

August 29, 2018

Attention: Scott Islip ROUND ENGINEERING INC 10 SEGWUN ROAD WATERDOWN, ON L8B 0K6 Email:scott.islip@roundeng.com

Accepted on: August 29, 2018

Expiry Date: August 29, 2028

The design submission, tracking number 2018-05622, originally received on August 24, 2018 was surveyed and accepted for registration as follows:

CRN : 0C18857.2

Reg Type: NEW DESIGN

Drawing No.: REPORT R-0951

Fitting type: GLOBE VALVE,2-1/2 INCH CLASS 150

Design registered in the name of : FLOVAL EQUIPMENT LIMITED

The registration is conditional on your compliance with the following notes:

As indicated on AB-41 Statutory Declaration form and submitted documentation, the code of construction is B16.34.

- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form.

This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date.
Should the approval of the quality management system lapse before the expiry date indicated above, this

registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3330 or fax (780) 437-7787 or e-mail grynchuk@absa.ca.

Sincerely,

YNCHUN

GRYNCHUK, MILLA, P. Eng. DOP Cert. No. D00005217

Aberta Municipal Affairs

STATUTORY DECLARATION Registration of Fittings

| I. FR | ANK TONDAT | , PRESIDENT | | trademark as it will appear on the fitting. | |
|---|--|---------------------------------------|-------------------------------------|--|--|
| | (name of applicant) | (position title) (n | nust be in a position of authority) | | |
| of FL | OVAL EQUIPMENT LTD. | | | NOR'EAST | |
| | | me of manufacturer) | | | |
| locate | d at 250 RAYETTE ROAD,UNI | | NTARIO, L4K 2G6 | | |
| do sol (checl | emnly declare that the fittings lis one) | (plant address) ted hereunder, whi | ich are subject to the Safety | / Codes Act | |
| \boxtimes | comply with the requirements o | | which North American Standard) | specifies the dimensions, | |
| | materials of construction, press | sure/temperature r | atings and identification ma | arking of the fittings, or | |
| | are not covered by the provisio | ns of a recognized | North American standard a | and are therefore manufactured | |
| | to comply with | | | as supported by the | |
| | attached | | | | |
| | (title of code | of construction or othe | er applicable document) | | |
| | data which identifies the dimen | sions, materials of | construction, pressure/tem | perature ratings and the basis | |
| | for such ratings, and the markin | ng of the fittings for | r identification. | | |
| l furth | er declare that the manufacture | of these fittings is a | controlled by a quality contr | ol program which has been | |
| verifie | d by the following authority, ISO | 9001:2015 SAI GI | LOBAL as being suita | ble for the manufacture of these | |
| fittings | s to the stated standard. The fitt | ngs covered by th | is declaration, for which I se | eek registration, are | |
| CATEGORY C NOR'EAST GLOBE VALVE | | | | | |
| (brief description of fittings) In support of this application, the following information, calculations and/or test data are attached: | | | | | |
| SCO | OPE OF CRN, DRAWINGS, CAL | CULATIONS, RE | PORTS | | |
| | ARED before me at | an in the | Province of (| | |
| DECL | (city) | | 01 (| (province or state) | |
| this _ | 15th day of | Month) | 2018 (Year) | | |
| (print) | (a Commissioner of Oaths or Nota | n Public) | (, | | |
| | D.Bardaho | y r donoy | A | 2 | |
| (sign) | (a Commissioner of Oaths or Nota | ry Public) | (signati | Tre of applicant) | |
| For A | BSA Office Use Only: | | | | |
| NOTE | :S: | | | | |
| | e best of my knowledge and beli ard B51, Clause 4.2, and is acc | | | the Safety Codes Act and CSA | |
| Registration Number: 0C18857.2 Grynchulk K | | | | | |
| Date I | Registered: AUG 29 | 2018 | (Signature) Expiry Date: 20 | of the Administrator/SCO) DS, Acup 29 | |
| The info | rmation you provide is pecessary only for | the administration of the | programs as required by the Albert | a Safety Codes Act/and Regulations in the | |

In this space, show facsimile of manufacturer's logo or

the pressure AB-41 2016-01

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act/and Regulations in the Pressure Equipment Discipline.

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FLOVAL EQUIPMENT LTD. 250 RAYETTE ROAD UNIT 1 CONCORD, ONTARIO L4K 2G6, CANADA





PAGE 1 OF 1

14-Aug-18

SCOPE OF CRN REGISTRATION

| Product | Nor'East | Design | Size Range | Body | End Connection | Material | MAWP | MDMT |
|--------------------------------|----------|-------------|------------|-------|----------------|----------------------------|------------------|------|
| Description | Series | Code | | Class | (Note 1,2) | Specification | (psig) (Note 3) | (F) |
| Class 150 2-Way Globe Valve | 9100 | ASME B16.34 | 2-1/2" | 150 | CL.150 Flanged | ASTM A216-WCB Carbon Steel | 285 psig at 100F | -20 |

Note 1: In all cases the pressure-temperature ratings of the valves may be limited by the seat and seal materials. Consult Nor'East literature.

Note 2: In all cases the pressure-temperature ratings of a flanged valve are limited by the pressure-temperature ratings of the flange.

Note 3: The pressure-temperature ratings above 100F are in accordance with the applicable ASME B16.34 Table VII-2-1.1 ratings.

0018857.2

| FLOVAL EQUIPME 250 RAYETTE ROAD | | 14-Aug-18 |
|------------------------------------|---|----------------------|
| UNIT 1 | | Design Report Number |
| CONCORD, ONTARIO | CONTROLS | R-0951 |
| L4K 2G6, CANADA | | |
| | DESIGN CALCULATIONS IN ACCORDANCE WITH ASME B16 | <u>.34</u> |
| Product Description: | 2-WAY GLOBE VALVES | |
| Model: | SERIES 9100 Note: See Appendix B for product literature | |
| Connection Type: | CL. 150 FLANGED | |
| Size Range | 2-1/2" | |
| Body Construction: | ASTM A216-WCB | |
| Bonnet Construction: | ASTM A216-WCB | |
| Pressure - Temp Ratings: | Per ASME B16.34 Class 150 - See Section 1 | |
| MDMT: | -20 F | |
| Corrosion Allowance: | Nil | |
| NDE: | None | |
| DRAWING LISTING | | |

Series 9100 Type 2-WAY Size 2-1/2" CL. 150 Drawing No. R-0951 Note: See Appendix A

DESCRIPTION OF PRODUCT

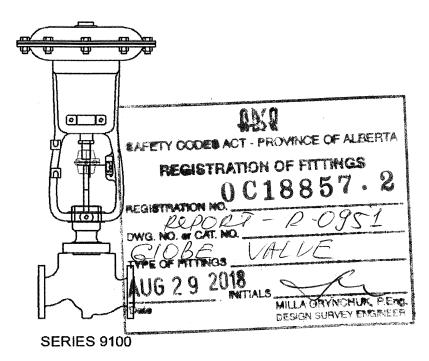


FIGURE 1

The Nor'East Globe valves were originally designed and manufactured by Honeywell. The product line was sold to Dezurik in 1997 and was purchased by Nor'East Controls in 2010. The same casting patterns and designs that were originally used by both Honeywell and Dezurik are now used by Nor'East.

| | | ALLOWABLE STRESS |
|---------------------------|--------|--|
| Material: | in . | ASTM A216-WCB |
| Allowable Stress Values @ | 100 F= | 16,000 psi, Stress Value from ASME Section II Part D multiplied by a casting quality factor of 0.8. |
| Allowable Stress Values @ | 800 F= | 9,600 psi, Stress Value from ASME Section II Part D multiplied by a casting quality factor of 0.8. |
| Yield Stress @ | 100 F= | 36,000 psi, Stress Value from ASME Section II Part D |
| Tensile Stress @ | 100 F= | 70,000 psi, Stress Value from ASME Section II Part D |