REGISTRATION OF A PRESSURE FITTING DESIGN

20-Aug-20

Pressure Vessel Engineering
120 Randall Drive, Suite B
Waterloo, Ontario
N2V 1C6

Attention: Catherine Diplock

File Number: 11630 [0 F]

Re: Manufacturer: ABB Limited - Measurement & Analytics
Item: Measurement Probes
Catalog or Drawing: See scope 15179s-1 R0

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:

0F22557.53 Expiry Date: July 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,

[Signature]

Williams Uju, P.Eng.
Codes and Standards Compliance

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

I, John Patrick Marshall,

(company title, e.g. vice president, plant manager, chief engineer)

must be in a position of authority in the manufacturing plant where the fitting is produced)

of: ABB Limited - MEasurement and Analytics

(name of manufacturer)

located at: Oldends Lane, Stonehouse, GL10 3TA, United Kingdom

(Plant Address – Apt/Street) (City, Prov) (Postal Code)

do solemnly declare that the fittings listed hereunder, which are subject to the Saskatchewan Boiler and Pressure Vessel Safety Act (check one)

- Comply with the requirements of ____________________________ which specifies the dimensions, materials of construction, pressure / temperature ratings and identification marking of the fittings, or

- Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ASME B31.3 2018ED as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such markings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, BSI ____________________________ as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Measurement Probes

In support of this application, the following information, calculations and / or test data are attached:

Scope of Registration: 151798s-1

II. Declaration

DECLARED before me at Gloucester In the County of Renfrew

this 4th day of June 2023

P. David Andre Wik (print name)

(Signature of Commissioner of Oaths)

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the Boiler and Pressure Vessel Safety Act and CSA B51, Clause 4.2, and is accepted for registration in Category _______________________

(Date Registered – MM DD YYYY) (Expiry Date – MM DD YYYY)

(Registration Number) (For the Administrator / Chief Inspector)

Codes & Standards Compliance Office
Design Conditions:
- Design Code: ASME B31.3 2018ED
- MAWP: 81psi @ 212°F
- MDMT: 23F @ 81psi
- Hydrotest: 122 psi @ 70F
- Material:
  - Body: PVDF [Material: Arkema Kynar 710]
  - End: Glass

Drawings Included:
- 3KXA004001U0001: 100GP GA
- 3KXA004002U0001: 100Ultra GA
- 3KXA004004U0001: 100GP-D
- 3KXA004005U0001: 100Ultra-D Digital
- 3KXA004007U0001: 500PRO
- 3KXA004009U0001: 500PRO-D

Supporting Document:
- Burst test: PVEng_Report 20010210
  - The Burst test failed at 816 psi. As the components are plastic and glass, a 10x safety factor is used. The MAWP of these units 81 psi.