



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

www.tssa.org

August 16, 2018

CHAD THOMAS
ENGINEERED CONTROLS INTERNATIONAL LLC
100 REGO DR
ELON NC 27244
US

Service Request Type: BPV-Fitting Registration
Service Request No.: 2356406
Your Reference No.:
Registered to: ENGINEERED CONTROLS INTERNATIONAL LLC

Dear CHAD THOMAS,

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

CRN No.: 0C20620.5
Main Design No.: Dwg. No. PB504 SER Rev. B, Regulator, Cryogenic 1/2" Pressure Builder
Expiry Date: 16-Aug-2028

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

The stamped copy of the approved registration and the invoice are mailed separately. 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.



Mark Valcic
Engineer Specialist BPV
Tel. : 416-734-3494
Fax : 416-231-6183
Email : mvalcic@tssa.org



Technical Standards and Safety Authority
345 Carlingview Drive
Toronto, Ontario M9W 6N9
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Customer Service: 1.877.682.8772
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National Design Registration Application for a CRN

Technical Standards and Safety Act
Boilers and Pressure Vessels Regulation

Date of Application (mm/dd/yyyy): 12/16/2016
☐ Expedited Service (please attach request form)

INTAKE GROUP
 Date: 2356406 (INT)
 SR #: 2356406 (INT)
 Agent: 2356410 (INT)

Please indicate the type of design: ☐ Boiler ☐ Pressure Vessel ☒ Fitting

Existing CRN: (if applicable)

Section A: Submitter Company Name: ENGINEERED CONTROLS INTERNATIONAL, LLC. Address: 100 REGO DRIVE City/Town: ELON Province/State: NC Postal/Zip Code: 27244 Country: USA Telephone: 336-449-7707 Fax: Contact Name: CHAD THOMAS E-mail: cthomas@regoproducts.com Job No./Reference: Drawing/Catalog No.:		Section B: Invoicee Same as: ☒ A ☐ C ☐ D Company Name: Address: City/Town: Province/State: Postal/Zip Code: Country: Telephone: Fax: Contact Name: E-mail: Purchase Order No.:	
Acct/Cust No.: A400233 C913215		Acct/Cust No.:	
Section C: Owner of Design/CRN Same as: ☒ A ☐ B ☐ D Company Name: Address: City/Town: Province/State: Postal/Zip Code: Country: Telephone: Fax: Contact Name: E-mail: Acct/Cust No.:		Section D: Manufacturer Same as: ☒ A ☐ B ☐ C (If more than one please attach list) Company Name: Address: City/Town: Province/State: Postal/Zip Code: Country: Telephone: Fax: Contact Name: E-mail: Acct/Cust No.:	

Registration required in the following jurisdictions:

☒ Ontario	☒ Saskatchewan	☒ New Brunswick	☒ Newfoundland and Labrador
☒ British Columbia	☒ Manitoba	☒ Nova Scotia	☒ Yukon
☒ Alberta	☒ Quebec	☒ Prince Edward Island	☒ Northwest Territories
			☒ Nunavut

Deposit included: ☐ CDN \$600.00 - Ontario and up to 2 additional provinces ☒ CDN \$1,200.00 - Ontario and 3 or more additional provinces

Cheque No. Amount \$

(Deposit to be applied to the incurred fees when all jurisdictions are complete - any charges over and above deposit amount will be invoiced at that time.)

Return mail address: ☐ A ☐ B ☐ C Optional: Courier Collect Courier name: Account No.:

Signed: [Signature] Date (mm/dd/yyyy): 12/16/2016
 Date: Aug 16, 2018 (mm/dd/yyyy) Reviewing Engineer: [Signature] CRN Issued: 0120620.5



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

REGO®

STATUTORY DECLARATION Registration of Fittings

I, **CHAD THOMAS, VP GLOBAL ENGINEERING**

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

of **ENGINEERED CONTROLS INTERNATIONAL, LLC**

(Name of Manufacturer)

Located at **100 REGO DRIVE, ELON, NC - 27244**

(Plant Address)

336-449-7707

(Telephone No.)

(Fax No.)

☒ I 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

ASME B31.3/B31.3

(Title of recognized North American Standard)

☐ or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with 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 **ISO90001** which has been verified by the following authority, **UNDERWRITERS LABORATORY INC**

The items covered by this declaration, for which I seek registration, are category **"H"** type fittings. In support of this application, the following information and/or test data are attached as follows:
PB504 SER

(drawings, calculations, test reports, etc.)

Declared before me at **Engineered Controls Int'l** in the **County** of **Alamance, NC**

the **1st** day of **February** AD 20 **18**

Commissioner for Oaths:

Marisa E. Elliott

(Printed name)

Marisa E. Elliott

(Signature)

**MARISA E. ELLIOTT
NOTARY PUBLIC
ALAMANCE COUNTY
NORTH CAROLINA**

my commission expires **8/31/2021**

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 **(C)**

CRN:

0190620.5

Registered by:

MARK VALCIC, P.ENG.

Dated:

Aug. 16, 2018

NOTE: This registration expires on:

Aug. 16, 2028

PV 08553/05/16

(Signature of Declarer)

Chad Thomas

Boilers and Pressure Vessels Safety Program

REGISTERED

CRN:

0190620.5

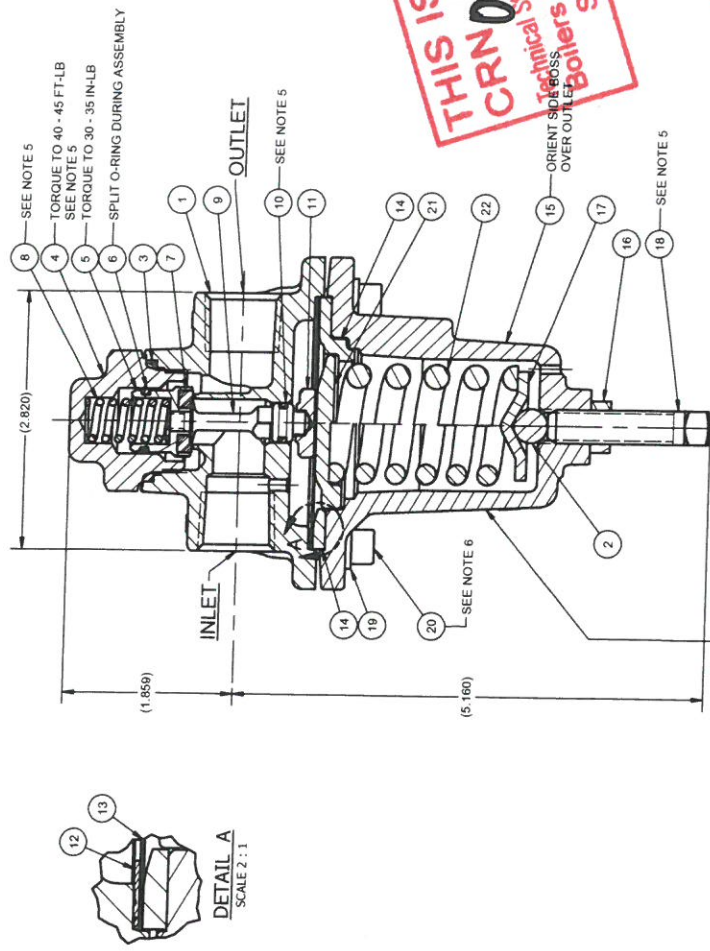
Signed:

Mark Valcic

Aug 16, 2018

NOTE: REGULATOR 1/2", CRYOGENIC PRESSURE BUILT-UP LUGS
Aug 16, 2018

REVISION HISTORY		
REV	DATE	DESCRIPTION
A	2017-406, 12-19-17	ISSUED
B	2018-148, 3-08-18	REV



-PRIOR TO ASSY, MARK
PB BLANK NUMBER WITH .156 CHARACTERS.
"600 PSI MAX IN" & DEL. RANGE WITH .118 CHARACTERS,
& DATE CODE (MO, WK, YR) WITH .094 CHARACTERS
ON SIDE OPPOSITE BONNET BOSS

NOTES:

1. CLEAN & PACKAGE PER B-11550-000 OXYGEN SERVICE. HANDLE PARTS WITH CARE TO NOT SCRATCH OR NICK, DO NOT ACID DIP ANT PARTS.
2. ASSEMBLE IN CLEAN AREA.
3. ASSEMBLE & TEST PER PB504-100.
4. DELIVERY PRESSURE SETTING (PSIG) SPECIFIED BY SUFFIX IN PB REGULATOR NUMBER. EXAMPLE: AN ORDER FOR PB504-125 USES THE PB504B BLANK SET, 125 PSIG. GET A MARKED WITH "PB504B", "50-180 PSI", "600 PSI MAX IN", & DATE CODE (MO., WK., YR).
5. CENTER HOLES TO 11.550-608 GREESE TO POINT & FIRST FIVE THREADS OF ADJUSTING SCREW, TO PREVENT OVER-TIGHTENING. SCREW HOLES IN BODY, TO ONE END OF SEAT SPRING, & TO FIRST TWO SCREWS SHIP, AND BE SLOWLY TIGHTENED IN A CRISS CROSS PATTERN, 3 TIMES, AT ASSEMBLY: TO 20 IN-LBS, THEN 45 IN-LBS, & 65 IN-LBS. RE-TORQUE TO 65 - 70 IN-LBS AT TESTING.
6. INSTRUCT SHEET TO BE INCLUDED IN FINAL PACKAGING. DO NOT INCLUDE, AT TESTING.

THIS IS PART OF 220620.3
CRN Standards & Safety Authority
Technical Standards & Pressure
Boilers & Pressure Vessels
Safety Program
01/24/2016

ITEM	QTY	INSTRUCTION SHEET (NOT SHOWN)	
23	1	SPRING, CYLINDRICAL	PB500-350
22	1	PLATE, DIAPHRAGM	SEE TABLE
21	1	SCREW, 1/4-20 X .750 LG	SEE TABLE
20	6	WASHER, LOCK	BR-1786-3
19	6	SCREW, 3/8-16 X 1.500 LG	TCV8500-8
18	1	BUTTON, SPRING	BR-1784-17
17	1	NUT, JAM	1784-5A
16	1	BONNET	BR-17766-18
15	1	RING, CLAMPING	PB504-2
14	1	DIAPHRAGM	SEE TABLE
13	4	GASKET	PB504-6H
12	1	BUTTON, TRUST	PB504-14
11	1	O-RING	PB504-16
10	1	STEM, SEAT	BR-1784-10T
9	1	SPRING, CYLINDRICAL	PB504-13
8	1	DISC, SEAT	PB504-18
7	1	O-RING, SIZE 014	PB504-10
6	1	RETAINER, SEAT	PB504-15T
5	1	BACKCAP	PB504-11
4	1	SEAL, BACKCAP	PB504-3
3	1	BALL, 3/8	BR-1784-15T
2	1	BODY	4226-2
1	1		PB504-1

PB REGULATOR NUMBER (SEE NOTE 4)	PB BLANK NUMBER	DELIVERY PRESSURE RANGE (PSI)	22 SPRING (PRESSURE ADJUSTING)	14 RING, CLAMPING	21 PLATE, DIAPHRAGM
PB504-020 TO -070	PB504A	20 - 75	1784-7A	PB504-12L	PB504-8L
PB504-071 TO -175	PB504B	50 - 180	1784-7B	PB504-12L	PB504-8L
PB504-176 TO -300	PB504C	150 - 300	PB504-7	PB504-12L	PB504-8L
PB504-301 TO -550	PB504D	250 - 550	1784-7C	PB504-12H	PB504-8H

[illegible]



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

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

of **ENGINEERED CONTROLS INTERNATIONAL, LLC**

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Located at **100 REGO DRIVE, ELON, NC - 27244**

(Plant Address)

336-449-7707

(Telephone No.)

(Fax No.)

☒ I 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

ASME B31.3/B31.3

(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 _____ 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 **ISO90001** which has been verified by the following authority, **UNDERWRITERS LABORATORY INC**

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

PB504SER

(drawings, calculations, test reports, etc.)

Declared before me at **Engineered Controls Int'l** in the **County** of **Alamance, NC**
the **1st** day of **February** AD 20 **18**

Commissioner for Oaths:

Marisa E. Elliott

(Printed name)

Marisa E. Elliott

(Signature)

**MARISA E. ELLIOTT
NOTARY PUBLIC
ALAMANCE COUNTY
NORTH CAROLINA**

my commission expires
8/31/2021

Chad Thomas

(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 **"B"**

CRN: **0C20620.5**

Registered by: **MARK VALCIC, P.ENG**

Dated: **AUG. 16, 2018**

NOTE: This registration expires on: **AUG. 16, 2028**

PV 09553 (06/16)

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: **0C20620.5**

Signed: **Mark Valcic**

Date: **AUG 16, 2018**

NOTE: REGULATOR 1/2", CRYOGENIC PRESSURE BUILDER