



345 Carlingview Drive
Toronto, Ontario M9W 6N9
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www.tssa.org

January 10, 2017

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

Service Request Type: BPV-Fitting Registration

Service Request No.: 2000374

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.: 0H19069.5

Main Design No.: Dwg. No. MVE4D-R Rev. J, Manifold 1-1/2" Fill
Expiry Date: 10-Jan-2027

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.

Yours truly,

Mark Valcic P. Eng.
Engineer BPV
Tel.: 416-734-3494
Fax: 416-231-1626
Email: mvalcic@tssa.org



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

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.)

☒ 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 B31.1**

(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 this application, the following information and/or test data are attached as follows:

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:

SEE ATTACHED LIST

(drawings, calculations, test reports, etc.)

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

the **19th** day of **December** AD 20 **16**

Commissioner for Oaths:

MARISA E. ELLIOTT

(Printed name)

Marisa E. Elliott

(Signature)

(Signature of Declarer)

Chad Thomas

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 eligible for registration in Category **"H"**

CRN:

Registered by:

Dated:

Boilers and Pressure Vessels Safety Program

REGISTERED

OH19069.5

CRN:

OH19069.5

Jan 10, 2017

NOTE: This registration expires on:

NOTE: DWG. # MVE4D-R-REV-J MANIFOLD SEE THE ATTACHMENT FOR THE SCOPE OF REGISTRATION

Jan 10, 2017

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

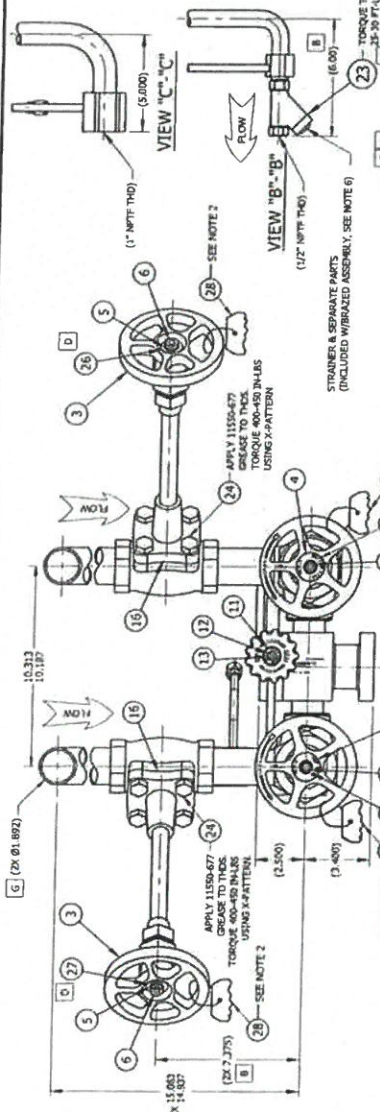
my Commission expires 8/31/2024

Category	System Number	Description	Drawing Number	Body Number	Body Material	Service Pressure
H	MVEAD-R	Manifold	450154	450154	Stainless Steel Pipe, ASTM A249, TP304L	600
			450043	450043	FC Brass, UNS C36000, ASTM B16	600
			2227-25	2227-25	FC Brass, UNS C36000, ASTM B16	600
			450153	450153	FC Brass, UNS C36000, ASTM B16	600
			450059	450059	Stainless Steel Pipe, ASTM A249, TP304L	600
			450151	450151	Stainless Steel Pipe, ASTM A249, TP304L	600
			1337C-22 SER	1337C-22 B, C	Stainless Steel Pipe, ASTM A249, TP304L	600
			1337-53	1337-53	Stainless Steel Pipe, ASTM A249, TP304L	600
			1337B-22 SER	1337B-22A	Stainless Steel Pipe, ASTM A312, TP304L	600
			450077-11	450077-11	Stainless Steel Pipe, ASTM A312, TP304L	600
			1337-50A	1337-50	Stainless Steel Pipe, ASTM A249, TP304L	600
			B-8400-12C	B-8400-12SE	Bronze Cast Alloy, UNS C92200, ASTM B61	600
			B-9409-1C	B-9412PP-2	Bronze Cast Alloy, UNS C92200, ASTM B61	600
			B-8412-11	B-8412-11	Stainless Steel Pipe, ASTM A249, TP304L	600
			BK9450-8	BK9450-8	FC Brass, UNS C36000, ASTM B16	600
			B-9410-16SS	B-9410-16SS	Stainless Steel Pipe, ASTM A249, TP304L	600

THIS IS PART OF
CRN 0119069.5
Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program
W/O & Jan 10/17

REVISION HISTORY	
REV	DESCRIPTION
A-G	DATE
H	ADP91, 7-2-09
J	ADP92, 11-2-09

- NOTES:**
- CLEAN ALL COMPONENTS PER B-1150-400 FOR ORIGIN SERVICE JUST PRIOR TO ASSEMBLY. ASSEMBLY & TEST INSTRUCTIONS ARE LOCATED IN THE TORQUE TAGS AND ATTACH TAGS TO HANDWHEELS.
 - THE STAMP "451" IN TORQUE TAGS AND ATTACH TAGS TO HANDWHEELS.
 - THE STAMP "1569" IN TORQUE TAGS AND ATTACH TAGS TO HANDWHEELS.
 - THE STAMP "1569" IN TORQUE TAGS AND ATTACH TAGS TO HANDWHEELS.
 - WAP THREADS WITH TAPE 11550-544 (PTFE TAPE) COMPOUND AND ASSEMBLE INTO HANDWHEELS.
 - LUBRICATE GASKET WITH LIGHT COATING OF 11550-477 GREASE. ASSEMBLE STRAINER SCREEN & CAP.
 - TEST PER 8000-100.
 - TEST ALL CLOSURES ON ALL OPERABLE.
 - PACK ALL CLOSURES AND ATTACH TO ASSEMBLY.
 - DEPENDENCE REQUIRED TO BE MAINTAINED WITH THE PARTS.
 - SEALED PRODUCT IN POLYBAG AND INCLUDE ORIGIN CLEAN INFORMATION IN OR ON BAG.
 - SEALED SEAT DISC ASSEMBLY (P3) TO BE USED WITH B-9412-4KTU UPPER ASSEMBLY UNTESTED KIT (P4) TO BE USED WITH B-9412-4KTU UPPER ASSEMBLY UNTESTED KIT (P15).



ITEM QTY.

DESCRIPTION

1 34 2 SEAT DISC ASSY (NOT SHOWN) SEE NOTE 13

2 33 2 SEAT DISC ASSY (NOT SHOWN) SEE NOTE 12

3 32 2 CAP SCREW (NOT SHOWN) SEE NOTE 9

4 31 2 LOCK WASHER (NOT SHOWN) SEE NOTE 9

5 30 2 WASHER (NOT SHOWN) SEE NOTE 9

6 29 1 TAG, TORQUE (100-1100)

7 28 5 TAG, TORQUE (BLANK)

8 27 1 TAG - HCV-7 FILL DRAIN

9 26 1 TAG - HCV-7 FILL DRAIN

10 25 2 HANDWHEEL - BLUE

11 24 8 SCREW

12 23 1 GASKET

13 22 1 STRAINER

14 21 1 REAR FLANGE ASSEMBLY

15 20 4 CAP SCREW

16 19 3 SPRING

17 18 1 PISTON ASSEMBLY

18 16 2 GASKET

19 15 2 UPPER ASSEMBLY - UNTESTED SEE NOTE 1

20 14 2 PLUG

21 13 1 NUT

22 12 1 WASHER

23 11 1 TAG HCV-7 FILL DRAIN

24 10 1 HANDWHEEL - BLUE

25 9 1 UPPER ASSEMBLY - UNTESTED

26 8 1 GASKET

27 7 1 TAG HCV-2 TOP FILL

28 6 4 LOCKWIT

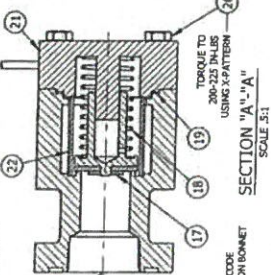
29 5 4 WASHER

30 4 1 TAG - HCV-1 BOTTOM FILL

31 3 2 HANDWHEEL - GREEN

32 2 2 UPPER ASSEMBLY - UNTESTED SEE NOTE 12

33 1 1 BRAZED ASSEMBLY



SCALE 3:1

TORQUE TO 200-225 FT-LBS

USING X-PATTERN

APPLY 11550-477 GREASE TO THOS

TORQUE TO 162416 FT-LBS

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APPLY 11550-477 GREASE TO THOS

TORQUE TO 162416 FT-LBS

APPLY 11550-477 GREASE TO THOS

TORQUE TO 162416 FT-LBS

APPROVED/CONTROLLED

REVISION HISTORY	
REV	DESCRIPTION
A-G	DATE
H	ADP91, 7-2-09
J	ADP92, 11-2-09

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