

Montréal, le 19 octobre 2022.

MR. SCOTT ISLIP
ROUND ENGINEERING
10 SEGWUN RD
WATERDOWN ONTARIO
CANADA L8B OK6

Manufacturer : MICROTHERMICS, INC.
3216-B WELLINGTON CT
RALEIGH NC
USA 27615

OUR REFERENCE : 947089

Design number : AS PER SCOPE OF REGISTRATION
[DWG M-2022-992 REV 3 & M-2022-993 REV 3]

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): **0H05625.6**.

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

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, 19 octobre 2022.

MONSIEUR SCOTT ISLIP
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Fabricant : MICROTHERMICS, INC.
3216-B WELLINGTON CT
RALEIGH NC
USA 27615

Numéro de dossier : 947089

Numéro(s) de dessin(s) : AS PER SCOPE OF REGISTRATION
[DWG M-2022-992 REV 3 & M-2022-993 REV 3]

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) : **OH05625.6**.

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.

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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.

N°	Description	Additional information (detail, calculations or approval sheets)
1	EXPANSION CYLINDERS,	
2	SCOPE OF CRN, REPORTS,	
3	DRAWINGS,	
4	CALCULATIONS,	
5	COMPANY NAME / LOGO - SEE RIGHT	



2. Declaration of the person in charge

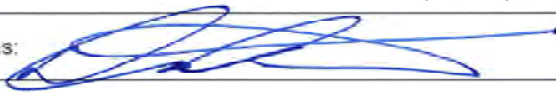
The person in charge is someone in a position of authority, such as a vice-president, a plant manager or a chief engineer.

2.1 Design	
I, the undersigned, <u>Robert White</u>	<u>Mechanical Engineering Manager</u>
(Name of the person in charge)	(Title of the person in charge)
from <u>Microthermics, Inc.</u>	located at <u>3216-102 Wellington Court, Raleigh, North Carolina, 27615, USA</u>
(Company's name)	(Plant's address)
hereby declare that the above-mentioned fittings and subject to the Regulation respecting pressure installations:	
<input type="checkbox"/> comply with the requirements of the ANSI/ASME codes as to their dimensions, identification, material and purpose or <input checked="" type="checkbox"/> are not covered by the ANSI/ASME codes, but are in compliance with <u>ASME B31.3, ASME B31.1</u>	
(Name of code or standard)	
code or standard and are designed according to the best current engineering practice, as proven by the enclosed approval report.	
2.2 Manufacturing quality control	
I further declare that the manufacture of these fittings is controlled by a quality control program that complies with the requirements of the following code: <u>ISO 9001:2015</u>	
(Name of code)	and has been verified by <u>Verisys Registrars LLC</u>
(Authorized agency)	
Signature of the person in charge: <u><i>Robert White</i></u>	Date (yyyy-mm-dd): <u>2022-09-19</u>

3. Declaration of commissioner for oaths

I certify that this declaration has been administered before me, at Wake County, NC, on 2022-09-19.
(Location) (Date (yyyy-mm-dd)).

Signature of commissioner for oaths:



Date (yyyy-mm-dd): 2022-09-19

Stamp the seal:



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

As far as I know, this application complies with the requirements of the Act and with standard CSA B51, Part 1, section 4.2, and is accepted for registration in the class _____.

This registration expires in ten (10) years after the date of registration indicated above, and it must be validated again after this period.

Canadian registration number (CRN):

Registration date (yyyy-mm-dd):



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.

MicroThermics, Inc.

3216-102 WELLINGTON COURT,
RALEIGH, NORTH CAROLINA
27615, USA



15-Sep-22

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SCOPE OF CRN REGISTRATION

Product Description	Drawing Numbers	Design Code	Process Connections	Available Materials	MAWP at MAWT	MDMT	Report Number
Expansion Cylinders 500ML and 1000 ML	M-2022-992 Rev. 03, M-2022-993 Rev. 03	ASME B31.3, ASME B31.1	1/4" FNPT	ASTM A213 TP316L, ASTM A269 TP316L, ASTM A270 TP316L, ASTM A479 TP316L, ASTM A213 TP304L, ASTM A269 TP304L, ASTM A270 TP304L, ASTM A479 TP304L,	150 psig at 350°F	-20°F	R-1709 Rev. 0

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

Note 2: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 3: In accordance with ASME B31.1 para. 123.1.2(d) when this product is manufactured from the ASME B31.1 unlisted material and used under the ASME B31.1 code the facility owner must accept the use of the unlisted material. The following materials are not listed in ASME B31.1.: ASTM A269-316L, ASTM A270-316L, ASTM A269-304L, ASTM A270-304L

Note 4: In accordance with CSA B51 paragraph 4.2.5 MicroThermics, Inc. is taking responsibility for the product covered under this CRN that is manufactured at Quest Manufacturing Inc.