

Montréal, 7 mars 2022.

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

Fabricant : MEC CRYO, LLC.
4430 E ADAMO DR, UNIT 305
TAMPA FL
USA 33605

Numéro de dossier : 948284

Numéro(s) de dessin(s) : Safety Relief Valves Models RXSO and RXSO-S
per Scope of Registration

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 : **0G22625.56**.

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

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 7 mars 2022.

MRS. CECYLIA GARBACZ
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
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CANADA M9W 6N9

Manufacturer : MEC CRYO, LLC.
4430 E ADAMO DR, UNIT 305
TAMPA FL
USA 33605

OUR REFERENCE : 948284
Design number : Safety Relief Valves Models RXSO and RXSO-S
per Scope of Registration

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): **0G22625.56**.

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

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Statutory Declaration Registration of Fittings



(a) Design Qualification

I¹ JAMES C. ZUCK
(Name of applicant)

DIRECTOR
(Position eg, president, plant manager, chief eng.)

of MEC CRYO, LLC.
(name of company)

Located at 4430 E ADAMO DR., TAMPA, FLORIDA, 33605, UNITED STATES
(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:

- comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required: **ASME SECTION VIII-1**
- Or
- are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with _____ code and standard, and are designed to the best current engineering practice, as shown by the supporting test data.

(b) Quality control of Manufacture

I further declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of ASME UV, and has been verified by the following authority or authorized agency ASME

The fittings² covered by this declaration, for which I seek registration, are CATEGORY G - SAFETY RELIEF VALVES

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

SCOPE OF CRN. NB LISTING

Declared before me at Marshall Excelsior
 In the of State of Michigan
 The 2nd day of November AD 2001
Pamela Kellner
A (commissioner for oaths)

PAMELA WILLISON
 Notary Public, State of Michigan
 County of Branch
 My Commission Expires 07-03-2005
 Acting in the County of Calhoun

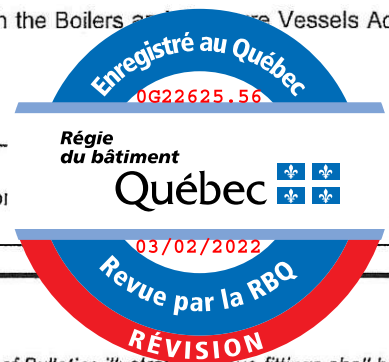
[Signature]
 Signature of Declarer³

For Official Use Only

The application is accepted for registration in Category _____ in accordance with the Boilers and Pressure Vessels Act and CSA Standard B51.

This registration must be revalidated after ten (10) years from the date of acceptance.

Registered Number CRN _____ For the Chief Inspector
 Date _____



¹ Three completed copied of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.
² All fittings are required to be registered in the name of the Manufacturer.
³ This form shall be completed and signed by the president of highest official in the manufacturing plan where the fitting is produced.

MEC CRYO, LLC.
 4430 EAST ADAMO DRIVE
 TAMPA, FLORIDA
 33605, USA



21-Oct-21

PAGE 1 OF 1

SCOPE OF CRN REGISTRATION

Product Description	Model	Design Code	Code Stamp	Material Specifications	Size Range	End Connection Inlet/Outlet	MAWP at MAWT (Note 1,2,3)	Report Number
ASME Safety Relief Valves	RXSO	ASME Section VIII Division 1	ASME UV	Brass ASME SB283 C37700	1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2"	MNPT x FNPT	400 psig at 200°F	R-1141
ASME Safety Relief Valves	RXSO-S	ASME Section VIII Division 1	ASME UV	Stainless Steel ASME SA351-CF8M, SA479-316	1/2", 3/4", 1", 1-1/4"	MNPT x FNPT	400 psig at 400°F	R-1141

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature.

Note 2: The pressure-temperature ratings shown are the maximum CRN pressure-temperature ratings. In all cases the pressure-temperature ratings may be limited by the seat and seal materials. Please consult MEC CRYO, LLC.

Note 3: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 4: See attached copy of National Board Listing.



MEC Cryo, LLC. (LSH)

Nameplate Abbreviation: MEC

Tampa, FL 33605 United States

This Company Manufactures or Assembles:

Design Name: RXSO and RXSO-S NBCert # 47001

Manufacturer/Assembler	Code Sections	Expiration Date
Manufacturer	VIII Div. 1	08/04/2027

Design Type

[Safety Relief Valve] RXSO and RXSO-S
 Capacity Tests: Sec. VIII Div. 1 at Louisiana State University on April 17, 1980
 Method of Establishing Relieving Capacity: Flow Capacity, K
 Certified Value: 0.604 Unitless
 Media - Test: Air/Gas; Certified: Air, Gas
 Set Pressure Definition: Pop
 Blowdown Characteristics: Adjustable (Single Ring)
 Designed by: MEC Cryo, LLC. {LSH}

Inlet Size	Outlet Size	Flow Area	Orifice [designator] dia.	Lift	Set Pressure Range	Media	Code Section
0.5-0.75 NPS	.75, 1 NPS	0.059 in ²	0.75 in	0.025 in	15-300 psi	Air	VIII Div. 1
0.5-0.75 NPS	.75, 1 NPS	0.118 in ²	0.75 in	0.05 in	15-400 psi	Air	VIII Div. 1
0.5-1 NPS	1, 1.25 NPS	0.204 in ²	1 in	0.065 in	15-400 psi	Air	VIII Div. 1
0.75-1.25 NPS	1.25, 1.5 NPS	0.326 in ²	1.25 in	0.083 in	15-400 psi	Air	VIII Div. 1
1-1.5 NPS	1.5, 2 NPS	0.424 in ²	1.5 in	0.09 in	15-400 psi	Air	VIII Div. 1
1.25-2 NPS	2, 2.5 NPS	0.628 in ²	2 in	0.1 in	15-400 psi	Air	VIII Div. 1
2.5 NPS	3 NPS	0.864 in ²	2.5 in	0.11 in	15-400 psi	Air	VIII Div. 1
3 NPS	3, 4 NPS	1.131 in ²	3 in	0.12 in	15-400 psi	Air	VIII Div. 1