

Montréal, 14 avril 2022.

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

Fabricant : BADGER METER INC
4545 W. BROWN DEER ROAD
MILWAUKEE WI
USA 53223

Numéro de dossier : 948101

Numéro(s) de dessin(s) : Hedland Flow Meters per Scope of Registration
attached to the Statutory Declaration

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 : **0F14981.56**.

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 la *Déclaration de conformité du constructeur (Manufacturer's Data Report)* pour chaque appareil ou chaudière fabriqué selon ce NEC dans les 30 jours suivant la signature de cette déclaration;
- Le numéro de dessin enregistré et le numéro de révision doivent être indiqués sur la déclaration de conformité pour les équipements fabriqués selon ce NEC.

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

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

Montréal

545, boul. Crémazie Est, 7ième étage

Montréal (Québec) H2M 2V2

Téléphone : 514 873-6459

Sans frais : 1 866 262-2084

www.rbq.gouv.qc.ca

Montréal, le 14 avril 2022.

MRS. TANYA FRANCIS
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Manufacturer : BADGER METER INC
4545 W. BROWN DEER ROAD
MILWAUKEE WI
USA 53223

OUR REFERENCE : 948101
Design number : Hedland Flow Meters per Scope of Registration
attached to the Statutory Declaration

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): **0F14981.56.**

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

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

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

Yours sincerely,

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

Montréal

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Montréal (Québec) H2M 2V2
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Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
www.tssa.org

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings

I, Michael Wusterbarth, Director - Engineering Flow Instrumentation

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

of Badger Meter, Inc.

(Name of Manufacturer)

Located at 8635 Washington Ave., Racine, WI 53406-1580

(Plant Address)

262-639-6770

(Telephone No.)

n/a

(Fax No.)



do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;



or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ASME B31.3 & NFPA T2.6.R1 as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO9001:2015 which has been verified by the following authority, BSI Assurance

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of this application, the following information and/or test data are attached as follows:

Calculations BP628/8H; Hedland Canadian Registration Flow Meter Catalog, Model assembly and detail parts drawings

(drawings, calculations, test reports, etc.)

Declared before me at RACINE in the STATE OF WISCONSIN of USA

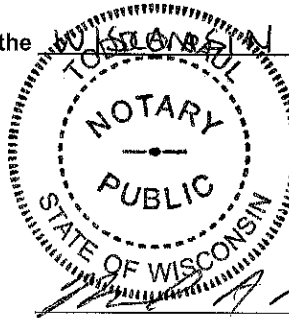
the 13 day of DECEMBER AD 20 21

Commissioner for Oaths:

TODD A. PAUL

(Printed name)

(Signature)



(Signature of Declarer)

FOR OFFICE USE ONLY

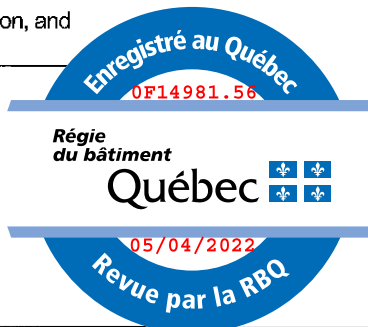
To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category _____

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: _____



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

RACINE FEDERATED INC. - HEDLAND DIVISION**HEDLAND VARIABLE AREA FLOW METER HOUSINGS. SUMMARY OF ADDITIONAL PRESSURE TESTING****TESTED HOUSINGS WITH THIRD PARTY VERIFICATION**

HOUSING BODY	HOUSING CAP	BURST WALL O.D.	BURST WALL I.D.	PORT TYPE	FAILURE MODE	BURST PRESSURE
H2-1-4HSG-NPT	HN100009	HN101314	0.808*	0.534*	1/4 NPTF	39,308 PSI
H6-1-2HSG-NPT	HN100021	HN101300	1.305	1.001	1/2 NPTF	22,503 PSI
H7-3-4HSG-NPT	HN100033	HN101296	1.688	1.378	3/4 NPTF	17,224 PSI
H8-1-2HSG-NPT	HN100069	HN101355	2.871	2.378	1 1/2 NPTF	14,665 PSI

*BASED UPON THE OTHER SAMPLES THIS IS THE ASSUMED BURST WALL IF THE O-RING HAD SURVIVED

SIMILAR HOUSINGS BURST RATED BY ANALOGY

HOUSING BODY	HOUSING CAP	BURST WALL O.D.	BURST WALL I.D.	PORT TYPE	ANALOGIZED FAILURE MODE	BURST RATING
H2-1-4HSG-SAE	HN100013	HN101317	0.808	0.534	LONG WALL BURST	>39,308 PSI
H6-1-2HSG-SAE	HN100025	HN101303	1.305	1.001	LONG WALL BURST	22,503 PSI
H6-1-4HSG-NPT	HN100272	HN100284	1.305	1.001	LONG WALL BURST	22,503 PSI
H6-1-4HSG-SAE	HN100276	HN100288	1.305	1.001	LONG WALL BURST	22,503 PSI
H7-3-4HSG-SAE	HN100037	HN101297	1.688	1.378	LONG WALL BURST	17,224 PSI
H7-1-0HSG-NPT	HN100045	HN101323	1.688	1.378	LONG WALL BURST	17,224 PSI
H7-1-0HSG-SAE	HN100049	HN100080	1.688	1.378	LONG WALL BURST	17,224 PSI
H8-1-4HSG-NPT	HN100057	HN101352	2.871	2.378	LONG WALL BURST	14,665 PSI
H8-1-4HSG-SAE	HN100061	HN101353	2.871	2.378	LONG WALL BURST	14,665 PSI
H8-1-2HSG-SAE	HN100073	HN101356	2.871	2.378	LONG WALL BURST	14,665 PSI

CONCLUSION:

THE ANALOGIZED HOUSINGS ARE IDENTICAL TO THE TESTED HOUSINGS IN THE AREA OF THE FAILURE, THE DIFFERENCES ARE IN THE PORT TYPES.

THIS IS PART OF**CRN**

07/4981.5

Technical Standards & Safety Authority
Boilers & Pressure Vessels

Safety Program

Régie
du bâtiment

Québec

