

REGISTRATION OF A PRESSURE FITTING DESIGN

20-Apr-23

Round Engineering Inc.
10 Segwun Rd.
Waterdown, Ontario
L8B 0K6

Attention: Scott Islip

File Number: 13601 [0 F]

Re: Manufacturer: Chart Inc.
Item: Carbon Capture System
Catalog or Drawing: Scope of CRN Registration, dated 28-Mar-23

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

0H2277.3 Expiry Date: April 20, 2033

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,



Williams Uju, P.Eng.
Codes and Standards Compliance

Remarks:

A valid quality control program must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

Statutory Declaration (Registration of Fittings)


TSK-1008

I. Declaration Information

I, Ron Street,
Plant Manager
(company title, e.g. vice president, plant manager, chief engineer)
 (must be in a position of authority in the manufacturing plant where the fitting is produced)

of: Chart Inc.
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.



located at: SEE ATTACHED WORLDWIDE LOCATIONS APPENDIX
(Plant Address – Apt/Street) (City,Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel Safety Act** (check one)

Comply with the requirements of ASME B31.3 which specifies the dimensions, Materials of construction, pressure / temperature ratings and identification marking of the fittings, or
(title of recognized North American Standard)

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, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, Bureau Veritas ISO 9001: 2015 as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are CATEGORY H - Carbon Capture System

In support of this application, the following information, calculations and / or test data are attached:
SCOPE OF CRN REGISTRATION, REPORTS, DRAWINGS, CALCULATIONS

II. Declaration

DECLARED before me at Tulsa In the State of Oklahoma
 this 9th day of March 2023,
Ron Street
(print name)
Nicole J. Knight
(Signature of Commissioner of Oaths)

Nicole J. Knight
(Signature)
NICOLE J. KNIGHT
 Notary Public, State of Oklahoma
 Commission # 22004978
 My Commission Expires 04-08-2026

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the **Boiler and Pressure Vessel Safety Act** and CSA B51, Clause 4.2, and is accepted for registration in Category _____

(Registration Number) _____ (Date Registered – MM DD YYYY) _____ (Expiry Date – MM DD YYYY) _____
(For the Administrator / Chief Inspector)



Registration No. 0H2277.3
 File No. 13601
 Registered
 Date: April 20, 2023
 Expiry Date: April 20, 2033
Codes & Standards Compliance Office



WORLDWIDE LOCATIONS APPENDIX

**CHART INC. MANUFACTURING LOCATIONS
& CERTIFYING AUTHORITIES COVERED UNDER THIS CRN**

(rev. 21/Feb./2022)

Chart Inc.

1300 Airport Dr.,
Ball Ground, GA
30107, USA

ISO 9001:2015 Certified by Bureau Veritas

Chart Inc.

5615 S. 129TH E. Ave.
Tulsa, OK
74134, USA

ISO 9001:2015 Certified by Bureau Veritas

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28-Mar-23

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SCOPE OF CRN REGISTRATION

Product Description	Drawing Numbers	Design Code	Size Range	Connections	Material Specification	MAWP at MAWT (psig)	MDMT (F)	CA (in.)	Report Number
Carbon Capture System	Earthly Labs CiCi (Oak) 3-Way PID V6.8 - CRN.VSDX, CRN C-1000, CRN Line 1010 Rev. 1, CRN H-1010 Rev. 1, CRN Line 1011 Rev. 1, CRN Line 1012 Rev.4, CRN Line 1014 Rev.4, CRN Line 1013, CRN Line 1020 Rev. 1, CRN Line 1021 Rev. 1, CRN Line 1022, V-1020 & V-1021 Dryer Beds CRN Line 1023, CRN Line 1024, CRN Line 1030, CRN V-1030, CRN Line 1031 Rev.4, CRN H-1040 Rev. 5, CRN Line 1040 Rev. 1, CarboMax 1000 CO2 Dewar, CRN Line 1041 Rev. 4	ASME B31.3, 2020	1/4" OD x 0.035", 3/8" OD x 0.035", 2" Sch. 40S, 1/2" Class 3000, 2" Class 3000	Tube End, NPT, ASME B16.5 Flanged	ASTM A213 TP316, ASTM A269 TP316, ASTM A270 TP316, ASTM A312 TP304, ASTM A182 F316, ASTM A182 F304	CO2: 175 psig at 150°F	30°F and -40°F (Note 2)	Nil	R-1840 Rev. 0

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

Note 2: All CSA B51 regulated lines in the Carbon Capture System have a MDMT equal to 30°F except for line 1040 between the Chiller and Dewar which has a MDMT equal to -40°F.

Note 3: Per CSA Table 1 Note (2)(B) the total volume of any configured assembly shall not exceed 1.5 cubic feet in volume.

Note 4: Flanges to comply with ASME B16.5 and ASME B16.11 fittings shall be Class 3000.

Note 5: See Attached List of Chart Inc. Manufacturing locations applicable to this CRN.



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Registered

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