## Table of Contents

| 01_TSBC_0F22502.51 R1_Cerabar MOP | 2  |
|-----------------------------------|----|
| 02_ABSA_0F22502.52 R1_Cerabar MOP | 3  |
| 03_SK_0F22502.53 R1_Cerabar MOP   | 10 |
| 04_MB_0F22502.54 R1_Cerabar MOP   | 16 |
| 05_ON_0F22502.5R1_Cerabar MOP     | 17 |
| 06_QC_0F22502.56 R1_Cerabar MOP   | 23 |
| 07_NB_0F22502.57 R1_Cerabar MOP   | 30 |
| 08_NS_0F22502.58 R1_Cerabar MOP   | 31 |
| 09_PEI_0F22502.59 R1_Cerabar MOP  | 32 |
| 10_NL_0F22502.50 R1_Cerabar MOP   | 33 |
| 11_YK_0F22502.5Y R1_Cerabar MOP   | 34 |
| 12_NT_0F22502.5T R1_Cerabar MOP   | 35 |
| 13_NU_0F22502.5N R1_Cerabar MOP   | 36 |
|                                   |    |



Suite 600 - 2889 E 12th Ave Vancouver, BC V5M 4T5

Toll Free: 1-866-566-7233 www.technicalsafetybc.ca

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

**Date:** August 4, 2022

Account #: 35231 Journal #: 80702

Attn: TSSA

Re: Application for Design Registration

The design, as detailed in your, 0F22502.5R1 - ENDRESS + HAUSER GMBH + CO, for a Fitting is accepted for registration as follows:

Registered To: ENDRESS+HAUSER SE+CO. KG CRN: 0F22502.51

Drawing #: Scope Document 961004198 Drawing Revision: N/A

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

#### **Reviewer's Notes:**

As required by CSA B51 4.2.1, this registration expires on 15-Jun-2030. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void. Any additional conditions of registration stated in TSSA CRN# 0F22502.5R1 registration shall apply to BC registration.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

Emilia Tam

emilia.tam@technicalsafetybc.ca Design Administration

cc:

(PROD) 30400-20 GST #: 87391 2802 RT0001



9410 - 20 Ave N.W. Edmonton, Alberta, Canada T6N 0A4 Tel: (780) 437-9100 / Fax: (780) 437-7787

July 06, 2022

**Attention:** Tanya Francis

TECHNICAL STANDARDS & SAFETY AUTHORITY

345 CARLINGVIEW DRIVE TORONTO, ON M9W 6N9

The design submission, tracking number 2022-03480, originally received on June 22, 2022 was surveyed and accepted for registration as follows:

**CRN**: 0F22502.52 **Accepted on:** July 06, 2022

**Reg Type:** RENEWAL **Expiry Date:** June 15, 2030

Drawing No.: SCOPE DOCUMENT 961004198 Rev 09FEB22

Fitting type: Pressure Device

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

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

As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction are ASME B31.1 and ASME B31.3.

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration 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 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 until that date.
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3388 or fax (780) 437-7787 or e-mail Liu@absa.ca.

Sincerely,

LIU, XING, P. Eng.

DOP Cert. No. D00008861

2022-03480 Page 1 of 1



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



| STA   | ATUTORY DECL<br>Registration of Fits   |   |                                |
|---|--|---|--------------------------------|
| L CHRISTOPHER PROIOS, DIVISION MANA   |  |   |                                |
|   | Position, e.g. President, Plant Manager,                                       | Chief Engineer)   |                                |
| of ENDRESS+HAUSER SE+Co. KG   |  | , , , , , , , , , , , , , , , , , , ,                           |                                |
| 01  | (Name of Manufacturer)   |   |                                |
| SEE ATTACHED WORLDWIDE  | LOCATIONS APPENDIX   |   |                                |
| Located at SEE ATTACHED WORLDWIDE (Plant Address  | s)   | (Telephone No.)   | (Fax No.)                      |
| do solemnly declare that the fittings listed and Pressure Vessels Regulation, comple ASME B31.3, ASME B31.1   | hereunder, which are subject to  | the Technical Standard  |                                |
| which specifies the dimensions, materials of d  | itle of recognized North American Standa<br>construction, pressure/temperature |   | ng the fittings and service;   |
|   | supported by the attached data w   | hich identifies the dimension                                   | ons, material of construction, |
| pressure/temperature ratings and the basis  | s for such ratings, the marking of   | the fitting for identification                                  | and service.                   |
| I further declare that the manufacture of these fitti   |  | tem meeting the requirem  | ents of ISO 9001               |
| The items covered by this declaration, for which I see  |  | tallic Pressure Devices   | type fittings. In support of   |
| this application, the following information and/or test d<br>SCOPE OF CRN REGISTRATION, REPORTS   |  | S   |                                |
|   | (drawings, calculations, test reports, et                                      | c.)   |                                |
| Declared before me at   | in the   |   | of                             |
| the day of  |  |   | <u> </u>                       |
| (Printed name)  |  | i.V.  |                                |
| (Signature)   |  | (Signature of I   | Declarer)                      |
| To the best of my knowledge and belief, the applica<br>Technical Standards and Safety Act, Boilers and<br>CSA Standard B51 and is accepted for registration | Pressure Vessels Regulation, an  | e 2022-03480 <b>AR</b>  | ROMNCE OF ALBERTA<br>22502 52  |
| CRN:  |  | conditions of   |                                |
| Registered by:  |  | This stamp and signature hav<br>to this registered design as re |                                |
| Dated:  |  | the Pressure Equipment Safet<br>with the Electronic Transaction | y Regulation, in accordance    |
| 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)



#### WORLDWIDE LOCATIONS APPENDIX

### ENDRESS+HAUSER SE+Co. KG MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES

(rev. 22/Jan/2020)

Endress+Hauser SE+Co. KG

Hauptstrasse 1 79689 Maulburg, Germany ISO 9001 Certified by SQS

Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.

China – Singapore Industrial Park (SIP) Su Hong Zhong Lu No. 491 Jiangsu Province, 215021 Suzhou, P.R. China ISO 9001 Certified by SQS

Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.

M-192, Waluj MIDC Aurangabad – 431136, Maharashtra State, India ISO 9001 Certified by SQS

Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi 406 0846 Yamanashi, Japan ISO 9001 Certified by SQS

Endress+Hauser (USA)
Automation Instrumentation Inc.
2340 Endress Place
Greenwood, Indiana 46143, USA
ISO 9001 Certified by SQS

Endress+Hauser (Brazil)
Instrumentação e Automação Ltda.
Estrada Municipal Antonio Sesti
600 Bairro Recreio Costa Verde
Itatiba/SP – 13254-085, Brazil
ISO 9001 Certified by SQS

Endress+Hauser SE+Co. KG Queremathe 2 14532 Stahnsdorf Germany ISO 9001 Certified by SQS



Tracking #:\_



# STATUTORY DECLARATION Registration of Fittings Single or Multiple Fitting Designs within one Fitting Category

|             | IRISTOPHER PROIC   | os,  | DIVISION MANA<br>MANAGEMENT   | AGER QUALIT                       | Y mar                                   | nis space, show facsimile of<br>nufacturer's logo or tradem<br>will appear on the fitting. |
|-------------|--|--|---|-----------------------------------|---|--|
|             | (name of applicant)  |  | (position title) (must  | be in a position of               | 2.2.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4 |  |
| of EN       | NDRESS+HAUSER S  |  |   |                                   | End                                     | dress+Hauser 👃   |
|             |  |  | of manufacturer)  | 1212119                           |   |  |
| located     | d at SEE ATTACHE   |  | E LOCATIONS APP<br>ant address)                                     | PENDIX                            |   |  |
|             | emnly declare that the toolly one)   |  |   | are subject to t                  | he Safety Codes                         | Act  |
| $\boxtimes$ | comply with the requ   | uirements of _                                   | ASME B31.1, B31.  | 3                                 | which specifie                          | es the dimensions,   |
|             |  |  | title of recognized North   | American Standa                   | rd)                                     |  |
|             | materials of constru   | iction, pressur                                  | e/temperature ratin   | gs and identific                  | cation marking of                       | the fittings, or   |
|             | are not covered by t   |  | of a recognized No  | rth American s                    | tandard and are                         | therefore  |
|             | manufactured to con  |  | ands of southwester as  |                                   | as suppo                                | rted by the  |
|             |  |  | code of construction or   |                                   | and the state of                        |  |
|             | attached data which  | identifies the                                   | dimensions, materi  | als of construc                   | tion, pressure/ter                      | nperature ratings  |
|             | and the basis for suc  | ch ratings, and                                  | the identification r  | narking of the f                  | ittings.                                |  |
| been v      | er declare that the ma<br>verified as described i<br>standard, regulation,<br>ation for which I seek<br>y Program Verificati | n the below T<br>code, guideli<br>registration a | able as being suita<br>ne or other applicat<br>re as provided in th | ble for the man                   | ufacturing of the                       | se fittings to the ed by the   |
|             | of the Quality Certific  | cate from eac                                    | h manufacturing sit   | e must he inclu                   | ıded                                    |  |
|             | of the Quality Certific  | cate from eac                                    | h manufacturing sit   | e must be inclu                   | ıded                                    |  |
|             | Product Description, Model or Series   | Quality<br>Program                               | Scope of<br>Certification   | e must be inclu<br>Expiry<br>Date | Verifying<br>Organization               | Location(s)<br>Plant Name and<br>address   |
| A copy      | Product<br>Description,  | Quality  | Scope of  | Expiry                            | Verifying                               | Plant Name and   |





In support of this application, the following information, calculations and/or test data are attached: SCOPE OF CRN, DRAWINGS, CALCULATIONS, REPORTS 08. März 2022 DECLARED before me at \_\_\_\_\_ (province, territory, or state) (Month) (print) (a Commissioner of Oaths or Notary Public) (a Commissioner of Oaths or Notary Public) (expiry date (mm/dd/yy)) Commissioner of Oaths / Notary Public in and for: \_\_\_\_\_\_\_\_(province, territory, or state) For ABSA Office Use Only: NOTES: \_\_\_\_ To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Part 1, Clause 4.2, and is accepted for registration in Category CRN:\_\_\_\_\_ Registered Date: Expiry Date: Signature: (Signature of the Administrator/SCO) The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline

HAUPTSTRASSE 1 79689 MAULBURG GERMANY

# Endress + Hauser 🖽

411

People for Process Automation

Page 1 of 2

| Doc. | #961004198 |
|------|------------|
|------|------------|

### **SCOPE OF CRN REGISTRATION**

| Product Description:                | Category F Fittings: Metallic Pressure Devices  |
|-------------------------------------|---|
| Product                             | Cerabar PMP43, PMP43B, PMP50, PMP50B, PMP51, PMP51B, PMP53, PMP53B,   |
| Models:                             | PMP63, PMP63B, PMP71, PMP71B, PMP73, PMP73B, OPMP43, OPMP43B, OPMP50, OPMP50B, OPMP51, OPMP51B, OPMP53, OPMP53B, OPMP63, OPMP63B; OPMP71, OPMP71B, OPMP73, OPMP73B; Deltabar FMD72, PMD72B, OFMD72, OPMD72B |
| Code of Construction:               | ASME B31.1, ASME B31.3.   |
| Standard Materials of Construction: | Body: UNS S31603 ASTM A479 (316L,1.4404,1.4435), UNS N10276 ASTM B574 (C276,2.4819)   |
|                                     | Flanges: UNS S31600 ASTM A240,A182 (316,1.4401), UNS N10276 ASTM B575 (C276,2.4819)   |

### **PRODUCT DESCRIPTION**

| Report  | Process Connection     |                 |                          |       |   |
|---------|------------------------|-----------------|--------------------------|-------|---|
| Number  | Size and Type          | Drawing         | MAWP (Barg) at MAWT (°C) | MDMT  | Type  |
| R-1158A | Thread MNPT 1/2",      | 961002543       | 621 barg at 38°C         | -60°C | (O)PMP51(B),  |
|         | FNPT 1/2"              | Olvorlage       | 621 barg at 50°C         |       | (O)PMP71(B)   |
|         |                        | HD700           | 618 barg at 100°C        |       |   |
|         |                        |                 | 595 barg at 150°C        |       |   |
| R-1158B | Thread MNPT 1/2",      | 961002547       | 400 barg at 150°C        | -60°C | (O)PMP50(B),  |
|         | FNPT 1/2",             | Olvorlage       |                          |       | (O)PMP51(B),  |
|         | MNPT 1/2" x FNPT 1/4", | HD400           |                          |       | (O)PMP71(B)   |
|         | Sockets to accept      |                 |                          |       |   |
|         | capillary and mounted  |                 |                          |       |   |
|         | diaphragm seals        |                 |                          |       |   |
| R-1158C | Thread MNPT 3/4", 1"   | 961002513       | 100/40 barg at 150°C     | -60°C |   |
|         | 1-1/2", 2"             | Olvorlage HD100 | (Note 2)                 |       |   |
|         |                        | 961002490       | 10 barg at 150°C         | -60°C |   |
|         |                        | Olvorlage ND    | -                        |       |   |
|         | ASME BPE / ISO 2852    | 961002513       | 14.4 barg at 38°C        | -60°C |   |
|         | Clamp Ferrule 1/2", 1" | Olvorlage HD100 | 14.4 barg at 50°C        |       |   |
|         | 1-1/2", 2"             |                 | 14.3 barg at 100°C       |       |   |
|         | (Note 3)               |                 | 13.8 barg at 150°C       |       |   |
|         | , ,                    | 961002490       | 10 barg at 150°C         | -60°C |   |
|         |                        | Olvorlage ND    | •                        |       |   |
|         | Bio Control D25, D50   | 961002513       | 16 barg at 150°C         | -60°C |   |
|         |                        | Olvorlage HD100 | -                        |       | (O)PMP50(B),  |
|         |                        | 961002490       | 10 barg at 150°C         | -60°C | (O)PMP51(B),  |
|         |                        | Olvorlage ND    | -                        |       | (O)PMP53(B),  |
|         | Varivent B, F, N       | 961002513       | 40 barg at 150°C         | -60°C | (O)PMP63(B),  |
|         | (Note 3)               | Olvorlage HD100 |                          |       | (O)PMP71(B),  |
|         |                        | 961002490       | 10 barg at 150°C         | -60°C | (O)PMP73(B),  |
|         |                        | Olvorlage ND    |                          |       | (O)FMD72(B),  |
|         | Thread G 1/2",         | 961002513       | 100/40 barg at 150°C     | -60°C | (O)PMD72(B)   |
|         | G1" O-Ring Seal,       | Olvorlage HD100 | (Note 2)                 |       |   |
|         | G1" Sealing Cone       | 961002490       | 10 barg at 150°C         | -60°C |   |
|         |                        | Olvorlage ND    |                          |       |   |
|         | Thread MNPT 1/2",      | 961002513       | 100/40 barg at 150°C     | -60°C | 2022-03480 ABSA   |
|         | FNPT 1/2", MNPT        | Olvorlage HD100 | (Note 2)                 |       | SAFETY CODES ACT - PROMINCE OF ALBERTA  |
|         | 1/2" x FNPT 1/4"       | 961002490       | 10 barg at 150°C         | -60°C | ACCEPTED: 0F22502 52 See acceptance letter for conditions of registration.  |
|         |                        | Olvorlage ND    | -                        |       | Date: 2022-07-06 By: Sarray Ann.  |
|         | Sockets to accept      | 961002513       | 100/40 barg at 150°C     | -60°C | This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the prosper of Funityment Safety Provides |
|         | capillary and mounted  | Olvorlage HD100 | (Note 2)                 |       | with the Electronic Transactions Act.   |
|         | diaphragm seals        | 961002490       | 10 barg at 150°C         | -60°C |   |
|         |                        | Olvorlage ND    | -                        |       |   |

**HAUPTSTRASSE 1** 79689 MAULBURG **GERMANY** 

# Endress + Hauser 4



People for Process Automation

Page 2 of 2

Doc. #961004198

### PRODUCT DESCRIPTION CONTINUED

| Report  | Process Connection         |                   |                          |       |              |
|---------|----------------------------|-------------------|--------------------------|-------|--------------|
| Number  | Size and Type              | Drawing           | MAWP (barg) at MAWT (°C) | MDMT  | Type         |
| R-1158C | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 19.0 barg at 38°C        | -60°C |              |
|         | CL 150 Flanged             |                   | 18.4 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 16.2 barg at 100°C       |       |              |
|         | UNS S31603,                |                   | 14.8 barg at 150°C       |       |              |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | UNS S31600,                |                   |                          |       |              |
|         | (316, 1.4401)              |                   |                          |       |              |
|         | (Note 4)                   |                   |                          |       |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 49.6 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 48.1 barg at 50°C        |       | (O)PMP50(B), |
|         | Manufactured from          |                   | 42.2 barg at 100°C       |       | (O)PMP51(B), |
|         | UNS S31603,                |                   | 38.5 barg at 150°C       |       | (O)PMP53(B), |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C | (O)PMP63(B), |
|         | UNS S31600,                |                   |                          |       | (O)PMP71(B), |
|         | (316, 1.4401)              |                   |                          |       | (O)PMP73(B), |
|         | (Note 4)                   |                   |                          |       | (O)FMD72(B), |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 20.0 barg at 38°C        | -60°C | (O)PMD72(B)  |
|         | CL 150 Flanged             |                   | 19.5 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 17.7 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 15.8 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 51.7 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 51.7 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 51.5 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 50.3 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature, MDMT = Minimum Design Metal Temperature.

Note 2: 100 barg is the maximum design pressure which may be limited by the process connection type. In addition some sensors may be factory limited to 40 barg due to reading accuracy.

Note 3: The Clamp Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

Note 4: Stainless steel flanges are constructed from Type 316/316L dual rated material.

Note 5: See Attached List of Endress+Hauser Manufacturing locations applicable to this CRN.



2202 2nd Avenue Regina, SK S4R 1K3 Canada 1 (866) 530-8599 info@tsask.ca www.tsask.ca

#### REGISTRATION OF A PRESSURE FITTING DESIGN

08-Aug-22

TSSA 345 Carlingview Drive Toronto, Ontario M9W 6N9

Attention: Tanya Francis File Number: 13171 [ 0 F]

Re: Manufacturer: Endress + Hauser SE+Co. KG
Item: Metallic Pressure Devices

Catalog or Drawing: Scope of Registration Doc. #961004198 (09-Feb-22)

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:

**OF22502.53** Expiry Date: June 15, 2030

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:

Revision to existing design, per scope of registration.

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.

See Worldwide Locations Appendix document (rev. 22/Jan/2020) for list of manufacturing locations.



**Technical** Safety Authority of Saskatchewan

2202 2nd Ave.

Regina, SK S4R 1K3
PH: (306)798-7112 Toll Free: (866)530-8599
FAX: (306)787-9273 Toll Free: (866)760-9255
Email: boilerpermits@tsask.ca
Website: www.tsask.ca

### Statutory Declaration (Registration of Fittings)

| Designation to the second   |  |   |
|---|--|---|
| . Declaration Informati   | on   |   |
| CHRISTOPHER PROIOS  |  | In this space, show facsimile of manufacturer's logo or trademark as it wil                               |
| DIVISION MANAGER QU   | ALITY MANAGEMENT   | appear on the fitting.  |
| (company title, e.g<br>(must be in a position of autho  | . vice president, plant manager, chief engineer)<br>rity in the manufacturing plant where the fitting is produce | Endress+Hauser 4  |
| f: ENDRESS+HAUSER SE+C  | Co. KG   |   |
|   | (name of manufacturer)   |   |
| SEE ATTACHED  (Plant Address – A  | WORLDWIDE LOCATIONS APPENDIX  opt/Street) (City,Pro  | ov) (Postal Code)   |
|   | ttings listed hereinunder, which are subject   | t to the Saskatchewan Boiler and Pressure   |
|   | ments of ASME B31.3, B31.1 (title of recognized North American Stand   |   |
|   | n, pressure / temperature ratings and ident  |   |
|   | provisions of a recognized North American  | standard and are therefore manufactured   |
| to comply with  |  | as supported by the attached  |
|   | e dimensions, materials of construction, pre   | essure / temperature ratings and the basis  |
|   | e marking of the fittings for identification.<br>facturer of these fittings is controlled by a c                 |   |
|   | no following information, calculations and   | or took data are attached.  |
| support of this application, the  | ne following information, calculations and /TRATION, REPORTS, DRAWINGS   |   |
| support of this application, the COPE OF CRN REGIS  |  |   |
| support of this application, the COPE OF CRN REGIST   |  |   |
| support of this application, the COPE OF CRN REGISTED Declaration  ECLARED before me at   | In the In the , de   | of OZZ  |
| support of this application, the COPE OF CRN REGIST   | TRATION, REPORTS, DRAWINGS   | of OZZ  |
| support of this application, the COPE OF CRN REGISTED Declaration  ECLARED before me at   | In the (Signa  | of OZZ  |
| support of this application, the COPE OF CRN REGISTED Declaration  ECLARED before me at   | In the (Signa  | of OZZ  |
| Declaration  ECLARED before me at is day of  (print name)  (Signature of Commissioner of Oaths)  Office Use Only the best of my knowledge and   | In the (Signal belief, the application meets the requirements of   | of OZZ  |
| Declaration  ECLARED before me at day of  (print name)  (Signature of Commissioner of Oaths)  Office Use Only the best of my knowledge and  | In the (Signa  | of OZZ  |
| Declaration  ECLARED before me at day of  (print name)  (Signature of Commissioner of Oaths)  Office Use Only the best of my knowledge and  | In the   | of OSZZ OF THE Boiler and Pressure Vessel Safety Act and ODD YYYY) (Expiry Date – MM DD YYYY)             |
| Declaration  ECLARED before me at   | In the   | of OSZZ OF THE Boiler and Pressure Vessel Safety Act and ODD YYYY) (Expiry Date – MM DD YYYY)             |
| Declaration  ECLARED before me at   | In the   | of OSZZ OF THE Boiler and Pressure Vessel Safety Act and ODD YYYY) (Expiry Date – MM DD YYYY)             |
| Declaration  ECLARED before me at   | In the   | of of of of other and Pressure Vessel Safety Act and DD YYYY) (Expiry Date – MM DD YYYY) Chief Inspector) |
| support of this application, the COPE OF CRN REGISTANCE OF CRN REGISTATION, the best of my knowledge and SA B51, Clause 4.2, and is accessory of Saskatch Registration No. 0F22502.53  File No. 13171 | In the   | of OSZZ OF THE Boiler and Pressure Vessel Safety Act and ODD YYYY) (Expiry Date – MM DD YYYY)             |



### **WORLDWIDE LOCATIONS APPENDIX**

### ENDRESS+HAUSER SE+Co. KG MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES

(rev. 22/Jan/2020)

Endress+Hauser SE+Co. KG

Hauptstrasse 1 79689 Maulburg, Germany ISO 9001 Certified by SQS

Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.

China – Singapore Industrial Park (SIP) Su Hong Zhong Lu No. 491 Jiangsu Province, 215021 Suzhou, P.R. China ISO 9001 Certified by SOS

Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.

M-192, Waluj MIDC Aurangabad – 431136, Maharashtra State, India ISO 9001 Certified by SOS

Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi 406 0846 Yamanashi, Japan ISO 9001 Certified by SQS

Endress+Hauser (USA)
Automation Instrumentation Inc.
2340 Endress Place
Greenwood, Indiana 46143, USA
ISO 9001 Certified by SQS

Endress+Hauser (Brazil) Instrumentação e Automação Ltda. Estrada Municipal Antonio Sesti 600 Bairro Recreio Costa Verde Itatiba/SP – 13254-085, Brazil ISO 9001 Certified by SQS

Endress+Hauser SE+Co. KG Queremathe 2 14532 Stahnsdorf Germany ISO 9001 Certified by SQS HAUPTSTRASSE 1 79689 MAULBURG **GERMANY** 

# Endress + Hauser 🖽

People for Process Automation

Page 1 of 2

| Doc. | #961004198 |
|------|------------|
|------|------------|

### **SCOPE OF CRN REGISTRATION**

| Product Description:                | Category F Fittings: Metallic Pressure Devices  |  |  |  |
|-------------------------------------|---|--|--|--|
| Product                             | Cerabar PMP43, PMP43B, PMP50, PMP50B, PMP51, PMP51B, PMP53, PMP53B,   |  |  |  |
| Models:                             | PMP63, PMP63B, PMP71, PMP71B, PMP73, PMP73B, OPMP43, OPMP43B, OPMP50, OPMP50B, OPMP51, OPMP51B, OPMP53, OPMP53B, OPMP63, OPMP63B; OPMP71, OPMP71B, OPMP73, OPMP73B; Deltabar FMD72, PMD72B, OFMD72, OPMD72B |  |  |  |
| Code of Construction:               | ASME B31.1, ASME B31.3.   |  |  |  |
| Standard Materials of Construction: | Body: UNS S31603 ASTM A479 (316L,1.4404,1.4435), UNS N10276 ASTM B574 (C276,2.4819)   |  |  |  |
|                                     | Flanges: UNS S31600 ASTM A240,A182 (316,1.4401), UNS N10276 ASTM B575 (C276,2.4819)   |  |  |  |

### **PRODUCT DESCRIPTION**

| Report  | <b>Process Connection</b> |                 |                          |       |  |
|---------|---------------------------|-----------------|--------------------------|-------|--|
| Number  | Size and Type             | Drawing         | MAWP (Barg) at MAWT (°C) | MDMT  | Туре   |
| R-1158A | Thread MNPT 1/2",         | 961002543       | 621 barg at 38°C         | -60°C | (O)PMP51(B),                                     |
|         | FNPT 1/2"                 | Olvorlage       | 621 barg at 50°C         |       | (O)PMP71(B)                                      |
|         |                           | HD700           | 618 barg at 100°C        |       |  |
|         |                           |                 | 595 barg at 150°C        |       |  |
| R-1158B | Thread MNPT 1/2",         | 961002547       | 400 barg at 150°C        | -60°C | (O)PMP50(B),                                     |
|         | FNPT 1/2",                | Olvorlage       |                          |       | (O)PMP51(B),                                     |
|         | MNPT 1/2" x FNPT 1/4",    | HD400           |                          |       | (O)PMP71(B)                                      |
|         | Sockets to accept         |                 |                          |       |  |
|         | capillary and mounted     |                 |                          |       | Technical Safety Author                          |
|         | diaphragm seals           |                 |                          |       | Safety Author of Saskatchewa                     |
| R-1158C | Thread MNPT 3/4", 1"      | 961002513       | 100/40 barg at 150°C     | -60°C | File No 13171                                    |
|         | 1-1/2", 2"                | Olvorlage HD100 | (Note 2)                 |       | Registered                                       |
|         |                           | 961002490       | 10 barg at 150°C         | -60°C | Date: August 8, 2022  Expiry Date: June 15, 2030 |
|         |                           | Olvorlage ND    |                          |       | Codes & Standards Compliance Office              |
|         | ASME BPE / ISO 2852       | 961002513       | 14.4 barg at 38°C        | -60°C |  |
|         | Clamp Ferrule 1/2", 1"    | Olvorlage HD100 | 14.4 barg at 50°C        |       |  |
|         | 1-1/2", 2"                |                 | 14.3 barg at 100°C       |       |  |
|         | (Note 3)                  |                 | 13.8 barg at 150°C       |       |  |
|         |                           | 961002490       | 10 barg at 150°C         | -60°C |  |
|         |                           | Olvorlage ND    |                          |       |  |
|         | Bio Control D25, D50      | 961002513       | 16 barg at 150°C         | -60°C |  |
|         |                           | Olvorlage HD100 |                          |       | (O)PMP50(B),                                     |
|         |                           | 961002490       | 10 barg at 150°C         | -60°C | (O)PMP51(B),                                     |
|         |                           | Olvorlage ND    |                          |       | (O)PMP53(B),                                     |
|         | Varivent B, F, N          | 961002513       | 40 barg at 150°C         | -60°C | (O)PMP63(B),                                     |
|         | (Note 3)                  | Olvorlage HD100 |                          |       | (O)PMP71(B),                                     |
|         |                           | 961002490       | 10 barg at 150°C         | -60°C | (O)PMP73(B),                                     |
|         |                           | Olvorlage ND    |                          |       | (O)FMD72(B),                                     |
|         | Thread G 1/2",            | 961002513       | 100/40 barg at 150°C     | -60°C | (O)PMD72(B)                                      |
|         | G1" O-Ring Seal,          | Olvorlage HD100 | (Note 2)                 |       |  |
|         | G1" Sealing Cone          | 961002490       | 10 barg at 150°C         | -60°C |  |
|         |                           | Olvorlage ND    |                          |       |  |
|         | Thread MNPT 1/2",         | 961002513       | 100/40 barg at 150°C     | -60°C |  |
|         | FNPT 1/2", MNPT           | Olvorlage HD100 | (Note 2)                 |       |  |
|         | 1/2" x FNPT 1/4"          | 961002490       | 10 barg at 150°C         | -60°C |  |
|         |                           | Olvorlage ND    |                          |       |  |
|         | Sockets to accept         | 961002513       | 100/40 barg at 150°C     | -60°C |  |
|         | capillary and mounted     | Olvorlage HD100 | (Note 2)                 |       |  |
|         | diaphragm seals           | 961002490       | 10 barg at 150°C         | -60°C |  |
|         |                           | Olvorlage ND    |                          |       |  |

**HAUPTSTRASSE 1** 79689 MAULBURG **GERMANY** 

# Endress + Hauser 4

Page 2 of 2 People for Process Automation

#961004198 Doc.

### PRODUCT DESCRIPTION CONTINUED

| Report  | Process Connection         |                   |                          |       |              |
|---------|----------------------------|-------------------|--------------------------|-------|--------------|
| Number  | Size and Type              | Drawing           | MAWP (barg) at MAWT (°C) | MDMT  | Type         |
| R-1158C | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 19.0 barg at 38°C        | -60°C |              |
|         | CL 150 Flanged             |                   | 18.4 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 16.2 barg at 100°C       |       |              |
|         | UNS S31603,                |                   | 14.8 barg at 150°C       |       |              |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | UNS S31600,                |                   |                          |       |              |
|         | (316, 1.4401)              |                   |                          |       |              |
|         | (Note 4)                   |                   |                          |       |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 49.6 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 48.1 barg at 50°C        |       | (O)PMP50(B), |
|         | Manufactured from          |                   | 42.2 barg at 100°C       |       | (O)PMP51(B), |
|         | UNS S31603,                |                   | 38.5 barg at 150°C       |       | (O)PMP53(B), |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C | (O)PMP63(B), |
|         | UNS S31600,                |                   |                          |       | (O)PMP71(B), |
|         | (316, 1.4401)              |                   |                          |       | (O)PMP73(B), |
|         | (Note 4)                   |                   |                          |       | (O)FMD72(B), |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 20.0 barg at 38°C        | -60°C | (O)PMD72(B)  |
|         | CL 150 Flanged             |                   | 19.5 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 17.7 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 15.8 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 51.7 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 51.7 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 51.5 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 50.3 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature, MDMT = Minimum Design Metal Temperature.

Note 2: 100 barg is the maximum design pressure which may be limited by the process connection type. In addition some sensors may be factory limited to 40 barg due to reading accuracy.

Note 3: The Clamp Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

Note 4: Stainless steel flanges are constructed from Type 316/316L dual rated material.

Note 5: See Attached List of Endress+Hauser Manufacturing locations applicable to this CRN.





#### WORLDWIDE LOCATIONS APPENDIX

### ENDRESS+HAUSER SE+Co. KG MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES

(rev. 22/Jan/2020)

#### Endress+Hauser SE+Co. KG

Hauptstrasse 1 79689 Maulburg, Germany **ISO 9001 Certified by SQS** 

### Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.

China – Singapore Industrial Park (SIP) Su Hong Zhong Lu No. 491 Jiangsu Province, 215021 Suzhou, P.R. China ISO 9001 Certified by SQS

#### Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.

M-192, Waluj MIDC Aurangabad – 431136, Maharashtra State, India ISO 9001 Certified by SQS

### Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi 406 0846 Yamanashi, Japan **ISO 9001 Certified by SQS** 

### **Endress+Hauser (USA) Automation Instrumentation Inc.**

2340 Endress Place Greenwood, Indiana 46143, USA ISO 9001 Certified by SQS

### Endress+Hauser (Brazil) Instrumentação e Automação Ltda.

Estrada Municipal Antonio Sesti 600 Bairro Recreio Costa Verde Itatiba/SP – 13254-085, Brazil **ISO 9001 Certified by SQS** 

#### Endress+Hauser SE+Co. KG

Queremathe 2 14532 Stahnsdorf Germany ISO 9001 Certified by SQS





July 18, 2022

TSSA 345 Carlingview Drive Toronto, ON M9W 6N9

### Dear Tanya Francis,

### 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-R2452 CRN: 0F22502.54

Scope: Scope Document 961004198
Manufacturer: Endress + Hauser GmbH + Co KG

Expiry Date: 15 June 2030

Along with this letter is the invoice for registration.

In addition, every vessel shall be stamp of 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 <a href="mailto:qasupport@gov.mb.ca">qasupport@gov.mb.ca</a>. 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 <a href="mailto:qasupport@gov.mb.ca">qasupport@gov.mb.ca</a> for any questions or concerns.

### **Inspection and Technical Services**

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



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

www.tssa.org

April 21, 2022

ROUND ENGINEERING INC 10 SEGWUN RD WATERDOWN ON L8B 0K6

Workorder Type: Registration - Fitting(Conventional)

Workorder No: 8090457

Your Reference No.: R-1480 - REV TO CRN#0F22502.5 Registered to: ENDRESS + HAUSER GMBH + CO KG

Dear SCOTT ISLIP,

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

CRN: 0F22502.5R1

Main Design No.: Scope Document 961004198

Expiry Date: Jun 15, 2030

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

Note: 1. Revision to existing CRN 0F22502.5 2. Scope of change: Increase pressure ratings of Class 150 and Class 300 (961002513 HD100 & 961002490 ND) pressure gauges per ASME B16.5 Tables 2-2.2 and 3.8 . Items are qualified by proof test 3. 5" sizes are removed from the scope

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,

Shreyas Madhuranath M.Eng, P.Eng

Engineer, BPV



Tel.: +1 416-734-3212

Email: smadhuranath@tssa.org

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

www.tssa.org



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



| I, CHRISTOPHER PROIOS, DIVISION MA   |  | an results.  |  |
|--|--|--|--|
|  | e and Position, e.g. President, Plant Manager,   | Chief Engineer)  |  |
| of ENDRESS+HAUSER SE+Co. KG  |  |  |  |
|  | (Name of Manufacturer)   |  |  |
| Located at SEE ATTACHED WORLDW   |  |  |  |
| (Plant Ad  | ddress)  | (Telephone No.)  | (Fax No.)  |
| do solemnly declare that the fittings li<br>and Pressure Vessels Regulation, co<br>ASME B31.3, ASME B31.1  |  |  | ds and Safety Act, Boiler  |
| which are sifes the dimensions motorial  | (Title of recognized North American Standa   |  | - # Ellis and continu  |
| which specifies the dimensions, material   | s of construction, pressure/temperature  | ratings, Identification marking  | ng the fittings and service,                                       |
| pressure/temperature ratings and the  I further declare that the manufacture of thes  which has been verified by   | _as supported by the attached data w<br>basis for such ratings, the marking of   | hich identifies the dimension<br>the fitting for identification  | ons, material of construction and service.                         |
| The items covered by this declaration, for which   |  | tallic Pressure Devices  | type fittings. In support o  |
| this application, the following information and/or t   |  | Mile   | _ type iluiigs. iii support o                                      |
| SCOPE OF CRN REGISTRATION, REPO  |  | S  |  |
|  |  |  |  |
|  | (drawings, calculations, test reports, et  | c.)  |  |
|  | (drawings, calculations, test reports, et  | c.)  |  |
| Declared before me at  | (drawings, calculations, test reports, et  | c.)  | of   |
| Declared before me at  |  | c.)  | of   |
| the Of. day of Horra   | in the   | i.V.   | of   |
| the <u>Of</u> day of <u>Low Or</u><br>Commissioner for Oaths:  | in the   | (Signature of  | 3  |
| the <u>Of</u> day of <u>florror</u> Commissioner for Oaths:  (Printed name)  | in thein the AD 20  FOR OFFICE USE ONLY opplication meets the requirements of the sand Pressure Vessels Regulation, an | (Signature of I  | Declarer)  Boilers and Pressure Vessels Safety Program             |
| commissioner for Oaths:  (Printed name)  (Signature)  To the best of my knowledge and belief, the apple of the commissioner for Oaths:   | in thein the AD 20  FOR OFFICE USE ONLY opplication meets the requirements of the sand Pressure Vessels Regulation, an | (Signature of I  | Declarer)  Boilers and Pressure Vessels Safety Program             |
| commissioner for Oaths:  (Printed name)  (Signature)  To the best of my knowledge and belief, the appreciate Standards and Safety Act, Boilers CSA Standard B51 and is accepted for registration.    | in thein the AD 20  FOR OFFICE USE ONLY opplication meets the requirements of the sand Pressure Vessels Regulation, an | (Signature of I  | Boilers and Pressure Vessels Safety Program  EGISTERED  F22502.5R1 |
| commissioner for Oaths:  (Printed name)  (Signature)  To the best of my knowledge and belief, the apprechaical Standards and Safety Act, Boilers CSA Standard B51 and is accepted for registrations. | in thein the AD 20  FOR OFFICE USE ONLY opplication meets the requirements of the sand Pressure Vessels Regulation, an | (Signature of I  | Boilers and Pressure Vessels Safety Program  EGISTERED F22502.5R1  |
| commissioner for Oaths:  (Printed name)  (Signature)  To the best of my knowledge and belief, the appreciate Standards and Safety Act, Boilers CSA Standard B51 and is accepted for registration.    | in thein the AD 20  FOR OFFICE USE ONLY opplication meets the requirements of the sand Pressure Vessels Regulation, an | (Signature of International Control of Interna | Boilers and Pressure Vessels Safety Program  EGISTERED  F22502.5R1 |

\*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)

### THIS IS PART OF CRN

0F22502.5R1

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety

Program



### WORLDWIDE LOCATIONS APPENDIX

### ENDRESS+HAUSER SE+Co. KG MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES

(rev. 22/Jan/2020)

Endress+Hauser SE+Co. KG

Hauptstrasse 1 79689 Maulburg, Germany ISO 9001 Certified by SQS

Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.

China – Singapore Industrial Park (SIP) Su Hong Zhong Lu No. 491 Jiangsu Province, 215021 Suzhou, P.R. China ISO 9001 Certified by SQS

Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.

M-192, Waluj MIDC Aurangabad – 431136, Maharashtra State, India ISO 9001 Certified by SQS

Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi 406 0846 Yamanashi, Japan ISO 9001 Certified by SQS

Endress+Hauser (USA)
Automation Instrumentation Inc.
2340 Endress Place

Greenwood, Indiana 46143, USA

ISO 9001 Certified by SQS

Endress+Hauser (Brazil)

Instrumentação e Automação Ltda.

Estrada Municipal Antonio Sesti 600 Bairro Recreio Costa Verde Itatiba/SP – 13254-085, Brazil ISO 9001 Certified by SQS

Endress+Hauser SE+Co. KG

Queremathe 2 14532 Stahnsdorf Germany ISO 9001 Certified by SQS #961004198

HAUPTSTRASSE 1 79689 MAULBURG GERMANY

Doc.

# Endress + Hauser 4

People for Process Automation

THIS IS PART OF FIGURE OF 2

0F22502.5R1

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety

Program

# roduct Description: Category F Fittings: Metallic Pressure Devices

| Product Description:                | Category F Fittings: Metallic Pressure Devices                                      |
|-------------------------------------|---|
| Product                             | Cerabar PMP43, PMP43B, PMP50, PMP50B, PMP51, PMP51B, PMP53, PMP53B,                 |
| Models:                             | PMP63, PMP63B, PMP71, PMP71B, PMP73, PMP73B, OPMP43, OPMP43B, OPMP50,               |
|                                     | OPMP50B, OPMP51, OPMP51B, OPMP53, OPMP53B, OPMP63, OPMP63B; OPMP71,                 |
|                                     | OPMP71B, OPMP73, OPMP73B;   |
|                                     | Deltabar FMD72, PMD72B, OFMD72, OPMD72B   |
| Code of Construction:               | ASME B31.1, ASME B31.3.   |
| Standard Materials of Construction: | Body: UNS S31603 ASTM A479 (316L,1.4404,1.4435), UNS N10276 ASTM B574 (C276,2.4819) |
|                                     | Flanges: UNS S31600 ASTM A240,A182 (316,1.4401), UNS N10276 ASTM B575 (C276,2.4819) |

### **PRODUCT DESCRIPTION**

| Report  | Process Connection        |                              |                          |       |                              |
|---------|---------------------------|------------------------------|--------------------------|-------|------------------------------|
| Number  | Size and Type             | Drawing                      | MAWP (Barg) at MAWT (°C) | MDMT  | Type                         |
| R-1158A | Thread MNPT 1/2",         | 961002543                    | 621 barg at 38°C         | -60°C | (O)PMP51(B),                 |
|         | FNPT 1/2"                 | Olvorlage                    | 621 barg at 50℃          |       | (O)PMP71(B)                  |
|         |                           | HD700                        | 618 barg at 100°C        |       |                              |
|         |                           |                              | 595 barg at 150°C        |       |                              |
| R-1158B | Thread MNPT 1/2",         | 961002547                    | 400 barg at 150°C        | -60°C | (O)PMP50(B),                 |
|         | FNPT 1/2",                | Olvorlage                    |                          |       | (O)PMP51(B),                 |
|         | MNPT 1/2" x FNPT 1/4",    | HD400                        |                          |       | (O)PMP71(B)                  |
|         | Sockets to accept         |                              |                          |       |                              |
|         | capillary and mounted     |                              |                          |       |                              |
|         | diaphragm seals           |                              |                          |       |                              |
| R-1158C | Thread MNPT 3/4", 1"      | 961002513                    | 100/40 barg at 150°C     | -60°C |                              |
|         | 1-1/2", 2"                | Olvorlage HD100              | (Note 2)                 |       |                              |
|         |                           | 961002490                    | 10 barg at 150°C         | -60°C |                              |
|         | 10115 555 (100 5555       | Olvorlage ND                 | 1111                     | 00.0  |                              |
|         | ASME BPE / ISO 2852       | 961002513                    | 14.4 barg at 38°C        | -60°C |                              |
|         | Clamp Ferrule 1/2", 1"    | Olvorlage HD100              | 14.4 barg at 50°C        |       |                              |
|         | 1-1/2", 2"                |                              | 14.3 barg at 100°C       |       |                              |
|         | (Note 3)                  |                              | 13.8 barg at 150°C       |       |                              |
|         |                           | 961002490                    | 10 barg at 150°C         | -60°C |                              |
|         | B: 0 1 1 B05 B50          | Olvorlage ND                 | 40.1                     | 2000  |                              |
|         | Bio Control D25, D50      | 961002513                    | 16 barg at 150°C         | -60°C |                              |
|         |                           | Olvorlage HD100              | 40.1 1.45000             | 0000  | (O)PMP50(B),                 |
|         |                           | 961002490                    | 10 barg at 150°C         | -60°C | (O)PMP51(B),                 |
|         | Variate D. E. N.          | Olvorlage ND                 | 40 have at 150°C         | 6000  | (O)PMP53(B),                 |
|         | Varivent B, F, N (Note 3) | 961002513                    | 40 barg at 150°C         | -60°C | (O)PMP63(B),<br>(O)PMP71(B), |
|         | (Note 3)                  | Olvorlage HD100<br>961002490 | 10 barg at 150°C         | -60°C | (O)PMP71(B),<br>(O)PMP73(B), |
|         |                           | Olvorlage ND                 | To barg at 150°C         | -60°C | (O)FMD72(B),                 |
|         | Thread G 1/2",            | 961002513                    | 100/40 barg at 150°C     | -60°C | (O)PMD72(B)                  |
|         | G1" O-Ring Seal,          | Olvorlage HD100              | (Note 2)                 | -00 C | (O) MB72(B)                  |
|         | G1" Sealing Cone          | 961002490                    | 10 barg at 150°C         | -60°C |                              |
|         | GT Sealing Cone           | Olvorlage ND                 | 10 barg at 150 C         | -00 C |                              |
|         | Thread MNPT 1/2",         | 961002513                    | 100/40 barg at 150°C     | -60°C |                              |
|         | FNPT 1/2", MNPT           | Olvorlage HD100              | (Note 2)                 | -00 0 |                              |
|         | 1/2" x FNPT 1/4"          | 961002490                    | 10 barg at 150°C         | -60°C |                              |
|         | 1/2 A I IVI I 1/7         | Olvorlage ND                 | 10 baily at 100 0        | -55 0 |                              |
|         | Sockets to accept         | 961002513                    | 100/40 barg at 150°C     | -60°C |                              |
|         | capillary and mounted     | Olvorlage HD100              | (Note 2)                 | -00 0 |                              |
|         | diaphragm seals           | 961002490                    | 10 barg at 150°C         | -60°C |                              |
|         | diapinagin oodio          | Olvorlage ND                 | 10 5419 41 100 0         |       |                              |
|         | 1                         | Olvollage 14D                |                          |       |                              |

**HAUPTSTRASSE 1** 79689 MAULBURG **GERMANY** 

# Endress + Hauser 4



People for Process Automation

Page 2 of 2

Doc. #961004198

### PRODUCT DESCRIPTION CONTINUED

| Report  | Process Connection         |                   |                          |       |              |
|---------|----------------------------|-------------------|--------------------------|-------|--------------|
| Number  | Size and Type              | Drawing           | MAWP (barg) at MAWT (°C) | MDMT  | Type         |
| R-1158C | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 19.0 barg at 38°C        | -60°C |              |
|         | CL 150 Flanged             |                   | 18.4 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 16.2 barg at 100°C       |       |              |
|         | UNS S31603,                |                   | 14.8 barg at 150°C       |       |              |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | UNS S31600,                |                   |                          |       |              |
|         | (316, 1.4401)              |                   |                          |       |              |
|         | (Note 4)                   |                   |                          |       |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 49.6 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 48.1 barg at 50°C        |       | (O)PMP50(B), |
|         | Manufactured from          |                   | 42.2 barg at 100°C       |       | (O)PMP51(B), |
|         | UNS S31603,                |                   | 38.5 barg at 150°C       |       | (O)PMP53(B), |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C | (O)PMP63(B), |
|         | UNS S31600,                |                   |                          |       | (O)PMP71(B), |
|         | (316, 1.4401)              |                   |                          |       | (O)PMP73(B), |
|         | (Note 4)                   |                   |                          |       | (O)FMD72(B), |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 20.0 barg at 38°C        | -60°C | (O)PMD72(B)  |
|         | CL 150 Flanged             |                   | 19.5 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 17.7 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 15.8 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 51.7 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 51.7 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 51.5 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 50.3 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature, MDMT = Minimum Design Metal Temperature.

Note 2: 100 barg is the maximum design pressure which may be limited by the process connection type. In addition some sensors may be factory limited to 40 barg due to reading accuracy.

Note 3: The Clamp Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

Note 4: Stainless steel flanges are constructed from Type 316/316L dual rated material.

Note 5: See Attached List of Endress+Hauser Manufacturing locations applicable to this CRN.



Direction générale de l'inspection

Montréal, 20 juillet 2022.

MADAME TANYA FRANCIS
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO
CANADA M9W6N9

Fabricant: ENDRESS + HAUSER GMBH + CO KG

1 HAUPTSTRASSE MAULBURG GERMANY

79689

Numéro de dossier : 947630

Numéro(s) de dessin(s): PER SCOPEOF CRN REGISTRATION DATED 9FEB2022

### 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 : **0F22502.56.** 

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

www.rbq.gouv.qc.ca



Direction générale de l'inspection

Montréal, le 20 juillet 2022.

MRS. TANYA FRANCIS
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO
CANADA M9W6N9

Manufacturer: ENDRESS + HAUSER GMBH + CO KG

1 HAUPTSTRASSE MAULBURG GERMANY

79689

OUR REFERENCE: 947630

Design number: PER SCOPEOF CRN REGISTRATION DATED 9FEB2022

#### 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):**0F22502.56**.

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

www.rbq.gouv.qc.ca



### **Statutory Declaration Registration of Fittings**

Building Act (B-1.1)
Regulation respecting pressure vessels (B-1.1, r. 6.1)
Boiler, pressure vessel, and pressure piping code (CSA B51)

This declaration must be filled out and sent to the Régie du bâtiment du Québec (RBQ) by pressure fitting manufacturers when they make an application registration for fittings.

For more information on the application registration for fittings, consult the www.rbq.gouv.qc.ca/fittings-pv.

### 1. Fittings to register

List the fittings included in this declaration and that you wish to register.

| Nº | Description               | Additional information (detail, calculations or approval sheets) |
|----|---------------------------|--|
| 1  | METALLIC PRESSURE DEVICES |  |
| 2  | SCOPE OF CRN, REPORTS     |  |
| 3  | DRAWINGS                  | Endress+Hauser   |
| 4  | CALCULATIONS              | Litaress · Hauser Lib  |
| 5  | COMPANY LOGO - SEE RIGHT  |  |

### 2. Declaration of the person in charge

The person in charge is someone in a position of authority, such as a vice-president, a plant manager or a chief engineer.

| I, the undersigned,  | Christopher Proios   | Division Manager Quality Management  |
|--|--|--|
|  | (Name of the person in charge)   | (Title of the person in charge)  |
| from Endress+Hau   | ser SE+Co.KG , located at  | See Attached Worldwide Locations Appendix  |
| (Company   | 's name)   | (Plant's address)  |
| hereby declare that the a  | bove-mentioned fittings and subject to   | the Regulation respecting pressure installations:  |
| comply with the requi<br>or ASME B31.3, AS                             | rements of the ANSI/ASME codes as to<br>ME B31.1   | o their dimensions, identification, material and purpose   |
|  |  |  |
| are not covered by the   | e ANSI/ASME codes, but are in compli   | ance with  |
| are not covered by the   | e ANSI/ASME codes, but are in compli   | ance with(Name of code or standard)  |
|  |  |  |
| code or standard and are   | designed according to the best curren  | (Name of code or standard)   |
| code or standard and are   | e designed according to the best curren  | (Name of code or standard) It engineering practice, as proven by the enclosed approval report.   |
| 2.2 Manufacturing quali  | e designed according to the best currentity control manufacture of these fittings is controlle | (Name of code or standard) It engineering practice, as proven by the enclosed approval report. It does not be a quality control program that complies with the requirements of the |
| 2.2 Manufacturing qualing I further declare that the refollowing code: | e designed according to the best currentity control manufacture of these fittings is controlle | (Name of code or standard) It engineering practice, as proven by the enclosed approval report. It does not be a quality control program that complies with the requirements of the |

# Declaration of commissioner for oaths Schopfheim certify that this declaration has been administered before me, at (Date (yyyy-mm-dd)): Signature of commissioner for oaths: Date (yyyy-mm-dd): Stamp the seal:

## 4. Registration confirmation (for RBQ's use only)

| As far as I know, this application complies with the re-<br>accepted for registration in the class | quirements of the Act and with standard CSA B51, Part 1, section 4.2, and is         |
|--|--|
| This registration expires in ten (10) years after the dat  | e of registration indicated above, and it must be validated again after this period. |
| Canadian registration number (CRN):  | Registration date (yvvy-mm-dd):  Régie du bâtiment  Québec * *                       |

### Documents to attach

Any application registration for fittings must include these documents:

- Statutory Declaration Registration of Fittings (2 copies)
- Detailed calculations or burst test report (1 copy)
- Detailed technical drawings or catalogues (2 copies)
- Example of the manufacturer's marking (1 copy)
- Proof that a valid and approved quality control program has been implemented (1 copy)
- Form Application for design registration (1 copy)

### Sending the form

This declaration is necessary to submit an application for design registration. Design registration applications must be sent by email only to enregistrementdesplans@rbq.gouv.qc.ca.

Documents must be in PDF format and in separate files.



### WORLDWIDE LOCATIONS APPENDIX

# ENDRESS+HAUSER SE+Co. KG MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES

(rev. 22/Jan/2020)

Endress+Hauser SE+Co. KG

Hauptstrasse 1 79689 Maulburg, Germany ISO 9001 Certified by SQS

Endress+Hauser (Suzhou) Automation Instrumentation Co. Ltd.

China – Singapore Industrial Park (SIP) Su Hong Zhong Lu No. 491 Jiangsu Province, 215021 Suzhou, P.R. China ISO 9001 Certified by SOS

Endress+Hauser (India) Automation Instrumentation Pvt. Ltd.

M-192, Waluj MIDC Aurangabad – 431136, Maharashtra State, India ISO 9001 Certified by SQS

Endress+Hauser Yamanashi Co., Ltd.

862-1 Mitsukunugi Sakaigawa-cho Fuefuki-shi 406 0846 Yamanashi, Japan ISO 9001 Certified by SQS

Endress+Hauser (USA)

Automation Instrumentation Inc. 2340 Endress Place Greenwood, Indiana 46143, USA ISO 9001 Certified by SQS

Endress+Hauser (Brazil)

Instrumentação e Automação Ltda. Estrada Municipal Antonio Sesti 600 Bairro Recreio Costa Verde Itatiba/SP – 13254-085, Brazil

ISO 9001 Certified by SQS

Endress+Hauser SE+Co. KG

Queremathe 2 14532 Stahnsdorf Germany ISO 9001 Certified by SQS

### **ENDRESS+HAUSER SE+Co. KG**

HAUPTSTRASSE 1 79689 MAULBURG GERMANY

## Endress + Hause



Enregistré au Quéé

Page 1 of 2

09-Feb-22

Doc. #961004198

**SCOPE OF CRN REGISTRATION** 

People for Process Automation



| Product Description:                | Category F Fittings: Metallic Pressure Devices                                      |
|-------------------------------------|---|
| Product                             | Cerabar PMP43, PMP43B, PMP50, PMP50B, PMP51, PMP51B, PMP53, PMP53B,                 |
| Models:                             | PMP63, PMP63B, PMP71, PMP71B, PMP73, PMP73B, OPMP43, OPMP43B, OPMP50,               |
|                                     | OPMP50B, OPMP51, OPMP51B, OPMP53, OPMP53B, OPMP63, OPMP63B; OPMP71,                 |
|                                     | OPMP71B, OPMP73, OPMP73B;   |
|                                     | Deltabar FMD72, PMD72B, OFMD72, OPMD72B   |
| Code of Construction:               | ASME B31.1, ASME B31.3.   |
| Standard Materials of Construction: | Body: UNS S31603 ASTM A479 (316L,1.4404,1.4435), UNS N10276 ASTM B574 (C276,2.4819) |
|                                     | Flanges: UNS S31600 ASTM A240,A182 (316,1.4401), UNS N10276 ASTM B575 (C276,2.4819) |

### **PRODUCT DESCRIPTION**

| Report  | Process Connection                   |                           |   |                   |              |
|---------|--------------------------------------|---------------------------|---|-------------------|--------------|
| Number  | Size and Type                        | Drawing                   | MAWP (Barg) at MAWT (°C)                | MDMT              | Type         |
| R-1158A | Thread MNPT 1/2",                    | 961002543                 | 621 barg at 38°C                        | -60°C             | (O)PMP51(B), |
|         | FNPT 1/2"                            | Olvorlage                 | 621 barg at 50°C                        |                   | (O)PMP71(B)  |
|         |                                      | HD700                     | 618 barg at 100°C                       |                   |              |
|         |                                      |                           | 595 barg at 150°C                       |                   |              |
| R-1158B | Thread MNPT 1/2",                    | 961002547                 | 400 barg at 150°C                       | -60°C             | (O)PMP50(B), |
|         | FNPT 1/2",                           | Olvorlage                 |   |                   | (O)PMP51(B), |
|         | MNPT 1/2" x FNPT 1/4",               | HD400                     |   |                   | (O)PMP71(B)  |
|         | Sockets to accept                    |                           |   |                   |              |
|         | capillary and mounted                |                           |   |                   |              |
| D 44500 | diaphragm seals                      | 004000540                 | 100/101                                 | 10000             |              |
| R-1158C | Thread MNPT 3/4", 1"                 | 961002513                 | 100/40 barg at 150°C                    | -60°C             |              |
|         | 1-1/2", 2"                           | Olvorlage HD100           | (Note 2)                                | 0000              |              |
|         |                                      | 961002490                 | 10 barg at 150°C                        | -60°C             |              |
|         | A CME DDE /ICO 2052                  | Olvorlage ND<br>961002513 | 4.4.4.5                                 |                   |              |
|         | ASME BPE / ISO 2852                  |                           | 14.4 barg at 38°C                       | -60°C             |              |
|         | Clamp Ferrule 1/2", 1"<br>1-1/2", 2" | Olvorlage HD100           | 14.4 barg at 50°C<br>14.3 barg at 100°C |                   |              |
|         | (Note 3)                             |                           | 13.8 barg at 150°C                      |                   |              |
|         | (Note 3)                             | 961002490                 | 10 barg at 150°C                        | -60°C             |              |
|         |                                      | Olvorlage ND              | TO barg at 150 C                        | <del>-</del> 00 C |              |
|         | Bio Control D25, D50                 | 961002513                 | 16 barg at 150°C                        | -60°C             |              |
|         | Bio control B20, B00                 | Olvorlage HD100           | To barg at 100 0                        | -00 0             | (O)PMP50(B), |
|         |                                      | 961002490                 | 10 barg at 150°C                        | -60°C             | (O)PMP51(B), |
|         |                                      | Olvorlage ND              | ro sang at 100 0                        |                   | (O)PMP53(B), |
|         | Varivent B, F, N                     | 961002513                 | 40 barg at 150°C                        | -60°C             | (O)PMP63(B), |
|         | (Note 3)                             | Olvorlage HD100           |   |                   | (O)PMP71(B), |
|         | , ,                                  | 961002490                 | 10 barg at 150°C                        | -60°C             | (O)PMP73(B), |
|         |                                      | Olvorlage ND              | •                                       |                   | (O)FMD72(B), |
|         | Thread G 1/2",                       | 961002513                 | 100/40 barg at 150°C                    | -60°C             | (O)PMD72(B)  |
|         | G1" O-Ring Seal,                     | Olvorlage HD100           | (Note 2)                                |                   |              |
|         | G1" Sealing Cone                     | 961002490                 | 10 barg at 150°C                        | -60°C             |              |
|         |                                      | Olvorlage ND              |   |                   |              |
|         | Thread MNPT 1/2",                    | 961002513                 | 100/40 barg at 150°C                    | -60°C             |              |
|         | FNPT 1/2", MNPT                      | Olvorlage HD100           | (Note 2)                                |                   |              |
|         | 1/2" x FNPT 1/4"                     | 961002490                 | 10 barg at 150°C                        | -60°C             |              |
|         |                                      | Olvorlage ND              |   |                   |              |
|         | Sockets to accept                    | 961002513                 | 100/40 barg at 150°C                    | -60°C             |              |
|         | capillary and mounted                | Olvorlage HD100           | (Note 2)                                |                   |              |
|         | diaphragm seals                      | 961002490                 | 10 barg at 150°C                        | -60°C             |              |
|         |                                      | Olvorlage ND              |   |                   |              |

**HAUPTSTRASSE 1** 79689 MAULBURG **GERMANY** 

# Endress + Hauser 4



People for Process Automation

Page 2 of 2

Doc. #961004198

### PRODUCT DESCRIPTION CONTINUED

| Report  | Process Connection         |                   |                          |       |              |
|---------|----------------------------|-------------------|--------------------------|-------|--------------|
| Number  | Size and Type              | Drawing           | MAWP (barg) at MAWT (°C) | MDMT  | Type         |
| R-1158C | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 19.0 barg at 38°C        | -60°C |              |
|         | CL 150 Flanged             |                   | 18.4 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 16.2 barg at 100°C       |       |              |
|         | UNS S31603,                |                   | 14.8 barg at 150°C       |       |              |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | UNS S31600,                |                   |                          |       |              |
|         | (316, 1.4401)              |                   |                          |       |              |
|         | (Note 4)                   |                   |                          |       |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 49.6 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 48.1 barg at 50°C        |       | (O)PMP50(B), |
|         | Manufactured from          |                   | 42.2 barg at 100°C       |       | (O)PMP51(B), |
|         | UNS S31603,                |                   | 38.5 barg at 150°C       |       | (O)PMP53(B), |
|         | (316L, 1.4404, 1.4435),    | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C | (O)PMP63(B), |
|         | UNS S31600,                |                   |                          |       | (O)PMP71(B), |
|         | (316, 1.4401)              |                   |                          |       | (O)PMP73(B), |
|         | (Note 4)                   |                   |                          |       | (O)FMD72(B), |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 20.0 barg at 38°C        | -60°C | (O)PMD72(B)  |
|         | CL 150 Flanged             |                   | 19.5 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 17.7 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 15.8 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |
|         | 1", 1-1/2", 2", 3", 4", 6" | 961002513 (HD100) | 51.7 barg at 38°C        | -60°C |              |
|         | CL 300 Flanged             |                   | 51.7 barg at 50°C        |       |              |
|         | Manufactured from          |                   | 51.5 barg at 100°C       |       |              |
|         | UNS N10276                 |                   | 50.3 barg at 150°C       |       |              |
|         | (C276, 2.4819)             | 961002490 (ND)    | 10.0 barg at 150°C       | -60°C |              |

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature, MDMT = Minimum Design Metal Temperature.

Note 2: 100 barg is the maximum design pressure which may be limited by the process connection type. In addition some sensors may be factory limited to 40 barg due to reading accuracy.

Note 3: The Clamp Ferrule and Varivent connection shall be used with a clamp, however the assembly clamp is not part of this CRN. Pressure-Temperature ratings may be limited by the clamp type used in the joint assembly. The clamp used to complete the joint shall have its own CRN and shall have pressure-temperature ratings the same or higher than the product ratings.

Note 4: Stainless steel flanges are constructed from Type 316/316L dual rated material.

Note 5: See Attached List of Endress+Hauser Manufacturing locations applicable to this CRN.

|  |  |  | STRATION OF FITTING DESIGNS  |
|--|--|--|--|
| Vew Brunswick<br>Ilunavut  | Nova Scotia<br>Yukon   | Prince Edward Island<br>Northwest Territories  | Newfoundland and Labrador  |
| Manufacturers Nam  | e; ENDRESS+HAUSER SE+Co.   | KG   |  |
| <del></del>  |  | LDWIDE LOCATIONS APPENDIX  |  |
|  | ATTACHED WORLDWIDE LOCAT   |  |  |
| Category   | of Fittings to be register   | red. Circle one Category only  | Title of the Standard of   |
| B Flanges: all flanges   | couplings, tees, elbows, Ys,   | plugs, unions, pipe caps, or reducers  | Construction   |
| C Valves: all line valves  |  |  |  |
| <ul> <li>Expansion joints, flex</li> <li>Strainers, filters, sepa</li> </ul>   | ible connections, and hose as  | semblies: all types  | - ASME B31.3   |
| (F) Measuring devices, in  | cluding pressure gauges, leve  | el gauges, sight glasses, levels, or press   | sure - ASME B31.1  |
| transmitters G Certified capacity-rate   | d pressure relief devices acce   | eptable as primary over pressure protecti  | ion on   |
| boilers, pressure vess   | els, piping and fusible plugs  |  |  |
| -  | mponents that do not fall into   | A STATE OF THE PROPERTY OF THE |  |
| N Nuclear components:  | Class 1 Class 2 Clas   | is 3   , (Meeting CNSC or ASME require   | rements)   |
| Snow Manufacturers   | Name, Trademark, or Lo   | ogo as it will appear on the produ   | Forged Welded Wrought  |
| -  |  |  | Cast D Other D   |
| En   | dress+Ha   | user 4511  | Describe other:  |
|  |  |  |  |
| List of supporting de  | ocumentation and identif   | ication of the actual items to be r  | registered:  |
| - METALLIC PR  | ESSURE DEVICES   | SCOPE OF CRN REGIST  | TRATION, REPORTS, DRAWINGS,  |
| CALCULATIONS   |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| my knowledge represel<br>ratings, and identification<br>fittings is regulated by a<br>verified by sas iso 9001   | nts the product for which representation markings are in accordate Quality Control Program as the standard knowing that it is of the   | egistration is sought. The dimension<br>ince with the herein named standard<br>which extends to each plant where t   | mation contained in this form is true to the best of<br>ns, materials of construction, pressure temperature<br>ds. I further declare that the manufacture of these<br>fabrication occurs in whole or in part and has beer<br>make this solemn declaration conscientiously<br>nder oath.  |
| This day   | of March AD  | 677  | se this space for the Official Scale   |
| Commissioner of Oaths  |  | NOCE   |  |
|  |  | NOCE   |  |
|  | ~  | NO CC  | Nowana   |
|  | (Affix Official seal to the  | ight)  | Rrinswick  |
|  | (Affix Official seal to the  | This space for Regulatory Authority use  | Brunswick  |
| Or Notary Public: (sign)   | (Affix Official seal to the  | This space for Regulatory Authority use  | Brunswick  the pure receptions TICE PUBLIC SAFETY  |
| Or Notary Public: (sign)   | (Affix Official seal to the  | This space for Regulatory Authority use  | Brunswick  |
| Or Notary Public: (sign)  CRN: 0F22502.5   | (Affix Official seal to the  | This space for Regulatory Authority use  | the pressure vessel act  |
| Or Notary Public: (sign)  CRN: 0F22502.5  FID#: 15708  | (Affix Official seal to the  | This space for Regulatory Authority use  | the perfective stice public safety Boiler & PRESSURE VESSELACT REGISTRATION ONLY   |
| Or Notary Public: (sign)  CRN: 0F22502.5  FID#: 15708  Notes:  | (Affix Official seal to the control of Rev1  | This space for Regulatory Authority use<br>be revalidated after ten (10) yea's from  | the perfective stice public safety Boiler & PRESSURE VESSEL ACT REGISTRATION ONLY  |
| Or Notary Public: (sign)  CRN:   0F22502.5  FID#:  15708  Notes:  1. All Fittings shall be rec   | (Affix Official seal to the  | This space for Regulatory Authority use be revalidated after ten (10) years from locturer.   | the perfective stice public safety Boiler & PRESSURE VESSELACT REGISTRATION ONLY   |
| OF Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be regard and one copy of suppo  | This registration must Rev1  | This space for Regulatory Authority use be revalidated after ten (10) years from acturer.  | the perfective stice public safety Boiler & PRESSURE VESSELACT REGISTRATION ONLY   |
| Or Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppo 3. The Declaration shall li  | (Affix Official seal to the an official seal to the anomalous and anomalous and anomalous and anomalous anomalous and anomalous anomalous and anomalous anomalous and anomalous anomalous anomalous and anomalous anom | This space for Regulatory Authority use be revalidated after ten (10) years from acturer.  | the perfective stice public safety Boiler & Pressure vessel act REGISTRATION ONLY  |
| Or Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be reg and one copy of suppc 3. The Declaration shall I responsibility for the qu  | (Affix Official seal to the an analysis of the Natural Seal of the Manufales supported with two Statutory Devoting documentation.  | This space for Regulatory Authority use be revalidated after ten (10) years from a secturer.  claration forms  authority and   | the perfective stice public safety Boiler & Pressure vessel act REGISTRATION ONLY  |
| Or Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppc 3. The Declaration shall I responsibility for the qu   | (Affix Official seal to the an analysis of the Natural Seal of the Manufales supported with two Statutory Devoting documentation.  | This space for Regulatory Authority use be revalidated after ten (10) years from a secturer.  claration forms  authority and   | Brunswick  the presence rubbic safety Boiler & Pressure vessel act  REGISTRATION ONLY  CRN OF22502, 57 R  Registration accused the company of |
| Or Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppor 3. The Declaration shall I responsibility for the qu 4. Quality Control progra Scope of change: 1) Inc. (961002513 HD100.8 11/2018 ASME R16                             | This registration must Rev1  This registration must Rev1  instered in the name of the Manufa e supported with two Statutory Deviting documentation.  The made by the person having full uality of the end product.  The shall be resubmitted for validativese pressure ratings of Cl 61002490 ND) pressure de 5 Tables 2-2 2 and 3.8 Item.   | This space for Regulatory Authority use be revalidated after ten (10) years from octurer.  claration forms  authority and occurrences per months and occurrences per months are qualified.   | the perfective tice public safety Boiler & PRESSURE VESSELACT  REGISTRATION ONLY  CRN OF 22502, 57 R  CHIEF BOILER INSPECTOR   |
| Or Notary Public: (sign)  CRN:  DF22502.5  15708  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppo 3. The Declaration shall I responsibility for the qu 4. Quality Control progat Scope of change: 1) Inc (961002513 HD100 & 9 1172016 ASME B16 by proof test 2) 5" sizes   | This registration must Rev1  This registration must Rev1  platered in the name of the Manufale supported with two Statutory Deriting documentation.  Dee made by the person having full utility of the end product.  The shall be resubmitted for validate rease pressure ratings of Cl 61002490 ND) pressure de 5.5 Tables 2-2.2 and 3.8. Ite are removed from the scope  | This space for Regulatory Authority use be revalidated after ten (10) years from octurer.  claration forms  authority and occurrences per months and occurrences per months are qualified.   | the perfective tice public safety Boiler & PRESSURE VESSELACT  REGISTRATION ONLY  CRN OF 22502, 57 R  CHIEF BOILER INSPECTOR   |
| OF Notary Public: (sign)  CRN:  0F22502.5  15708  FID#:  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppo 3. The Declaration shall I responsibility for the quality Control program Scope of change: 1) Inc. (961002513 HD100 & 9 172016 ASME B16 by proof test 2) 5" sizes | This registration must Rev1  This registration must Rev1  platered in the name of the Manufale supported with two Statutory Deriting documentation.  Dee made by the person having full utility of the end product.  The shall be resubmitted for validate rease pressure ratings of Cl 61002490 ND) pressure de 5.5 Tables 2-2.2 and 3.8. Ite are removed from the scope  | This space for Regulatory Authority use be revalidated after ten (10) years from a contractor of the c | The present the pressure vessel act and the pressure vessel act are also ac |
| Or Notary Public: (sign)  CRN:  0F22502.5  15708  Notes:  1. All Fittings shall be reg 2. Each Category shall b and one copy of suppor 3. The Declaration shall I responsibility for the qu 4. Quality Control progra Scope of change: 1) Inc. (961002513 HD100.8 11/2016 ASME 8.16                            | This registration must Rev1  This registration must Rev1  platered in the name of the Manufale supported with two Statutory Deriting documentation.  Dee made by the person having full utility of the end product.  The shall be resubmitted for validate rease pressure ratings of Cl 61002490 ND) pressure de 5.5 Tables 2-2.2 and 3.8. Ite are removed from the scope  | This space for Regulatory Authority use be revalidated after ten (10) years from a contractor of the c | The DEPT CEPTURSTICE PUBLIC SAFETY BOILER & PRESSURE VESSEL ACT  REGISTRATION ONLY CRN OF 22502, 57 R  CHIEF BOILER INSPECTOR  |

### UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

| Hlunavut   | Nova Scotia  | Prince Edward  | Contract Contract  | Newfoundland and Labrador  |
|--|--|--|--|--|
| Tonava.  | Yukon  | Northwest Ter  | ritories   |  |
|  | me: Endress+Hauser se+C  |  |  |  |
|  | dress:SEE ATTACHED WO  |  | PPENDIX  |  |
|  | E ATTACHED WORLDWIDE LOC<br>ry of Fittings to be regist  |  | gan, ank   | Title of the Ctandard of   |
| A Pipe fittings, including B Flanges: all flanges C Valves: all line valve   | ng couplings, tees, elbows, Yo<br>as   | 's, plugs, unions, pipe capa   | s, or reducers   | Title of the Standard of<br>Construction   |
| E Strainers, filters, ser  | exible connections, and hose a<br>parators, and steam traps  | assemblies: all types  |  | - ASME B31.3   |
| Measuring devices,<br>transmitters   | including pressure gauges, le  | evel gauges, sight glasses   | levels, or pressure  | - ASME B31.1   |
| G Certified capacity-rai<br>bollers, pressure ver  | ted pressure relief devices ac<br>ssets, piping and fusible plugs<br>components that do not fall in  | 8  | -  | n en   |
| N Nuclear component  | s: Class 1 Class 2 C   | lass 3 🗆 , (Meeting CNSC   | or ASME requirer   | ments)   |
| Show Manufacture   | rs Name, Trademark, or   | Logo as it will appear   | on the product   | Type of Construction   |
| Er   | ndress+Ha  | auser 🖪  | IJ   | Forged Welded Wrought I Cast Cither Ci Describe other:   |
| List of supporting   | documentation and iden   | tification of the actua  | Items to be rec  | laistered;   |
|  | •  | •  |  | RATION, REPORTS, DRAWING   |
| CALCULATION  |  | SOUPE OF CR  | IN REGISTA   | WITON, REPORTS, DRAWING  |
| OALOGEATION  | ю.   |  |  |  |
| CHRISTOPHER PROIOS   | the quality of the end prod  | luct do solemniv declar  | a that the informa   | ation contained in this form is true to the be-  |
| pectaration: pectaration: graphs recovered by the second series of the s | the quality of the end prodents the product for which then markings are in accordance of a Quality Control Program and knowing that the of the control Program and knowing that the control Program and knowing the control Prog | duct do solemnly declar<br>n registration is sought.<br>dance with the herein r<br>m which extends to eac<br>is being suitable for that  | e that the informa<br>The dimensions<br>iamed standaris<br>h plant where fal<br>purpose and I n<br>ct as if made und   | KG and being the person having full authoration contained in this form is true to the bear, materials of construction, pressure temper. I further declare that the manufacture of the brication occurs in whole or in part and has nake this solemn declaration conscientious der oath.  |
| and responsibility for my knowledge representation:  and responsibility for my knowledge representatings, and identificative is regulated by verified by seaso soor believing it to be true,  Signature of Declarer Declared before me at This   | the quality of the end product for which the product for which tion markings are in accord a Quality Control Program and knowing that this of the control Program and knowing that the control Program and knowing the control | duct do solemniy declar<br>registration is sought.<br>dance with the herein r<br>m which extends to eac<br>is being suitable for that<br>the same force and effe   | e that the informa<br>The dimensions<br>iamed standaris<br>h plant where fal<br>purpose and I n<br>ct as if made und   | ation contained in this form is true to the be<br>, materials of construction, pressure temper<br>. I further declare that the manufacture of the<br>brication occurs in whole or in part and has<br>nake this solemn declaration conscientious<br>der oath.   |
| and responsibility for my knowledge representation:  and responsibility for my knowledge representatings, and identificative is regulated by verified by seaso soor believing it to be true,  Signature of Declarer Declared before me at This   | the quality of the end product for which the product for which tion markings are in accord a Quality Control Program and knowing that it is a larger of the product for which the product for which tion markings are in accord a Quality Control Program and knowing that it is a larger for the product for which the product for th | duct do solemniy declar<br>registration is sought.<br>rediscret with the herein r<br>m which extends to each<br>is being suitable for that<br>the same force and effe  | e that the informa<br>The dimensions<br>tamed standards<br>tamed standards<br>to plant where fall<br>to purpose and I m<br>ct as if made und<br>Use  | ation contained in this form is true to the bear, materials of construction, pressure temper.  I further declare that the manufacture of the brication occurs in whole or in part and has nake this sciemn declaration conscientious deroath.  It is space for the Official Seal   |
| pectaration:  and responsibility for my knowledge repres ratings, and identifica fittings is regulated by verified by ses so soon belleving it to be true, Signature of Declarer Declared before me a This   | the quality of the end product for which the product for which tion markings are in accordance and knowing that the of the control Program and knowing that the of the control product for the control program and knowing that the of the control product for which the control product for the control product for the control product for the control product for which the control product for the contr | duct do solemnly declar registration is sought. registration is sought. redistration is redistration.  | e that the information of the dimensions to the dimensions to the dimensions to the dimensions and in the dimensions and in the dimensions and in the dimensions and in the dimensions are dimensions and dimensions and dimensions are dimensions are dimensions are dimensions and dimensions are dimensional dimensions.  | ation contained in this form is true to the be, materials of construction, pressure temper.  I further declare that the manufacture of the brication occurs in whole or in part and has nake this solemn declaration conscientious der cath.  this space for the Official Seal   |
| pectaration:  and responsibility for my knowledge representings, and identificative fittings is regulated by verified by seaso soon belleving it to be true,  Signature of Declarer Declared before me and This day  Or Notary Public: (signature of Public: (signature of Declared before me and This day   | the quality of the end product for which the product for which tion markings are in accordance and knowing that the of the control Program and knowing that the of the control product for the control program and knowing that the of the control product for which the control product for the control product for the control product for the control product for which the control product for the contr | duct do solemniy declar<br>registration is sought.<br>rediscret with the herein r<br>m which extends to each<br>is being suitable for that<br>the same force and effe  | a that the information of the control of the contro | ation contained in this form is true to the be- , materials of construction, pressure temper . I further declare that the manufacture of to brication occurs in whole or in part and has nake this solemn declaration conscientious der oath.  this space for the Official Seal  |
| generation:  generation: gener | the quality of the end product for which the product for which tion markings are in accordance and knowing that the of the control Program and knowing that the of the control product for the control program and knowing that the of the control product for which the control product for the control product for the control product for the control product for which the control product for the contr | duct do solemnly declar registration is sought. registration is sought. redistration is redistration.  | a that the information of the control of the contro | ation contained in this form is true to the be- , materials of construction, pressure temper . I further declare that the manufacture of it brication occurs in whole or in part and has nake this solemn declaration conscientiousl der oath.  this space for the Official Seal   |
| ECRN:  Declaration  I christophier Process  and responsibility for my knowledge represeratings, and identificate fittings is regulated by sea see see in the process of the | the quality of the end product for which the product for which tion markings are in accordance and knowing that the of the control Program and knowing that the of the control product for the control program and knowing that the of the control product for which the control product for the control product for the control product for the control product for which the control product for the contr | duct do solemnly declar registration is sought. registration is sought. redistration is redistration.  | a that the information of the control of the contro | ation contained in this form is true to the be- , materials of construction, pressure temper . I further declare that the manufacture of to brication occurs in whole or in part and has nake this solemn declaration conscientious der oath.  This space for the Official Seal  |
| I CHRISTOPHER PROCOS and responsibility for my knowledge repres ratings, and identifica fittings is regulated by verified by 503 503 600 belleving it to be true, Signature of Declarer Declared before me a This  | the quality of the end product for which the product for which the markings are in according to a Quality Control Program and knowing that this of the control program and knowing that the control program and knowing the control p | duct do solemniy declar<br>registration is sought.<br>rediscretion is sought.                             | a that the information of the in | etion contained in this form is true to the bear, materials of construction, pressure temperature of the truther declare that the manufacture of the introduction occurs in whole or in part and has nake this scient declaration conscientious deroath.  This space for the Official Seal of this space for the Official Seal of th |
| general extra process of and responsibility for my knowledge representings, and identifications, and identifications is regulated by verified by seaso control belleving it to be true, signature of Declarer Declared before me at This   | the quality of the end product for which the product for which tion markings are in accordance and knowing that the original and the o | duct do solemniy declar registration is sought. It is sought. It is sought that the herein remained with the herein remained which extends to each being suitable for that the same force and effective and effective registration. This space for Regulative the revalidated after tental statements. | e that the information of the in | ation contained in this form is true to the be- , materials of construction, pressure temper . I further declare that the manufacture of to brication occurs in whole or in part and has nake this solemn declaration conscientious der oath.  This space for the Official Seal  |
| I CHRISTOPHER PROJOS  and responsibility for my knowledge repres ratings, and identifica fittings is regulated by verified by \$25 \$50 \$500 believing it to be true, Signature of Declarer Declared before me a This   | the quality of the end product for which the product for which the markings are in accordance and knowing that the product for which the markings are in accordance and knowing that the product for which the first for the product for which the first form of the fir | duct do solemniy declar i registration is sought. I sought. I which extends to eac is being suitable for that the same force and effe  AD  | a that the informative dimensions as med standards in plant where fall purpose and in ct as if made unconstitution of the control of the cont | ation contained in this form is true to the bear materials of construction, pressure temper it. I further declare that the manufacture of brication occurs in whole or in part and has nake this solemn declaration conscientious fer cath.  This space for the Official Seal of this space for the Official Seal of this space for the Official Seal of the Soleman declaration conscientious for cath.   |

| · ·   | STATUTORY DECL  | ARATION FORM FOR THE REGI   | STRATION OF FITTING DESIGNS   |
|---|---|---|---|
| New Brunswick<br>Junavut  | Nova Scotia<br>Yukon  | Prince Edward Island<br>Northwest Territories   | Newfoundland and Labrador   |
| Manufacturers Nam   | 8: ENDRESS+HAUSER SE+C  | o. KG   |   |
| Manufacturers Addr  | ess:SEE ATTACHED WO   | RLDWIDE LOCATIONS APPENDIX  |   |
| Plant Locations: SEE  | ATTACHED WORLDWIDE LOC  | ATIONS APPENDIX   |   |
| B Flanges: all flanges C Valves: all fine valves  | couplings, tees, elbows, Ys   | ered. Circle one Category only<br>s, plugs, unions, pipe caps, or reducers  | <u>Title of the Standard of</u> <u>Construction</u>   |
| E Strainers, filters, sepai   | ble connections, and hose a<br>rators, and steam traps                          | assemblies: all types<br>vel gauges, sight glasses, levels, or pressi   | - ASME B31.3  |
| i uansminers  |   |   |   |
| H Pressure retaining con  | es, piping and fusible plugs<br>apponents that do not fall int                  | o one of the above categories   |   |
| N Nuclear components:   | Class 1 Class 2 Cl  | ass 3 🗆 , (Meeting CNSC or ASME require   | ements)   |
| Show Manufacturers  | Name, Trademark, or I   | ogo as it will appear on the produc   | Type of Construction  |
| En  | dress+Ha  | nuser 🖾   | Forged Welded Wrought Scat Co Other Co Describe other:  |
| List of supporting do   | cumentation and Ident   | ification of the actual items to be re  |   |
| CHRISTOPHER PROIOS  I CHRISTOPHER PROIOS  and responsibility for the my knowledge represent ratings, and identification fittings is regulated by a verified by sos iso soot believing it to be true, an | I markings are in accord Quality Control Program as d knowing that it is of the | egistration is sought. The dimensions<br>ance with the herein named standards<br>which extends to each plant where fa<br>being suitable for that purpose and I re<br>same force and effect as if made un- | .KG and being the person having full authority ation contained in this form is true to the best of s, materials of construction, pressure temperatures. I further declare that the manufacture of these brication occurs in whole or in part and has been ake this solemn declaration conscientiously der oath. |
| Signature of Declarer;  | 11/4/   |   |   |
| Signature of Declarer:  | - PLEVICE AD  | Jozz Use  | this space for the Official Seal  |
| Commissioner of Oaths   |   |   |   |
| Or Notary Public: (sign) _  |   |   |   |
|   | (Affix Official seal to the   |   |   |
|   | This registration must  | This space for Regulatory Authority use, be revalidated after ten (10) years from the   | e date of econdance   |
| CRN: 0F22502.5  | Rev1  |   | PRINCE EDWARD ISLAND  |
| FID#: 15708   |   |   | S, LAND & ENVIRONMENT   |
| Notes:  1. All Fittings shall be regist   | tered in the name of the Manuf.   | and AE  | 22502.59 Revi   |
|   | supported with two Statutory De   |   | L. 5 adaa   |
|   | made by the person having full  |   | P HCC.L   |
| 4. Quality Control programs<br>Scope of change: 1) Increa<br>(961002513 HD100 & 961<br>172016 ASME R16 5  |   | tion. 1.150 & 300  vices per BOILER/PRE are qualified e. 7 plant locations.   | IN SERVICES SECTION SSURE VESSEL BRANCH Fittings Rev.2  |

### UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

| 1   |  | nce Edward Island No<br>thwest Territories   | ewfoundland and Labrador   |
|---|--|--|--|
| Manufacturers Name  | ENDRESS+HAUSER SE+Co. KG   |  |  |
| Manufacturers Addre   | SS:SEE ATTACHED WORLDWIDE L  |  |  |
|   | TTACHED WORLDWIDE LOCATIONS APPE   |  |  |
| Category o  | of Fittings to be registered. Circ   | cle one Category only  | Title of the Standard of   |
| B Flanges: all flanges  | couplings, tees, elbows, Ys, plugs, unk  | ons, pipe caps, or reducers  | Construction   |
| C Valves; all line valves   |  |  |  |
| D Expansion joints, flexible  | e connections, and hose assemblies:  | all types  | - ASME B31.3   |
| Strainers, filters, separators, and steam traps  Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure   |  |  |  |
| transmitters  |  |  | - ASME B31.1   |
| boilers, pressure vessel  | pressure relief devices acceptable as<br>is, piping and fusible plugs<br>ponents that do not fall into one of the  |  |  |
| N Nuclear components:   | Class 1 ☐ Class 2 ☐ Class 3 ☐ . (N   | Meeting CNSC or ASME requirements)   |  |
| Show Manufacturers !  | Name, Trademark, or Logo as It   | will appear on the product   | Type of Construction   |
| End   | dress+Hause  | r 🖅  | Forged Welded Wrought Cast O Other O Describe other:   |
| List of supporting doc  | cumentation and identification of  | of the actual items to be registere  | ad:  |
|   |  |  | ON, REPORTS, DRAWINGS  |
| CALCULATIONS.   | .330KE DEVICES SCOP  | E OF CRININEGISTRATI   | ON, REPORTS, DRAWINGS  |
| CALCULATIONS.   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
|   |  |  |  |
| I CHRISTOPHER PROJOS QUAI   | quality of the end product do sole   | y Endress+Hauser SE+Co.KG ar   | nd being the person having full authori  |
| my knowledge represents<br>ratings, and identification<br>fittings is regulated by a 0  | markings are in accordance with<br>Quality Control Program which ext   | n is sought. The dimensions, mate<br>the herein named standards. I fun<br>tends to each plant where fabrication  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has  |
| my knowledge represents<br>ratings, and identification<br>fittings is regulated by a 0  | markings are in accordance with<br>Quality Control Program which ext   | n is sought. The dimensions, mate<br>the herein named standards. I fun<br>tends to each plant where fabrication  | rials of construction, pressure temper<br>ther declare that the manufacture of the   |
| my knowledge represents ratings, and identification fittings is regulated by a 0 verified by sos iso 9001 believing it to be true, and  | markings are in accordance with<br>Quality Control Program which ext<br>as being suit<br>d knowi <del>ng that It is of the</del> same for  | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the   |
| my knowledge represents<br>ratings, and identification<br>fittings is regulated by a 0<br>verified by SQS ISO 9001<br>believing it to be true, and  | markings are in accordance with<br>Quality Control Program which ext<br>as being suit<br>d knowi <del>ng that It is of the</del> same for  | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has  |
| my knowledge represents<br>ratings, and identification<br>fittings is regulated by a 0<br>verified by SQS ISO 9001<br>believing it to be true, and  | markings are in accordance with<br>Quality Control Program which ext<br>as being suit<br>d knowi <del>ng that It is of the</del> same for  | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has  |
| my knowledge represents<br>ratings, and identification<br>fittings is regulated by a 0<br>verified by SQS ISO 9001<br>believing it to be true, and  | markings are in accordance with<br>Quality Control Program which ext<br>as being suit<br>d knowi <del>ng that It is of the</del> same for  | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has in<br>the solemn declaration conscientiously<br>th,                                  |
| my knowledge represents ratings, and identification fittings is regulated by a Coverified by \$0.5 150 5001 believing it to be true, and Signature of Declarer: Declared before me at This day of   | markings are in accordance with<br>Quality Control Program which ext   | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has  |
| my knowledge represents ratings, and identification filtings is regulated by a Coverified by \$508.150.5001 believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for the s | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has in<br>the solemn declaration conscientiously<br>th,                                  |
| my knowledge represents ratings, and identification fittings is regulated by a Coverified by sos iso soon believing it to be true, and Signature of Declarer:   | markings are in accordance with<br>Quality Control Program which ext<br>as being suit<br>d knowi <del>ng that It is of the</del> same for  | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has<br>als solemn declaration conscientiously<br>h.                                      |
| my knowledge represents ratings, and identification fittings is regulated by a C verified by sos iso sooi believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for the s | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has<br>als solemn declaration conscientiously<br>h.                                      |
| my knowledge represents ratings, and identification fittings is regulated by a Coverified by sos iso soon believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that II-IB. Of the same for III-IB. AD AD ACCORDANCE AD AD ACCORDANCE AD AD ACCORDANCE AND AD ACCORDANCE AND AD ACCORDANCE AND ADD   | n is sought. The dimensions, mate<br>the herein named standards. I fur-<br>lends to each plant where fabrication<br>able for that purpose and I make the<br>roe and effect as if made under oat  | rials of construction, pressure temper<br>ther declare that the manufacture of the<br>on occurs in whole or in part and has<br>als solemn declaration conscientiously<br>h.                                      |
| my knowledge represents ratings, and identification fittings is regulated by a C verified by \$25 \$30 \$50 \$50 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$10 \$1   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I fur tends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat.  Use this seems  | rials of construction, pressure temper ther declare that the manufacture of the cocurs in whole or in part and has his solemn declaration conscientiously h.   |
| my knowledge represents ratings, and identification fittings is regulated by a Coverified by sos iso soon believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat.  Use this see for Regulatory Authority use.   | rials of construction, pressure temper ther declare that the manufacture of the cocurs in whole or in part and has his solemn declaration conscientiously h.   |
| my knowledge represents ratings, and identification fittings is regulated by a C verified by \$505 150 5001 believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat.  Use this see for Regulatory Authority use.   | rials of construction, pressure temper ther declare that the manufacture of the cocurs in whole or in part and has his solemn declaration conscientiously h.  space for the Official Seal of acceptance.         |
| my knowledge represents ratings, and identification fittings is regulated by a coverified by so so so believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat  | rials of construction, pressure temper ther declare that the manufacture of the cocurs in whole or in part and has his solemn declaration conscientiously h.  space for the Official Seal of acceptance.         |
| my knowledge represents ratings, and identification fittings is regulated by a C verified by \$50\$ \$10\$ \$50\$ \$50\$ \$50\$ \$50\$ \$50\$ \$50\$  | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat use this effect as if made under oat use the control of the control o | rials of construction, pressure temper ther declare that the manufacture of the conscient in whole or in part and has his solemn declaration conscientiously h.  The conscient the Criticial Seal of acceptance. |
| my knowledge represents ratings, and identification fittings is regulated by a conflicting is regulated by a conflicting it to be true, and believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that It is of the same for it. AD  | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make three and effect as if made under oat use this entire the for Regulatory Authority use.  The formal of t | rials of construction, pressure temper ther declare that the manufacture of the conscient in whole or in part and has his solemn declaration conscientiously h.  Appared for the Official Seal of acceptance.    |
| my knowledge represents ratings, and identification fittings is regulated by a C verified by sos iso soon believing it to be true, and Signature of Declarer:   | markings are in accordance with Quality Control Program which ext as being suit d knowing that it is of the same for the s | n is sought. The dimensions, mate the herein named standards. I furtends to each plant where fabricaticable for that purpose and I make the roe and effect as if made under oat the standard standard in the s | rials of construction, pressure temper ther declare that the manufacture of the conscient in whole or in part and has his solemn declaration conscientiously h.  Appared for the Official Seal of acceptance.    |
| my knowledge represents ratings, and identification fittings is regulated by a conflicting it to be true, and believing it to be true, and Signature of Declarer:   | Markings are in accordance with Quality Control Program which ext as being suited knowing that It is of the same for Marking AD Mark | n is sought. The dimensions, mate the herein named standards. I further the herein named standards. I further the herein named standards. I further the herein named the herein named the herein has been and after the part of the herein has been also been the herein named the herein has been also  | rials of construction, pressure temper ther declare that the manufacture of the conscient in whole or in part and has his solemn declaration conscientiously h.  Separation the Official Seal of acceptance.     |
| my knowledge represents ratings, and identification fittings is regulated by a consistency of the property of | Markings are in accordance with Quality Control Program which ext as being suited knowing that It is of the same for Marking AD Mark | n is sought. The dimensions, mate the herein named standards. I further the total able for that purpose and I make it roe and effect as if made under oat the last the standard standard standard standard standards.  Labe this standard standards and several standards and several standards stan | rials of construction, pressure temper ther declare that the manufacture of the conscient in whole or in part and has his solemn declaration conscientiously h.  Separation the Official Seal of acceptance.     |

### UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

| New Brunswick  | Nova Scotia   | Prince Edward Island  | Newfoundland and Labrador  |
|--|---|---|--|
| llunavut   | Yukon   | Northwest Territories   |  |
|  | 18: ENDRESS+HAUSER SE+Co  |   |  |
|  |   | RLDWIDE LOCATIONS APPENDIX  |  |
|  | ATTACHED WORLDWIDE LOCA   |   |  |
| A Pipe fittings, including<br>B Flanges: all flanges<br>C Valves: all line valves  | g couplings, tees, elbows, Ys   | ered. Circle one Category only<br>s, plugs, unions, pipe caps, or reducers  | <u>Title of the Standard of</u> <u>Construction</u>  |
| D Expansion joints, flexi  | ible connections, and hose a  | assemblies: all types<br>vel gauges, sight glasses, levels, or pressure   | - ASME B31.3<br>- ASME B31.1   |
| transmitters   |   |   |  |
| boilers, pressure vess   | els, piping and fusible plugs   | ceptable as primary over pressure protection or one of the above categories   | n  |
| N Nuclear components:  | Class 1 Class 2 Cl  | ass 3 🛘 , (Meeting CNSC or ASME requirement<br>Logo as it will appear on the product  |  |
|  |   | auser 🖾   | Type of Construction Forged  Welded  Wrought  Cast  Other  Describe other:   |
| List of supporting d   | ocumentation and ident  | tification of the actual Items to be regis  | tered:   |
|  |   |   |  |
| CALCULATIONS   |   | S SCOPE OF CRN REGISTRA   | ATION, REPORTS, DRAWINGS   |
| O' LEGGE TITO TO   | <b>-</b> .  |   |  |
| my knowledge represer<br>ratings, and identification<br>fittings is regulated by a<br>verified by sos iso and  | nts the product for which on markings are in accord a Quality Control Progran as and knowing that it is of the  | registration is sought. The dimensions, n<br>dance with the herein named standards. I<br>n which extends to each plant where fabri<br>s being suitable for that purpose and I mal<br>e same force and effect as if made under | and being the person having full authorical contained in this form is true to the best naterials of construction, pressure temper. I further declare that the manufacture of the cation occurs in whole or in part and has keethis solemn declaration conscientiously coath. |
|  |   | JOZZ Use th   | nis space for the Official Seal  |
| Commissioner of Oaths  | 5   | D_DEC Use the   | nis space for the Official Seal  |
|  | s<br>)  |   | nis space for the Official Seal  |
| Commissioner of Oaths  | 5   | e right)  | nis space for the Official Seal  |
| Commissioner of Oaths<br>Or Notary Public: (sign)  | (Affix Official seal to the   |   |  |
| Commissioner of Oaths Or Notary Public: (sign)  CRN: 0F22502.5   | (Affix Official seal to the   | e right)  This space for Regulatory Authority use.  |  |
| Commissioner of Oaths<br>Or Notary Public: (sign)  | (Affix Official seal to the   | e right)  This space for Regulatory Authority use.  |  |
| Commissioner of Oaths Or Notary Public: (sign)  CRN: 0F22502.5   | (Affix Official seal to the   | e right)  This space for Regulatory Authority use.  | rate of acceptance.  |
| CRN: OF22502.5 FID#: 15708 Notes: 1. All Fittings shall be reg.  | (Affix Official seal to the   | e right)  This space for Regulatory Authority use. st be revalidated after ten (10) years from the defacturer.  | late of acceptance.  |
| CRN: OF22502.5  FID#: 15708  Notes:  1. All Fittings shall be regard one copy of supports.  3. The Declaration shall if  | (Affix Official seal to the Affix Official seal | e right)  This space for Regulatory Authority use. st be revalidated after ten (10) years from the defacturer.  Declaration forms   | OF22502.5Y REV1  |
| Commissioner of Oaths Or Notary Public: (sign)  CRN:  15708  FID#:  Notes:  1. All Fittings shall be reg. 2. Each Category shall be and one copy of supports. 3. The Declaration shall I responsibility for the quality Control progras Scope of change: 1) Inc. (961002513 HD100 & 86112016 ASME BIR STANE BIR ST | (Affix Official seal to the Annual Seal in the name of the Manual Supported with two Statutory Enting documentation.  | e right)  This space for Regulatory Authority use. st be revalidated after ten (10) years from the distribution forms  all authority and distributions per terms are qualified  | late of acceptance.  |

| UNIFORM STATUTORY DECLARAT   | ION FORM FOR THE REGIST  | TRATION OF FITTING DESIGNS   |
|--|--|--|
| New Brunswick Nova Scotia<br>Iliunavut Yukon   | Prince Edward Island<br>Northwest Territories  | Newfoundland and Labrador  |
| Manufacturers Name: ENDRESS+HAUSER SE+Co. KG   |  |  |
| Manufacturers Address:SEE ATTACHED WORLDW  |  |  |
| Plant Locations: SEE ATTACHED WORLDWIDE LOCATIONS GREGORY OF Fittings to be registered.  |  | Title of the Plandard of   |
| A Pipe fittings, including couplings, tees, elbows, Ys, plugs B Flenges: all fisnges C Valves: all line valves D Expension joints, flexible connections, and hose assemb   | t, unions, pipe caps, or reducers  | Title of the Standard of<br>Construction   |
| E Strainers, filers, separators, and steam traps  (F) Measuring devices, including pressure gauges, level gautenamitters   |  | - ASME B31.3<br>- ASME B31.1   |
| G Certified capacity-rated pressure relief devices acceptable bollers, pressure vessels, piping and fuelble plugs. H Pressure retaining components tipet do not fall into one of the pressure retaining components to the pressure retaining the retaining the pressure retaining the pressure retaining the pressure retaining the retaining t |  | on   |
| N Nuclear componenta: Class 1 🗆 Class 2 🗆 Class 3 🗈  | ] , (Meeting CNSC or ASME requirem   | nents)   |
| Show Manufacturers Name. Trademark, or Logo:  Endress + Haus   | es it will appear on the product   | Type of Construction Forged # Welded # Wrought # Cast 0 Other 0 Describe other:  |
| pelleving it to be true, and knowing that it is of the same signature of Declarer:  Declared before me at  | solemniy declare that the informa-<br>action is sought. The dimensions,<br>with the herein named standards.<br>In extends to each plant where fab<br>sultable for that purpose and I made<br>e force and effect as if made under | tion contained in this form is true to the bear of<br>materials of construction, pressure temperate<br>I further declare that the manufacture of thes<br>indication occurs in whole or in part and has bear<br>ake this solemn declaration conscientiously |
| his <u>P.P.</u> day of <u>Pl/27/27</u> AD  | Jac 1  | this space for the Official Seel   |
| Or Notary Public: (sign)   | and the same was   |  |
| (Affix Official seal to the right)   | space for Regulatory Authority use.  |  |
|  | validated after ten (10) years from the  | data of acceptance.  |
| FID#: 15708  |  |  |
| Notes:   |  |  |
| All Fittings shall be registered in the name of the Manufacturer.     Each Category shall be supported with two Statutory Declarational one copy of supporting documentation.  |  | orthwest Territories   |
| 3. The Declaration shall be made by the person having full author  | thy and  | REGISTERED   |
| responsibility for the quality of the end product.  4. Quality Control programs shall be resubmitted for validation. Scope of change: 1) Increase pressure ratings of Cl. 150 (961002613 HD100 & 961002490 ND) pressure devices 11/2019 ASME B16.5 Tables 2-2.2 and 3.8 . items at   | 8.300 UNDER per re qualified THE BOI   | THE AUTHORITY OF   |
| by proof test 2) 5" sizes are removed from the scope. 7 p  | HAIN IOCABONS.   | OF22502.5TKgVI   |
| CRN expires June 15th, 2030 (DG)   | SIGNE  | De Roy   |
|  | DATE   | - July Steel   |
| 100  |  | 65.00  |

| New Brunswick<br>Illunavut   | Nova Scotia Yukon   | Prince Edward<br>Northwest Terri   | Island N  | ATION OF FITTING DESIGNS Newfoundland and Labrador  |
|--|---|--|---|---|
|  | 10: ENDRESS+HAUSER SE+Co  |  |   |   |
|  | ress:SEE ATTACHED WO  |  | PPENDIX   | -   |
|  | ATTACHED WORLDWIDE LOCA   |  |   |   |
| A Pipe fittings, including<br>B Flanges: all flanges<br>C Valves: all line valves  | of Fittings to be regist<br>g couplings, taes, elbows, Va<br>the connections, and hose a                                  | s, plugs, unions, pipe caps,   | or reducers   | Title of the Standard of<br>Construction  |
| E Strainers, filters, sepa<br>F Measuring devices, in<br>transmitters  | irstors, and steam traps<br>icluding pressure gauges, le  | vel gauges, sight glasses, i   |   | - ASME B31.3<br>- ASME B31.1  |
| H Pressure retaining co  | d pressure relief devices act<br>ets, piping and fusible pluga<br>mponents that do not fall into                          | o one of the above categori  | les   |   |
| N Nuclear components:  | Class 1 Class 2 Class   | ass 3 🗆 , (Meeting CNSC  | or ASME requirements  | 9   |
|  | dress+Ha  |  |   | Type of Construction Forged B Welded B Wrought B Cast a Other o Describe other:   |
| CHRISTOPHER PROIOS  CHRIST | nts the product for which in markings are in accord Quality Control Program as and knowing that it is of the              | registration is sought. T<br>lance with the herein na<br>which extends to each<br>being suitable for that of | he dimensions, mat<br>med standards. I fu<br>plant where fabrical<br>surpose and I make | and being the person having full authority contained in this form is true to the best of erials of construction, pressure temperature inher declare that the manufacture of these tion occurs in whole or in part and has been this solemn declaration conscientiously ath. |
| Declared before me at  |   |  |   |   |
| This Of day  | of Market AD  | DOLL.  | tise this   | specs for the Official Sear   |
| Commissioner of Oaths  |   | F ***  |   |   |
| Or Notary Public: (sign)   | (Affix Official seal to the   |  | 28  | NULVENVUT   |
| CRN: 0F22502.5   | Rev1  | This space for Regulator<br>it be revalidated after tan in   | Albority pse.   | of accidence vessels Act  |
| FID#: 15708  | -   |  | RI  | EGISTERED   |
| All Fittings shall be reg     Each Cetagory shall be   | istered in the name of the Manus<br>supported with two Statutory D  | eclaration forms   | Tul   | 2502, 5N Rev 1  |
| responsibility for the qu  | ne made by the person having fur<br>nellty of the end product.  | all authority and  | late  | De L.   |
| 4. Quality Control program<br>Scope of change: 1) Inco<br>(961002513 HD100 & 9<br>11/2016 ASME B16   | ns shall be resubmitted for valid<br>ease pressure ratings of C<br>61002490 ND) pressure do<br>5 Tables 2-2.2 and 3,8. It | stor.<br>Cl. 150 & 300<br>evices per<br>lems are qualified   |   | Chief Inspector 1.0 - Fittings Rev 2  |
| by proof test 2) 5" sizes  | are removed from the scor   | pe. 7 plant locations.   |   |   |
| CRN expires June 15th,   | 2030 (DG)   |  | Territori   | al Pedistration Fee   |