Located at Obere Wank 1, 87484 Nesselwang, Germany

(Plant Address)

+49 8361 3080

(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 **ASME B31.3 & ASME BPE** 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

which has been verified by the following authority, SQS

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of

this application, the following information and/or test data are attached as follows:

DRAWINGS: 10000007051, 10000007052, 10000007053, 10000007064, 10000008805; PRESSURE BURST TEST REPORT #14011472, CALCULATIONS FILE # MW-EH-4325-001

(drawings, calculations, test reports, etc.)

Declared before me at Nesselwang in the _____ of _____

the 8 day of April AD 20 25

Commissioner for Oaths:

(Printed name)

(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 _____.

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: _____

June 10, 2035

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0F17572.5R2

Signed: R. Kunert

Date: June 10, 2025

see Scope of Registration.

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

PV 09553 (04/17)

UVZ-Nr.

M00523

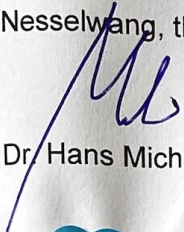
/2025

I hereby certify that the above standing is the true signature, signed before
me of

Mr. Bernd Josef KUNERT,
born on the 22nd of December 1962,
resident in Oy-Mittelberg,
located in 87484 Nesselwang, Obere Wank 1,

personally known to me.

Nesselwang, the 8th of April 2025


Dr. Hans Michael Malzer, notary public



SCOPE OF REGISTRATION
Sanitary Thermowells

Code of Construction: ASME B31.3

Catalogue: iTHERM TT411, TT412(see note 1 below)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp. °C (°F)
Tri-Clamp Sanitary Ferrule [1]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN8 – 18 (0.5" – 0.75")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN12 – 21.3 (1/2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007051 10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25 – 38 (1" – 1.5") DN40 – 51 (2")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
Tri-Clamp, ISO2852 Sanitary Ferrule [1]	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN63.5 (2.5"), DN70 – 76.5 (3")	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
DIN11851 [1]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	DN32, DN40, DN50	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical- Cylindrical Weld-in adapter [3]	10000007051 10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x D40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Spherical Weld-in adapter [3]	10000007051 10000007052 10000007053 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	D25	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Cylindrical Weld-in adapter [3]	10000007051 10000007052 10000008805	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D30 x 40 mm (D1" NPS) D1/2" NPS, D3/4" NPS	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
Weld-in adapter	10000007051	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D12 x 40 mm	40 bar (580 psi)	-40 to 600 °C (-40 to 1112 °F)
ISO228 Thread-in adapter	10000007051 10000007052 [2]	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G3/8 M12x1 metal-to-metal G1/2 metal-to-metal	16 bar (232 psi)	-40 to 650 °C (-40 to 1202 °F)
ISO228 Thread-in adapter	10000007052 10000007053 10000007064 10000008805	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	G1 for FLT50 G3/4 for FLT50 G3/4 for FLT20	40 bar [6] (580 psi)	-40 to 500 °C (-40 to 632 °F)
Type B Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	31 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
Type F, N Varivent [1]	10000007052 10000007064	A276/A476 316L B574 N10276 C-276 B564 N10276 C-276	50 mm, 68 mm	10 bar (145 psi)	-40 to 650 °C (-40 to 1202 °F)
DN11864-1-A [1]	10000007052	A276/A476 316L A266 TP316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN40	40 bar (580 psi)	-40 to 500 °C (-40 to 632 °F)
SMS1147	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN25, DN38, DN51	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)

Thermowell Product	Drawing [5]	Material	Size [5]	MAWP	Max Temp (°C) (°F)
APV	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	DN50	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Ingold	10000007052	A182 F316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	Ø25 mm x 30 mm, Ø25 mm x 46 mm	25 bar (362 psi)	-40 to 600 °C (-40 to 1112 °F)
Neumo Biocontrol	10000007052	A276/A476 316L A266 TP316L A240 316/316L B574 N10276 C-276 B564 N10276 C-276	D25, D50, D65	16 bar (232 psi)	-40 to 600 °C (-40 to 1112 °F)

1. TT411 brand name includes drawings 10000007051, 10000007052, 10000007053, 10000007064. The TT412 brand name includes drawing 10000008805. In drawing 10000008805 the only difference of design that differs from TT411 brand name are the instrumentation connections to the thermowells at the top side of the thermowells (outside the pressure boundary). These thermometer/thermocouple instrumentation connections are outside the pressure boundary and are not subject to process pressure.
2. Assemblies with clamps and gasket limitations are not part of this registration. Thermowell of this registration will be installed between clamps utilizing gaskets. The MAWP & MAX temperature of such assembly shall be determined by end user by verifying MAWP and MAX temperature of each component. The overall MAWP/MAX temperature for the assembly shall be that of the lowest rated component.