



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

**ACME**  
CRYOGENICS

## STATUTORY DECLARATION Registration of Fittings

I, David M. Rakos, Director of Quality and Engineering

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

of Acme Cryogenics, Inc.

(Name of Manufacturer)

Located at 2801 Mitchell Avenue, Allentown, PA 18103

(Plant Address)

(610) 791-7909

(Telephone No.)

(610) 791-2837

(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

(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 ASME B31.3 & CGA V-6 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 CSA B51

which has been verified by the following authority, TUV Rheinland

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:

Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations

(drawings, calculations, test reports, etc.)

Declared before me at Acme Cryogenics Inc in the Commonwealth of Pennsylvania  
the 13<sup>th</sup> day of July AD 20 22.

Commissioner for Oaths:

Eileen R Petrasovits

(Printed name)

Eileen R Petrasovits

(Signature)

Commonwealth of Pennsylvania - Notary Seal  
EILEEN R PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
Commission Number 1191577

[Signature]

(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 \_\_\_\_\_.

CRN: \_\_\_\_\_



This Document has been  
digitally signed and approved.  
The stamp size has been  
optimized for 11 x 17 documents.

Registered by: \_\_\_\_\_

Dated: \_\_\_\_\_

Technical  
Standards  
and Safety  
Authority

Boilers and  
Pressure Vessels  
Safety Program

**REGISTERED**

C.R.N.: 0H6700.5R3

Signed: W12

Date: April 6, 2023.

**NOTE: This registration expires on: Apr. 06, 2033**

Renewal - Scope of CRN Registration Dwg. No. CRN-D-08051 Sheet 1 to 4 Rev. C  
If these registered fittings are connected to a hose assembly, such hose assembly must be qualified by proof testing and registered under different CRN number for installation/application in Ontario.

\*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.



SCOPE OF CRN REGISTRATION

No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
1	ASK-40-0072	Hex Brass Coupling	1	B16 C36000 H02	600	-320	150	E11040.01
2	ASK-40-0073	Hex Brass Coupling	1½	B16 C36000 H02	600	-320	150	E11040.02
3	ASK-40-0074	Hex Brass Coupling	2	B16 C36000 H02	600	-320	150	E11040.03
3.1	ASK-40-0174	Hex Brass Coupling with 4 Purge Ports	1	B16 C36000 H02	600	-320	150	E11040.03A
3.1.1	ASK-40-0174S	COUPLING-HEX SS,1"CO2	1	SA-479 304/304L	650	-320	150	E11040.03A
3.2	ASK-40-0171	Hex Brass Coupling with 4 Purge Ports	2	B16 C36000 H02	600	-320	150	E11040.03B
3.2.1	ASK-40-0171S	COUPLING-HEX SS 2"CO2	2	SA-479 304/304L	650	-320	150	E11040.03B
4	590-021-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.04
4.1	590-021-15ORF	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.04
5	590-037-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.05
6	590-038-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.06
7	590-041-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.07
8	590-022-25	Fixed End Cast	2½	B62 C83600	600	-320	150	E11040.08
9	580-021-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.09
9.1	580-021-15ORF	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.09
9.2	580-021-15-STUB	F.E ARGON W/COPPER STUBS	1½	B62 C83600	600	-320	150	E11040.09
10	580-034-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.10
11	580-035-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.11
11.1	580-035-15ORF	F.E-ARG 1.5CAST,1.5 FNPT ORIF	1½	B62 C83600	600	-320	150	E11040.11
12	580-076-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.12
13	580-022-25	Fixed End Cast	2½	B62 C83600	600	-320	150	E11040.13
14	540-020-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.14
14.1	540-020-15ORF	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.14
15	540-036-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.15
15.1	540-036-15ORF	F.E-OXY 1.5 CAST,1.5FNPT ORIF	1½	B62 C83600	600	-320	150	E11040.15
16	540-038-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.16
17	540-076-15	Fixed End Cast	1½	B62 C83600	600	-320	150	E11040.17
18	540-021-20	Fixed End Cast	2	B62 C83600	600	-320	150	E11040.18
19	540-028-20	Fixed End Cast	2	B62 C83600	600	-320	150	E11040.19
20	590-014-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.20
20.1	590-014-15ORF	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.20
21	590-023-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.21
22	590-039-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.22
22.1	590-039-15ORF	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.22
22.2	600-001-15	F.E.-ARGOMIX 1.5 MACH 1.5FNPT	1½	B21 C46400 H02	600	-320	150	E11040.22
23	590-058-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.23
24	590-060-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.24
25	590-061-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.25
26	590-062-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.26
27	590-063-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.27
28	590-064-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.28
29	590-065-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.29
30	590-067-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.30
31	590-068-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.31
32	590-069-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.32
33	590-070-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.33

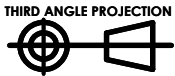
No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
34	590-071-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.34
34.1	590-054-15	TAILPIECE-NIT 1.5" 304 SST	1½	SA-479 304/304L	650	-320	150	E11040.34
35	590-072-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.35
36	590-073-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.36
37	590-074-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.37
38	590-079-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.38
38.1	590-090-15	F.E.-NIT 1.5,2 ODT BWE,316L	1½	SA-479 316/316L	650	-320	150	E11040.38
39	590-090-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.39
40	590-094-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.40
41	ASK-40-0014	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.41
42	590-024-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.42
43	590-029-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.43
44	590-043-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.44
45	590-044-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.45
46	590-051-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.46
47	590-053-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.47
48	590-057-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.48
48.1	590-111-25	F.E.-NIT 2.5"TUB,BR GL 314134B	2½	SB-505 C85700	600	-320	150	E11040.48
48.2	590-112-25	F.E.-NIT 2.5,GSKTLS,PIPESKT BR	2½	SB-505 C85700	600	-320	150	E11040.48
49	590-075-25	Fixed End Machined	2½	SA-479 316/316L	650	-320	150	E11040.49
50	590-076-25	Fixed End Machined	2½	B21 C46400 H02	600	-320	150	E11040.50
51	590-077-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.51
52	590-078-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.52
52.1	590-099-25	F.E.-NIT 2.5,3"X2.5PIPESS	2½	SA-479 304/304L	650	-320	150	E11040.52
53	590-083-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.53
54	590-084-25	Fixed End Machined	2½	SA-479 316/316L	650	-320	150	E11040.54
55	590-085-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.55
56	590-086-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.56
57	580-014-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.57
58	580-015-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.58
59	580-016-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.59
59.1	580-016-15ORF	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.59
60	580-017-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.60
61	580-023-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.61
62	580-033-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.62
63	580-060-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.63
64	580-061-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.64
65	580-062-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.65
66	580-063-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.66
67	580-064-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.67
68	580-065-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.68
69	580-067-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.69
70	580-068-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.70
71	580-070-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.71
72	580-071-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.72
72.1	580-054-15	TAILPIECE-ARG 1.5"	1½	SA-479 304/304L	650	-320	150	E11040.72
73	580-072-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.73
74	580-073-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.74
75	580-074-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.75

- NOTES:
- DESIGN CODE: ASME B31.3-2020
  - REFERENCE MATERIAL SPECIFICATIONS, PAGE IX OF CALCULATION E1 1040 REV 1

THIS IS PART OF CRN  
0H6700.5R3  
Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety  
Program

ORIGINAL

UNLESS OTHERWISE SPECIFIED  
INTERPRET PER ASME Y14.5-2009  
1. THE FOLLOWING TOLERANCES APPLY:  
X.X: ±.01" X.XX: ±.005"  
FRACTIONS: ± 1/32" ANGLES: ±0.5°  
2. ALL DIMENSIONS ARE INCHES.  
3. REMOVE ALL BURRS AND SHARP EDGES  
.015 MAX.  
4. MACHINED SURFACE TO BE 125  
MICR-INCHES OR BETTER.  
5. DO NOT SCALE DRAWING.



DESIGN BY	WJR	DATE	12/21/2011
DRAWN BY	PGZ	DATE	04/05/2012
CHECKED BY	BL	DATE	3/4/2022
APPROVED BY	JDE	DATE	03/17/2022

THIS DRAWING AND THE INFORMATION OR DATA CONTAINED HEREIN ARE CONSIDERED PROPRIETARY TO ACME CRYOGENICS, INC. AND IS NOT TO BE COPIED, REPRODUCED, DUPLICATED OR DISCLOSED TO OTHER IN WHOLE OR IN PART WITHOUT THE PRIOR WRITTEN CONSENT OF ACME CRYOGENICS, INC. THE DRAWING SHOULD BE RETURNED AS SOON AS IT HAS SERVED THE PURPOSES FOR WHICH IT IS FURNISHED AND WHILE IN THE POSSESSION OF THE RECIPIENT SHOULD BE PROPERLY SAFEGUARDED AGAINST DISCLOSURE TO ANYONE EXCEPT EMPLOYEES WHO REQUIRE IT FOR WORK OR A JOB. THIS RESTRICTION SHALL NOT APPLY TO INFORMATION OR DATA CONTAINED HEREIN WHICH IS AVAILABLE TO THE PUBLIC GENERALLY.

Title:  
SCOPE OF REGISTRATION - CGA  
STANDARD CRYOGENIC LIQUID  
TRANSFER CONNECTIONS

P/N:

SCALE: 1:1

Project No.: E210020

DWG NO. CRN-D-08051

SHEET: SHEET 1 OF 4

REV. C



SCOPE OF CRN REGISTRATION

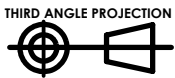
No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
76	580-078-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.76
77	580-079-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.77
78	580-090-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.78
79	ASK-40-0015	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.79
80	580-024-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.80
81	580-036-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.81
82	580-052-25	Fixed End Machined	2½	B21 C46400 H02	600	-320	150	E11040.82
83	580-057-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.83
84	580-069-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.84
85	580-075-25	Fixed End Machined	2½	SB-505 C85700	600	-320	150	E11040.85
85.1	580-111-25	F.E.-ARG 2.5 TUB BR GL 314133B	2½	SB-505 C85700	600	-320	150	E11040.85
85.2	580-112-25	F.E.-ARG 2.5 GSKTLS PIPESKT BR	2½	SB-505 C85700	600	-320	150	E11040.85
86	580-080-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.86
87	580-081-25	Fixed End Machined	2½	SA-479 316/316L	650	-320	150	E11040.87
88	580-082-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.88
89	580-085-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.89
89.1	580-099-25	Fixed End Machined	2½	SA-479 304/304L	650	-320	150	E11040.89A
90	540-023-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.90
90.1	540-023-15ORF	F.E.-OXY 1.5MACH W/ORF PLT THD	1½	B21 C46400 H02	600	-320	150	E11040.90
91	540-037-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.91
91.1	540-037-15ORF	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.91
92	540-041-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.92
92.1	540-041-15ORF	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.92
92.2	540-053-15	ADAPTOR MALE/MALE,OXY,1.5	1½	B21 C46400 H02	600	-320	150	E11040.92
93	540-060-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.93
94	540-061-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.94
95	540-062-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.95
96	540-063-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.96
97	540-064-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.97
98	540-065-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.98
99	540-067-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.99
100	540-068-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.100
101	540-070-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.101
102	540-071-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.102
103	540-072-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.103
104	540-073-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.104
105	540-074-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.105
106	540-078-15	Fixed End Machined	1½	SA-479 304/304L	650	-320	150	E11040.106
107	540-079-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.107
108	540-090-15	Fixed End Machined	1½	SA-479 316/316L	650	-320	150	E11040.108
108.1	540-054-15	TAILPIECE-OXY 1.5" 304 SST	1½	SA-479 304/304L	650	-320	150	E11040.108
109	540-094-15	Fixed End Machined	1½	B21 C46400 H02	600	-320	150	E11040.109
110	540-022-20	Fixed End Machined	2	SB-505 C85700	600	-320	150	E11040.110
111	540-039-20	Fixed End Machined	2	SB-505 C85700	600	-320	150	E11040.111
111.1	540-040-20	F.E.-OXY 2,MACH,2 MNPT	2	SB-505 C85700	600	-320	150	E11040.111
112	540-075-20	Fixed End Machined	2	SA-479 304/304L	650	-320	150	E11040.112
113	540-024-30	Fixed End Machined	3	SB-505 C85700	600	-320	150	E11040.113
114	540-040-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.114
115	540-058-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.115
116	540-069-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.116
117	540-080-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.117

No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
118	540-082-30	Fixed End Machined	3	SA-479 304/304L	650	-320	150	E11040.118
118.1	540-099-30	Fixed End Machined	3	SA-479 304/304L	650	-320	150	E11040.118A
119	540-089-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.119
120	540-091-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.120
120.1	540-111-30	F.E.-OXY 3,TUB,BR GL 314135B	3	B21 C46400 H02	600	-320	150	E11040.120
120.2	540-112-30	F.E.-OXY 3,GSKLS PIPESKT BRS	3	B21 C46400 H02	600	-320	150	E11040.120
120.3	540-128-30	F.E.-OXY 3GASKETLESS SHORT	3	B21 C46400 H02	600	-320	150	E11040.120
120.4	540-128-30SP	F.E.-OXY 3GSKLS SHORT NO FLATS	3	B21 C46400 H02	600	-320	150	E11040.120
121	540-092-30	Fixed End Machined	3	B21 C46400 H02	600	-320	150	E11040.121
122	ASK-40-0434	Fixed End Brazed Block	1½	B21 C46400 H02	600	-320	150	E11040.122
123	ASK-40-0454	Fixed End Brazed Block	1½	B21 C46400 H02	600	-320	150	E11040.123
124	ASK-40-0416	Fixed End Brazed Block	1½	B21 C46400 H02	600	-320	150	E11040.124
129	ASK-40-0443	Fixed End Rail Car	2½	SA-479 304/304L	275/600	-320	150	E11040.129
130	ASK-40-0444	Fixed End Rail Car	2½	SA-479 304/304L	275/600	-320	150	E11040.130
131	ASK-40-0456	Fixed End Rail Car	2	SA-479 304/304L	275/600	-320	150	E11040.131
132	ASK-40-0445	Fixed End Rail Car	3	SA-479 304/304L	275/600	-320	150	E11040.132
133	ASK-40-0086	Head Plug	1½	B21 C46400 H02	600	-320	150	E11040.133
134	ASK-40-0089	Head Plug	2	B21 C46400 H02	600	-320	150	E11040.134
135	ASK-40-0087	Head Plug	2½	B21 C46400 H02	600	-320	150	E11040.135
135.1	ASK-40-0199	HEADPLUG-2.5 GASKETLESS BRS	2½	B21 C46400 H02	600	-320	150	E11040.135
136	ASK-40-0088	Head Plug	3	B21 C46400 H02	600	-320	150	E11040.136
137	ASK-40-0086S	Head Plug	1½	SA-479 316/316L	650	-320	150	E11040.137
138	ASK-40-0003	Head Piece Threaded	1½ MNPT	B21 C46400 H02	600	-320	150	E11040.138
138.1	ASK-40-0003-6"L	Head Piece Threaded	1½ MNPT	B21 C46400 H02	600	-320	150	E11040.138
139	ASK-40-0130	Head Piece Threaded	1½ MNPT	B21 C46400 H02	600	-320	150	E11040.139
140	ASK-40-0082	Head Piece Threaded	1½ MNPT	B21 C46400 H02	600	-320	150	E11040.140
141	ASK-40-0080	Head Piece Threaded	1½ MNPT	B21 C46400 H02	600	-320	150	E11040.141
142	ASK-40-0084	Head Piece Threaded	1½ MNPT	SA-479 316/316L	650	-320	150	E11040.142
143	ASK-40-0118	Head Piece Threaded	1½ MNPT	SA-479 304/304L	650	-320	150	E11040.143
144	ASK-40-0020	Head Piece Threaded	2 MNPT	B21 C46400 H02	600	-320	150	E11040.144
144.1	ASK-40-0020BWE	HEADPC-2"W/SCH10 BWE 304 S/S	2"	B21 C46400 H02	600	-320	150	E11040.144
145	ASK-40-0050	Head Piece Threaded	2 MNPT	SB-505 C857	600	-320	150	E11040.145
146	ASK-40-0051	Head Piece Threaded	2 MNPT	B21 C46400 H02	600	-320	150	E11040.146
147	ASK-40-0127	Head Piece Threaded	2 MNPT	SA-479 304/304L	650	-320	150	E11040.147
148	ASK-40-0125	Head Piece Threaded	2 MNPT	SA-479 304/304L	650	-320	150	E11040.148
149	ASK-40-0126	Head Piece Threaded	2 MNPT	SA-479 304/304L	650	-320	150	E11040.149
150	ASK-40-0004	Head Piece Threaded	2½ MNPT	B21 C46400 H02	600	-320	150	E11040.150
151	ASK-40-0097	Head Piece Threaded	2½ MNPT	B21 C46400 H02	600	-320	150	E11040.151
151.1	ASK-40-0097EX	Head Piece Threaded	2½ MNPT	B21 C46400 H02	600	-320	150	E11040.151
152	ASK-40-0129	Head Piece Threaded	2½ MNPT	SA-479 304/304L	650	-320	150	E11040.152
152.1	ASK-40-0129-316	HEADPC-2.5 X 2.5 MNPT 316	2½ MNPT	SA-479 304/304L	650	-320	150	E11040.152
152.2	ASK-40-0129-EXT	HEADPC-2.5X2.5MNPT 304 SS 7"LG	2½ MNPT	SA-479 304/304L	650	-320	150	E11040.152
152.3	ASK-40-0178	HEADPC-2.5 AR/NI SS GSKL314124	2½ MNPT	SA-479 304/304L	650	-320	150	E11040.152
153	ASK-40-0131	Head Piece Threaded	2½ MNPT	SA-479 304/304L	650	-320	150	E11040.153
153.1	ASK-40-0131BWE	HEADPC-3 X 2.5 SCH 10 BWE	3	SA-479 304/304L	650	-320	150	E11040.153
154	ASK-40-0006	Head Piece Threaded	3 MNPT	SB-505 C857	600	-320	150	E11040.154
155	ASK-40-0128	Head Piece Threaded	3 MNPT	SA-479 304/304L	650	-320	150	E11040.155
155.1	ASK-40-0128-316	HEADPC-3 X 3 MNPT 316	3 MNPT	SA-479 316/316L	650	-320	150	E11040.155
155.2	ASK-40-0179	HEADPC-3 OXY SS GSKTLS 314123	3 MNPT	SA-479 304/304L	650	-320	150	E11040.155
156	ASK-40-0049	Head Piece BE	1½ TBS	B21 C46400 H02	600	-320	150	E11040.156

THIS IS PART OF CRN  
0H6700.5R3  
Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety  
Program

ORIGINAL

UNLESS OTHERWISE SPECIFIED  
INTERPRET PER ASME Y14.5-2009  
1. THE FOLLOWING TOLERANCES APPLY:  
XXX: ±.01" XXX: ±.005"  
FRACTIONS: ± 1/32" ANGLES: ±0.5°  
2. ALL DIMENSIONS ARE INCHES.  
3. REMOVE ALL BURRS AND SHARP EDGES  
.015 MAX.  
4. MACHINED SURFACE TO BE 125  
MICR-INCHES OR BETTER.  
5. DO NOT SCALE DRAWING.



DESIGN BY	WJR	DATE	12/21/2011
DRAWN BY	PGZ	DATE	04/05/2012
CHECKED BY	BL	DATE	3/4/2022
APPROVED BY	JDE	DATE	03/17/2022

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Title:  
SCOPE OF REGISTRATION - CGA  
STANDARD CRYOGENIC LIQUID  
TRANSFER CONNECTIONS

P/N:

SCALE: 1:1

Project No.: E210020



DWG NO. CRN-D-08051

SHEET: SHEET 2 OF 4

REV. C



SCOPE OF CRN REGISTRATION

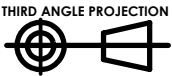
No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
157	ASK-40-0052	Head Piece BE	1½ TS	B21 C46400 H02	600	-320	150	E11040.157
157.1	ASK-40-0052DP	Head Piece BE	1½ TS	B21 C46400 H02	600	-320	150	E11040.157
158	ASK-40-0116	Head Piece BWE	1½ PBW	SA-479 316/316L	650	-320	150	E11040.158
158.1	ASK-40-0166	HEADPC-1.5" X 1" FNPT BRS	1½ PBW	B21 C46400 H02	600	-320	150	E11040.158
159	ASK-40-0135	Head Piece BWE	1½ TBW	SA-479 316/316L	650	-320	150	E11040.159
160	ASK-40-0117	Head Piece BE	1½ PS	SA-479 304/304L	650	-320	150	E11040.160
161	ASK-40-0119	Head Piece BWE	1½ PBW	SA-479 304/304L	650	-320	150	E11040.161
161.1	ASK-40-0418	HEADPC-1.5 BRAZED BLOCK	1½ PBW	SA-479 304/304L	650	-320	150	E11040.161
162	ASK-40-0053	Head Piece BE	2 TS	SB-505 C85700	600	-320	150	E11040.162
163	ASK-40-0054	Head Piece BE	2 TS	B21 C46400 H02	600	-320	150	E11040.163
164	ASK-40-0033	Head Piece BE	2 TS	B21 C46400 H02	600	-320	150	E11040.164
165	ASK-40-0034	Head Piece BE	2½ TS	B21 C46400 H02	600	-320	150	E11040.165
166	ASK-40-0120	Head Piece BWE	2½ PBW	SA-479 304/304L	650	-320	150	E11040.166
167	ASK-40-0032	Head Piece BE	3 TS	SB-505 C85700	600	-320	150	E11040.167
168	ASK-40-0121	Head Piece BWE	3 TBW	SA-479 304/304L	650	-320	150	E11040.168
168.1	ASK-40-0121-316	HEADPC-3 X 3 SCH10BW 316 SS	3 TBW	SA-479 304/304L	650	-320	150	E11040.168
169	ASK-40-0148	Flange SBT w/Tongue	1	SB-283 C37700	300	-320	100	E11040.169
170	ASK-40-0152	Flange SBT w/Tongue	1½	SB-283 C37700	300	-320	100	E11040.170
171	-	(deleted)	-	-	-	-	-	E11040.171
172	ASK-40-0150	Blind Flange TS w/Tongue	1	SB-283 C37700	350	-320	100	E11040.172
173	ASK-40-0149	Flange SBT w/Groove	1	SB-283 C37700	300	-320	100	E11040.173
174	ASK-40-0153	Flange SBT w/Groove	1½	SB-283 C37700	300	-320	100	E11040.174
175	-	(deleted)	-	-	-	-	-	E11040.175
176	ASK-40-0151	Blind Flange SBT w/Groove	1	SB-283 C37700	350	-320	100	E11040.176
177	320-019-10	Fixed End	1	SB-283 C37700,	600	-320	150	E11040.177
177.1	320-019-10HVY	Fixed End	1	SB-283 C37700,	600	-320	150	E11040.177
177.2	320-019-10S	F.E.-CO2 1,THRD,SS	1	SA-479 304/304L	650	-320	150	E11040.177
177.3	320-019-10S-PUR	F.E.-CO2 1" S/S W/1/4" PURGE	1	SA-479 304/304L	650	-320	150	E11040.177
177.4	326-003-10	F.E.-N2O 1"	1	SB-283 C37700,	600	-320	150	E11040.177
177.5	326-003-10-PUR	F.E-N2O 1" W/ 1/2" PURGE	1	SB-283 C37700,	600	-320	150	E11040.177
177.6	326-003-10S	F.E. N2O 1" 304 S/S	1	SA-479 304/304L	650	-320	150	E11040.177
178	320-000-15	Fixed End	1½	SB-283 C37700,	600	-320	150	E11040.178
178.1	320-000-15S	F.E.-CO2 1.5,THRD,SS	1½	SA-479 304/304L	650	-320	150	E11040.178
178.2	320-000-15S-PUR	F.E.-CO2 1.5,S/S W/1/4" PURGE	1½	SA-479 304/304L	650	-320	150	E11040.178
178.3	326-008-15	F.E.-N2O 1.5"	1½	SB-283 C37700,	600	-320	150	E11040.178
178.4	326-008-15-PUR	F.E-N2O 1.5" W/ 1/2" PURGE	1½	SA-479 304/304L	650	-320	150	E11040.178
178.5	326-008-15S	F.E.N2O 1.5" 304 S/S	1½	SA-479 304/304L	650	-320	150	E11040.178
179	320-031-20	Fixed End	2	B16 C36000 H02	600	-320	150	E11040.179
179.1	320-031-20S	F.E.-CO2 2,THRD,SS	2	SA-479 304/304L	650	-320	150	E11040.179
180	320-038-30	Fixed End	3	B21 C46400 H02	600	-320	150	E11040.180
180.1	320-038-30S	F.E. CO2 3" THRD 304 S/S	3	SA-479 304/304L	650	-320	150	E11040.180
181	320-086-10	Fixed End with Purge Port	1	B16 C36000 H02	600	-320	150	E11040.181
181.1	320-122-10	Fixed End with Purge Port	1	B16 C36000 H02	600	-320	150	E11040.181
181.2	320-129-10	F.E.-CO2 1" W/ 1/2"&1/4" PORTS	1	B16 C36000 H02	600	-320	150	E11040.181
181.3	326-018-10	F.E.-N2O 1" W/FNPT & PURGE	1	B16 C36000 H02	600	-320	150	E11040.181
182	320-087-15	Fixed End with Purge Port	1½	B16 C36000 H02	600	-320	150	E11040.182
182.05	320-123-15	Fixed End with Purge Port	1½	B16 C36000 H02	600	-320	150	E11040.182
182.1	320-121-20	Fixed End with 2 Purge Ports	2	B16 C36000 H02	600	-320	150	E11040.182A
182.2	320-120-20	Fixed End with 2 Purge Ports	2	B16 C36000 H02	600	-320	150	E11040.182B
182.3	320-087-15S	F.E.-CO2 1.5" W/PURGE PORT SS	1½	SA-479 304/304L	650	-320	150	E11040.182

No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
182.4	320-130-15	F.E.-CO2 1.5" W/1/2"&1/4" PORTS	1½	SA-479 304/304L	650	-320	150	E11040.182
182.5	326-019-15	F.E.-N2O 1.5 FNPT W/PURGE	1½	B16 C36000 H02	600	-320	150	E11040.182
183	320-016-10	Head Piece	1	SB-283 C37700	600	-320	150	E11040.183
183.1	320-016-10S	HEADPC-1 CO2 THRD SS	1	SA-479 304/304L	650	-320	150	E11040.183
184	320-014-15	Head Piece	1½	SB-283 C37700	600	-320	150	E11040.184
184.1	320-014-15S	HEADPC-1.5 CO2 THRD SS	1½	SA-479 304/304L	650	-320	150	E11040.184
184.2	320-014-15SPE	HEADPC-1.5 CO2 PLAIN END 316S	1½	SA-479 304/304L	650	-320	150	E11040.184
184.3	320-151-15	HEADPC 1.5"CO2 X 1" MNPT	1½	B16 C36000 H02	600	-320	150	E11040.184
184.4	326-009-15	HEADPC-1.5 NITROUS OXIDE	1½	SB-283 C37700	600	-320	150	E11040.184
185	320-028-20	Head Piece	2	B16 C36000 H02	600	-320	150	E11040.185
185.1	320-108-20	Head Piece	2	B16 C36000 H02	600	-320	150	E11040.185
185.2	320-028-20S	HEADPC-2 CO2 THRD SS	2	SA-479 304/304L	650	-320	150	E11040.185
185.3	320-028-20SPE	HEADPC 2" CO2 PLAIN END 316S	2	SA-479 316/316L	650	-320	150	E11040.185
186	320-035-30	Head Piece	3	B16 C36000 H02	600	-320	150	E11040.186
186.1	320-109-30	Head Piece	3	B16 C36000 H02	600	-320	150	E11040.186
187	320-048-10	Male Adapter	1	B16 C36000 H02	600	-320	150	E11040.187
188	320-049-15	Male Adapter	1½	B16 C36000 H02	600	-320	150	E11040.188
189	320-050-20	Male Adapter	2	B16 C36000 H02	600	-320	150	E11040.189
190	320-051-30	Male Adapter	3	B16 C36000 H02	600	-320	150	E11040.190
191	320-079-20	Male Adapter	2	B16 C36000 H02	600	-320	150	E11040.191
192	320-080-15	Male Adapter	1½	B16 C36000 H02	600	-320	150	E11040.192
193	ASK-40-0124	Hex Brass Bushing with 3 Purge Ports	1	B16 C36000 H02	600	-320	150	E11040.193
194	ASK-40-0076	Hex Brass Bushing with 3 Purge Ports	1½	B16 C36000 H02	600	-320	150	E11040.194
195	ASK-40-0077	Hex Brass Bushing with 3 Purge Ports	2	B16 C36000 H02	600	-320	150	E11040.195
195.1	ASK-40-0077SPEC	BUSHING-CO2 NO PURGE 2F 1-1/2M	2F x 1½M	B16 C36000 H02	600	-320	150	E11040.195
196	ASK-40-0078	Hex Brass Bushing with 3 Purge Ports	2	B16 C36000 H02	600	-320	150	E11040.196
197	ORIFICE-PRX-*	Orifice Plate	1.625	B16 C36000 H02	600	-320	150	E11040.197
198	590-123-15	Fixed End Cast with Integral Flange	1½	B584 C86500	600	-320	150	E11040.198
198.1	590-123-15ORF	F.E.-NIT 1.5,INT FLG ORF THD	1½	B584 C86500	600	-320	150	E11040.198
199	580-123-15	Fixed End Cast with Integral Flange	1½	B584 C86500	600	-320	150	E11040.199
199.1	580-123-15ORF	F.E.-ARG 1.5 INT FLG,ORF,THD	1½	B584 C86500	600	-320	150	E11040.199
200	540-123-15	Fixed End Cast with Integral Flange	1½	B584 C86500	600	-320	150	E11040.200
200.1	540-123-15ORF	F.E.-OXY 1.5 INT FLG,ORF THD	1½	B584 C86500	600	-320	150	E11040.200
201	590-119-25	Head Piece Adapter	2½	B21 C46400 H02	600	-320	150	E11040.201
202	580-132-25	Head Piece Adapter	2½	B21 C46400 H02	600	-320	150	E11040.202
203	540-119-30	Head Piece Adapter	3	B21 C46400 H02	600	-320	150	E11040.203
204	ASK-40-0148S	Flange SW w/Tongue	1	SA-479 304/304L	650	-425	150	E11040.204
205	ASK-40-0152S	Flange SW w/Tongue	1½	SA-479 304/304L	650	-320	150	E11040.205
206	ASK-40-0156S	Flange BW w/Tongue	2	SA-479 304/304L	650	-320	150	E11040.206
207	ASK-40-0149S	Flange SW w/Groove	1	SA-479 304/304L	650	-320	150	E11040.207
208	ASK-40-0153S	Flange SW w/Groove	1½	SA-479 304/304L	650	-425	150	E11040.208
209	540-000-15	NUT-OXY 1.5"	1½	SB-505 C86500	650	-320	150	E11040.209
209.1	540-000-15LH	NUT-OXY 1.5" LH	1½	SB-505 C86500	650	-320	150	E11040.209
209.2	540-055-15	NUT-OXY 1.5" 316L	1½	SA-479 304/304L	650	-320	150	E11040.209
210	540-005-30	NUT-OXY 3"	3	SB-505 C86500	650	-320	150	E11040.210
210.1	540-093-30	NUT-OXY 3"	3	SA-479 304/304L	650	-320	150	E11040.210
210.2	540-059-30	NUT-OXY 3" 316L	3	SA-479 316/316L	650	-320	150	E11040.210
211	540-010-20	NUT-OXY 2"	2	SB-505 C86500	650	-320	150	E11040.211
211.1	540-010-20S	NUT-OXY 2" SS	2	SA-479 316/316L	650	-320	150	E11040.211
212	580-000-25	NUT-ARG 2.5"	2½	SB-505 C86500	650	-320	150	E11040.212

ORIGINAL

THIS IS PART OF CRN  
0H6700.5R3  
Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety  
Program

- UNLESS OTHERWISE SPECIFIED  
INTERPRET PER ASME Y14.5-2009
- THE FOLLOWING TOLERANCES APPLY:  
X.X: ± 0.1" X.XX: ± 0.05"  
FRACTIONS: ± 1/32" ANGLES: ± 0.5°
  - ALL DIMENSIONS ARE INCHES.
  - REMOVE ALL BURRS AND SHARP EDGES  
.015 MAX.
  - MACHINED SURFACE TO BE 125  
MICR-INCHES OR BETTER.
  - DO NOT SCALE DRAWING.



DESIGN BY	WJR	DATE	12/21/2011
DRAWN BY	PGZ	DATE	04/05/2012
CHECKED BY	BL	DATE	3/4/2022
APPROVED BY	JDE	DATE	03/17/2022

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Title:  
SCOPE OF REGISTRATION - CGA  
STANDARD CRYOGENIC LIQUID  
TRANSFER CONNECTIONS

P/N:

SCALE: 1:1

Project No.: E210020



DWG NO. CRN-D-08051

SHEET: SHEET 3 OF 4

REV. C



SCOPE OF CRN REGISTRATION

No.	Part	Product Description	Size	Material (note 2)	Design P (psi)	MDMT	Design Temp (°F)	Calculation
212.1	580-059-25	NUT-ARG 2.5" 316L	2½	SA-479 316/316L	650	-320	150	E11040.212
212.2	580-093-25	NUT-ARG 2.5" 304 SS	2½	SA-479 304/304L	650	-320	150	E11040.212
213	580-002-15	NUT-ARG 1.5"	1½	SB-505 C86200	650	-320	150	E11040.213
213.1	580-055-15	NUT-ARG 1.5" 316L	1½	SA-479 316/316L	650	-320	150	E11040.213
214	590-000-15	NUT-NIT 1.5"	1½	SB-505 C86200	650	-320	150	E11040.214
214.1	590-055-15	NUT-NIT 1.5" 316L	1½	SA-479 316/316L	650	-320	150	E11040.214
215	590-002-25	NUT-NIT 2.5"	2½	SB-505 C86200	650	-320	150	E11040.215
215.1	590-093-25	NUT-NIT 2.5" 304	2½	SA-479 304/304L	650	-320	150	E11040.215
215.2	590-108-25	NUT-NIT 2.5" SST	2½	SA-479 316/316L	650	-320	150	E11040.215
215.3	590-059-25	NUT-NIT 2.5" 316 SS	2½	SA-479 316/316L	650	-320	150	E11040.215
216	590-088-30	NUT-NIT 3" BRONZE	3	SB-148-C95500	650	-320	150	E11040.216
217	320-015-10	NUT-CO2 1"	1	B16 C36000 H02	650	-320	150	E11040.217
217.1	320-060-10	NUT-CO2 1" SS	1	SA-479 304/304L	650	-320	150	E11040.217
218	320-008-15	NUT-CO2 1.5"	1½	B16 C36000 H02	650	-320	150	E11040.218
218.1	320-070-15	NUT-CO2 1.5" SS	1½	SA-479 304/304L	650	-320	150	E11040.218
219	320-027-20	NUT-CO2 2"	2	SB-505 C86200	650	-320	150	E11040.219
219.1	320-027-20S	NUT-CO2 2" SS	2	SA-479 304/304L	650	-320	150	E11040.219
220	320-034-30	NUT-CO2 3"	3	SB-505 C86200	650	-320	150	E11040.220
221	320-041-40	NUT-CO2 4"	4	SB-505 C86200	650	-320	150	E11040.221
222	326-000-10	NUT-NITROUS OXIDE 1"	1	B16 C36000 H02	650	-320	150	E11040.222
223	326-005-15	NUT-NITROUS OXIDE 1.5"	1½	B16 C36000 H02	650	-320	150	E11040.223
224	450-000-30	NUT-LNG 3"	3	SB-505 C95200	650	-320	150	E11040.224
224.1	450-000-30S	NUT-LNG 3" SST	3	SA-479 304/304L	650	-320	150	E11040.224
224.2	450-000-30S-316	NUT-LNG 3" 316 S/S	3	SA-479 316/316L	650	-320	150	E11040.224
225	600-000-15	NUT-ARGOMIX 1.5"	1½	SB-505 C95500	650	-320	150	E11040.225
226	600-000-25	NUT-ARGOMIX 2.5"	2½	SB-505 C95500	650	-320	150	E11040.226
227	450-003-30	F.E.-LNG 3" W/GASKET ASSY	3	B505 93200	450	-320	150	E11040.227
227.1	450-003-30C836	F.E.-LNG 3" C83600	3	B62 C83600	450	-320	150	E11040.227
227.2	450-003-30M	F.E.-LNG 3"	3	B505 93200	450	-320	150	E11040.227
227.3	450-003-30S	F.E.-LNG 3" 304S/S W/3"FNPT	3	SA-479 304/304L	650	-320	150	E11040.227
227.4	450-003-30BW316	F.E.-LNG 3" 316 S/S W/BWE	3	SA-479 316/316L	650	-320	150	E11040.227
227.5	450-003-30SM	F.E.-LNG 3" 304SST FNPT	3	SA-479 304/304L	650	-320	150	E11040.227
227.6	450-003-SM316	F.E -LNG 3" 316 S/S W/3"FNPT	3	SA-479 316/316L	650	-320	150	E11040.227
227.7	450-003-30SMPS	F.E LNG 3" 304S/S W/3"PIPE SKT	3	SA-479 304/304L	650	-320	150	E11040.227
227.8	450-003-30S-PS	F.E.LNG 3" 304S/S W/3"PIPE SKT	3	SA-479 304/304L	650	-320	150	E11040.227
228	450-004-30	HEADPC-3 LNG W/RETAINER ASSY.	3	SB-505 C85700	450	-320	150	E11040.228
228.1	450-004-30	HEADPC-3" LNG	3	SB-505 C85700	450	-320	150	E11040.228
228.2	450-010-30M	HEADPC-3"LNG W/2"FNPT BRASS	3	SB-505 C85700	450	-320	150	E11040.228
229	450-004-30S	HEADPC-3" LNG SS W/ 3"FNPT	3	SA-479 304/304L	650	-320	150	E11040.229
229.1	450-004-30-316	HEADPC 3" LNG 316 S/S W/BWE	3	SA-479 316/316L	650	-320	150	E11040.229
229.2	450-010-30M316	HEADPC-3" LNG 3"FNPT 316 SST	3	SA-479 316/316L	650	-320	150	E11040.229

THIS IS PART OF CRN  
0H6700.5R3  
Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety  
Program

ORIGINAL

<div>UNLESS OTHERWISE SPECIFIED</div> <div>INTERPRET PER ASME Y14.5-2009</div> <div>1. THE FOLLOWING TOLERANCES APPLY: XXX: ±.01" XXXX: ±.005" FRACTIONS: ± 1/32" ANGLES: ±0.5°</div> <div>2. ALL DIMENSIONS ARE INCHES.</div> <div>3. REMOVE ALL BURRS AND SHARP EDGES .015 MAX</div> <div>4. MACHINED SURFACE TO BE 125 MICR-INCHES OR BETTER.</div> <div>5. DO NOT SCALE DRAWING.</div>		DESIGN BY WJR	DATE 12/21/2011	Title: SCOPE OF REGISTRATION - CGA STANDARD CRYOGENIC LIQUID TRANSFER CONNECTIONS		<div><div>ACME</div><div>CRYOGENICS</div><div><div>QUALITY</div><div>ASSURANCE</div></div><div><div>CVI</div><div>ANALYTICAL</div></div></div>	
		DRAWN BY PGZ	DATE 04/05/2012				
		CHECKED BY BL	DATE 3/4/2022				
		APPROVED BY JDE	DATE 03/17/2022				
<div>THIRD ANGLE PROJECTION</div> <div></div>		THIS DRAWING AND THE INFORMATION OR DATA CONTAINED HEREIN ARE CONSIDERED PROPRIETARY TO ACME CRYOGENICS, INC. AND IS NOT TO BE COPIED, REPRODUCED, DUPLICATED OR DISCLOSED TO OTHER IN WHOLE OR IN PART WITHOUT THE PRIOR WRITTEN CONSENT OF ACME CRYOGENICS, INC. THE DRAWING SHOULD BE RETURNED AS SOON AS IT HAS SERVED THE PURPOSES FOR WHICH IT IS FURNISHED AND WHILE IN THE POSSESSION OF THE RECIPIENT SHOULD BE PROPERLY SAFEGUARDED AGAINST DISCLOSURE TO ANYONE EXCEPT EMPLOYEES WHO REQUIRE IT FOR WORK OR A JOB. THIS RESTRICTION SHALL NOT APPLY TO INFORMATION OR DATA CONTAINED HEREIN WHICH IS AVAILABLE TO THE PUBLIC GENERALLY.				P/N:	
		SCALE: 1:1		Project No.: E210020		B	DWG NO. CRN-D-08051
						SHEET: SHEET 4 OF 4	REV. C





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



## STATUTORY DECLARATION Registration of Fittings

I, David M. Rakos, Director of Quality and Engineering

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

of Acme Cryogenics, Inc.

(Name of Manufacturer)

Located at 2801 Mitchell Avenue, Allentown, PA 18103

(Plant Address)

(610) 791-7909

(Telephone No.)

(610) 791-2837

(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

(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 ASME B31.3 & CGA V-6 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 CSA B51

which has been verified by the following authority, TUV Rheinland.

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:

Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations

(drawings, calculations, test reports, etc.)

Declared before me at Acme Cryogenics Inc in the Commonwealth of Pennsylvania  
the 13<sup>th</sup> day of July AD 20 22.

Commissioner for Oaths:

Eileen R Petrasovits

(Printed name)

Eileen R Petrasovits

(Signature)

Commonwealth of Pennsylvania - Notary Seal  
EILEEN R PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
Commission Number 1191577

[Signature]

(Signature of Declarer)

### FOR OFFICE USE ONLY

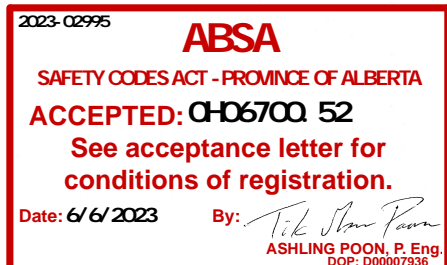
To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category 'H'.

CRN: \_\_\_\_\_

Registered by: \_\_\_\_\_

Dated: 2023-06-06

NOTE: This registration expires on: 2023-04-06



This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act

\*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.

PV 09553 (04/17) \*\* Drawing Sht 1-4 Rev C registered.



## Statutory Declaration Registration of Fittings


Building Act (B-1.1)  
Regulation respecting pressure vessels (B-1.1, r. 6.1)  
Boiler, pressure vessel, and pressure piping code (CSA B51)

This declaration must be filled out and sent to the Régie du bâtiment du Québec (RBQ) by pressure fitting manufacturers when they make an application registration for fittings.

For more information on the application registration for fittings, consult the [www.rbq.gouv.qc.ca/fittings-pv](http://www.rbq.gouv.qc.ca/fittings-pv).

## 1. Fittings to register

List the fittings included in this declaration and that you wish to register.

N°	Description	Additional information (detail, calculations or approval sheets)
1	Drawing CRN-D-08051, Rev. B, C	
2	Scope of CRN Registration,	
3	CALCULATIONS	
4		
5	COMPANY LOGO - SEE RIGHT	

## 2. Declaration of the person in charge

The person in charge is someone in a position of authority, such as a vice-president, a plant manager or a chief engineer.

## 2.1 Design

I, the undersigned, David M. Rakos Director of Quality and Engineering  
(Name of the person in charge) (Title of the person in charge)  
from Acme Cryogenics, Inc., located at 2801 Mitchell Avenue, Allentown, PA 18103  
(Company's name) (Plant's address)

hereby declare that the above-mentioned fittings and subject to the Regulation respecting pressure installations:


☐ comply with the requirements of the ANSI/ASME codes as to their dimensions, identification, material and purpose  
or

☒ are not covered by the ANSI/ASME codes, but are in compliance with ASME B31.3 & CGA V-6  
(Name of code or standard)

code or standard and are designed according to the best current engineering practice, as proven by the enclosed approval report.

## 2.2 Manufacturing quality control

I further declare that the manufacture of these fittings is controlled by a quality control program that complies with the requirements of the  
following code: CSA B51, and has been verified by TUV Rheinland  
(Name of code) (Authorized agency)

Signature of the person in charge: 


Date (yyyy-mm-dd): 2022-07-13



### 3. Declaration of commissioner for oaths

I certify that this declaration has been administered before me, at <u>Acme Cyrogenics</u> , on <u>2022-07-13</u> .	
(Location)	(Date (yyyy-mm-dd)):
Signature of commissioner for oaths: <u>Eileen R Petrasovits</u>	Date (yyyy-mm-dd): <u>2022-07-13</u>
Stamp the seal: <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"><p>Commonwealth of Pennsylvania - Notary Seal EILEEN R PETRASOVITS - Notary Public Lehigh County My Commission Expires Jul 23, 2022 Commission Number 1191577</p></div>	

### 4. Registration confirmation (for RBQ's use only)

As far as I know, this application complies with the requirements of the Act and with standard CSA B51, Part 1, section 4.2, and is accepted for registration in the class _____.	
This registration expires in ten (10) years after the date of registration indicated above, and it must be validated again after this period.	
Canadian registration number (CRN):	Registration date (yyyy-mm-dd):
	<div style="text-align: center;"></div>

#### Documents to attach

Any application registration for fittings must include these documents:

- Statutory Declaration Registration of Fittings (2 copies)
- Detailed calculations or burst test report (1 copy)
- Detailed technical drawings or catalogues (2 copies)
- Example of the manufacturer's marking (1 copy)
- Proof that a valid and approved quality control program has been implemented (1 copy)
- Form Application for design registration (1 copy)

#### Sending the form

This declaration is necessary to submit an application for design registration. Design registration applications must be sent by email only to [enregistrementdesplans@rbq.gouv.qc.ca](mailto:enregistrementdesplans@rbq.gouv.qc.ca).

Documents must be in PDF format and in separate files.





**Statutory Declaration (Registration of Fittings)**

**TSK-1008**

**I. Declaration Information**

I, David M. Rakos  
Director of Quality and Engineering

(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: Acme Cryogenics, Inc.  
(name of manufacturer)

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



located at: 2801 Mitchell Avenue, Allentown, PA 18103  
(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 Act** (check one)

☐ Comply with the requirements of \_\_\_\_\_ which specifies the dimensions,  
(title of recognized North American Standard)  
Materials of construction, pressure / temperature ratings and identification marking of the fittings, or

☒ Are not covered by the provisions of a recognized North American standard and are therefore manufactured  
to comply with ASME B31.3 & CGA V-6 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, TUV Rheinland 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 - CGA Cryogenic Liquid Transfer Fittings

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

Commonwealth of Pennsylvania - Notary Seal  
EILEEN R PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
Commission Number 1191577

**II. Declaration**

DECLARED before me at Acme Cryogenics Inc in the Commonwealth of Pennsylvania  
this 13th day of July, 2022  
Eileen R Petrasovits (print name) [Signature] (Signature)  
Eileen R Petrasovits (Signature of Commissioner of Oaths)

**III. Office Use Only**

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

(Registration Number)

(Date Registered)  
(For the Chief)

**Technical  
Safety Authority  
of Saskatchewan**

Registration No. 0H6700.53  
File No. 13645  
  
Date: May 25, 2023  
Expiry Date: April 6, 2033  
Codes & Standards Compliance Office



June 16, 2023

TSSA  
345 Carlingview Drive  
Toronto, ON M9W 6N9

**Dear Tanya Francis,**

**Re: Reciprocal CRN Registration in Manitoba**

As indicated by the Regulatory Reconciliation and Cooperation Table and the Reconciliation Agreement for the Canadian Registration Number (CRN) for Pressure Equipment, the design reviews conducted and accepted by the Canadian province or territory, or their delegated safety authority, will be mutually recognized in the Province of Manitoba. If a registration is conditionally based on compliance with the notes set by the original issuing Jurisdiction, such compliance shall be applied the same to this Province.

Your submission has been registered, as follows:

File Number:	74-R3234
CRN:	0H6700.54
Scope:	RENEWAL - SCOPE OF CRN REGISTRATION DWG. NO. CRN-D-08051 SHEET 1 TO 4 REV. C
Manufacturer:	ACME CRYOGENICS, INC.
Expiry Date:	6 April 2033

Along with this letter is the invoice for registration.

In addition, every Pressure Vessel, Boiler, and Heat Exchanger shall be stamped with the registration number and as required by CSA Code B51, a Manufacturer's Data Report (MDR) must be forwarded to this office immediately at the time a unit is shipped to Manitoba. Send your MDR to [gasupport@gov.mb.ca](mailto:gasupport@gov.mb.ca). In your subject line, indicate "*Manufacturer's Data Report-CRN No.*" A fee shall be billed to the Manufacturer to process data reports in accordance with the Steam and Pressure Plants Regulation section 17.1.

Please contact [gasupport@gov.mb.ca](mailto:gasupport@gov.mb.ca) for any questions or concerns.

**Inspection and Technical Services**

Labour and Immigration  
508 – 401 York Avenue, Winnipeg, MB R3C 0P8  
T (204) 945-3373 | F (204) 948-2089



ATTN: TSSA BPV NATIONAL REGISTRATION  
TECHNICAL STANDARDS & SAFETY AUTHORITY  
345 CARLINGVIEW DRIVE  
TORONTO ON M9W 6N9

**Date:** 19-Sep-2023  
**TSBC Account #:** 061440  
**TSBC Admin Number:** 97747  
**Canadian Registration Number:** 0H6700.51

### Re: Application for Design Registration

The design, as detailed in your Design Portal application 0H6700.5R3 - ACME CRYOGENICS, INC. for a Pressure Fitting is registered with the following notes and considerations:

<b>Registered To:</b>	ACME CRYOGENICS, INC.
<b>Project Name:</b>	0H6700.5R3 - ACME CRYOGENICS, INC.
<b>Drawing #:</b>	RENEWAL - SCOPE OF CRN REGISTRATION DWG. NO. CRN-D-08051 SHEET 1 TO 4
<b>REV. C</b>	
<b>Drawing Revision:</b>	-

### Conditions of Registration:

(1) Fitting Registration Expiry Date: 06-Apr-2033 (2) The registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of quality management system lapse before the expiry date indicated above, this registration shall become void.

### Reviewer's Notes:

Any additional conditions and considerations from the initial province of registration shall apply to this BC registration.

Full details of this submission including the scope of registration, design conditions, fabrication details, and calculations pertaining to this design are located in the above Admin Number on the Design Portal. For all other enquiries, please contact [eim@technicalsaftybc.ca](mailto:eim@technicalsaftybc.ca).

The Engineering Information Management Team




# UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

New Brunswick  
Nunavut

Nova Scotia  
Yukon

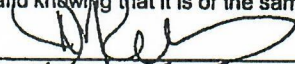
Prince Edward Island  
Northwest Territories

Newfoundland and Labrador

Manufacturers Name: Acme Cryogenics, Inc.	
Manufacturers Address: 2801 Mitchell Avenue, Allentown, PA 18103	
Plant Locations: same as above	
<b>Category of Fittings to be registered. Circle one Category only</b> A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs (H) Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> , (Meeting CNSC or ASME requirements)	<b>Title of the Standard of Construction</b>  ASME B31.3, CGA V-6
<b>Show Manufacturers Name, Trademark, or Logo as it will appear on the product</b>  	<b>Type of Construction</b> Forged <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Wrought <input type="checkbox"/> Cast <input type="checkbox"/> Other <input type="checkbox"/> Describe other:
<b>List of supporting documentation and identification of the actual items to be registered:</b> Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations  Scope: CRN renewal. CGA standard cryogenic connections. Includes Liquid Transfer Conn. (Nitrogen, Oxygen and Argon), Standard Carbon Dioxide Transfer Connections and Liquid Natural Gas LNG Fittings. Note: If the registered fittings are connected to a hose assembly, the hose assembly must be qualified by proof testing and registered under a different CRN. Scope of registration CRN-D-08051 Sheet 1 TO 4 Rev.C (DGallant)	

## Declaration:

I, David M. Rakos, Director of Quality and Engineering (see note 3) employed by Acme Cryogenics, Inc. and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by TUV Rheinland as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 

Declared before me at Acme Cryogenics Inc

This 13<sup>th</sup> day of July AD 2022

Commissioner of Oaths

Or Notary Public: (sign) 

(Affix Official seal to the right)

Use this space for the Official Seal

Commonwealth of Pennsylvania - Notary Seal  
 EILEEN R. PETRASOVITS - Notary Public  
 Lehigh County  
 My Commission Expires Jul 23, 2022  
 Commission Number 1191577

This space for Regulatory Authority use.

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

CRN: 0H6700.5 Rev3

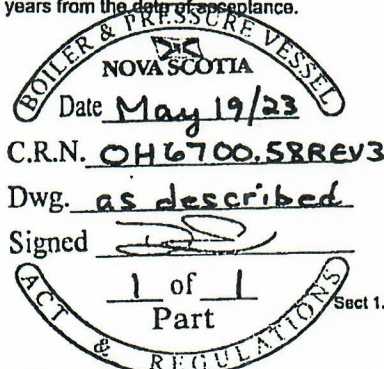
FID#: 1556

Notes:

- All Fittings shall be registered in the name of the Manufacturer.
- Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
- The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.
- Quality Control programs shall be resubmitted for validation.

11/2016

CRN expires April 6th, 2033





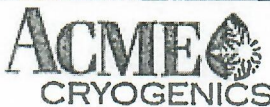
# UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

New Brunswick  
Nunavut

Nova Scotia  
Yukon

Prince Edward Island  
Northwest Territories

Newfoundland and Labrador

Manufacturers Name: Acme Cryogenics, Inc.	
Manufacturers Address: 2801 Mitchell Avenue, Allentown, PA 18103	
Plant Locations: same as above	
<p><b>Category of Fittings to be registered. Circle one Category only</b></p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers</p> <p>B Flanges: all flanges</p> <p>C Valves: all line valves</p> <p>D Expansion joints, flexible connections, and hose assemblies: all types</p> <p>E Strainers, filters, separators, and steam traps</p> <p>F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters</p> <p>G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs</p> <p><input checked="" type="radio"/> H Pressure retaining components that do not fall into one of the above categories</p> <p>N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting CNSC or ASME requirements)</p>	<p><b>Title of the Standard of Construction</b></p> <p>ASME B31.3, CGA V-6</p>
<p>Show Manufacturers Name, Trademark, or Logo as it will appear on the product</p> <div style="text-align: center;">  </div>	
<p><b>Type of Construction</b></p> <p>Forged <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Wrought <input type="checkbox"/>          Cast <input checked="" type="checkbox"/> Other <input type="checkbox"/>          Describe other:</p>	
<p><b>List of supporting documentation and identification of the actual items to be registered:</b></p> <p>Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations</p> <p>Scope: CRN renewal. CGA standard cryogenic connections. Includes Liquid Transfer Conn. (Nitrogen, Oxygen and Argon), Standard Carbon Dioxide Transfer Connections and Liquid Natural Gas LNG Fittings.</p> <p>Note: If the registered fittings are connected to a hose assembly, the hose assembly must be qualified by proof testing and registered under a different CRN. Scope of registration CRN-D-08051 Sheet 1 TO 4 Rev.C (DGallant)</p>	

## Declaration:

I, David M. Rokni, Director of Quality and Engineering (see note 3) employed by Acme Cryogenics, Inc. and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by TUV Rheinland as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: [Signature]

Declared before me at Acme Cryogenics Inc

This 13<sup>th</sup> day of July AD 2022

Commissioner of Oaths

Or Notary Public: (sign) Eileen R. Petrasovits

(Affix Official seal to the right)

Use this space for the Official Seal

Commonwealth of Pennsylvania - Notary Seal  
 EILEEN R. PETRASOVITS - Notary Public  
 Lehigh County  
 My Commission Expires Jul 23, 2022  
 Commission Number 1191377

<p>CRN: <u>0H6700.5 Rev3</u></p> <p>FID#: <u>1556</u></p> <p>Notes:</p> <ol style="list-style-type: none"> <li>All Fittings shall be registered in the name of the Manufacturer.</li> <li>Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.</li> <li>The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.</li> <li>Quality Control programs shall be resubmitted for validation.</li> </ol> <p>11/2016          CRN expires April 6th, 2033</p>	<p>This registration must be revalidated after ten (10) years from the date of acceptance.</p> <p>Registered <u>0H6700.50 Rev3</u>          Date <u>May 24, 2023</u>          Engineering and Inspection Services          Registered by <u>[Signature]</u>          UNDER THE AUTHORITY OF THE          PUBLIC SAFETY ACT AND          THE BOILER, PRESSURE VESSEL AND          COMPRESSED GAS REGULATIONS</p> <p>Sect 10 - Fittings Rev.2</p>
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# UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

New Brunswick  
Nunavut

Nova Scotia  
Yukon

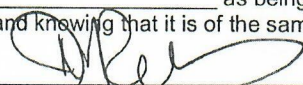
Prince Edward Island  
Northwest Territories

Newfoundland and Labrador

Manufacturers Name: Acme Cryogenics, Inc.	
Manufacturers Address: 2801 Mitchell Avenue, Allentown, PA 18103	
Plant Locations: same as above	
<b>Category of Fittings to be registered. Circle one Category only</b> A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs (H) Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> , (Meeting CNSC or ASME requirements)	<b>Title of the Standard of Construction</b>  ASME B31.3, CGA V-6
<b>Show Manufacturers Name, Trademark, or Logo as it will appear on the product</b>  	<b>Type of Construction</b> Forged <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Wrought <input type="checkbox"/> Cast <input checked="" type="checkbox"/> Other <input type="checkbox"/> Describe other:
<b>List of supporting documentation and identification of the actual items to be registered:</b> Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations  Scope: CRN renewal. CGA standard cryogenic connections. Includes Liquid Transfer Conn. (Nitrogen, Oxygen and Argon), Standard Carbon Dioxide Transfer Connections and Liquid Natural Gas LNG Fittings. Note: If the registered fittings are connected to a hose assembly, the hose assembly must be qualified by proof testing and registered under a different CRN. Scope of registration CRN-D-08051 Sheet 1 TO 4 Rev.C (DGallant)	

## Declaration:


I, David M. Rakos, Director of Quality and Engineering (see note 3) employed by Acme Cryogenics, Inc. and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by TUV Rheinland as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 



Declared before me at Acme Cryogenics, Inc.

This 13<sup>th</sup> day of July AD 2022

Commissioner of Oaths

Or Notary Public: (sign) 

(Affix Official seal to the right)

CRN: <u>0H6700.5 Rev3</u> FID#: <u>1556</u> Notes: 1. All Fittings shall be registered in the name of the Manufacturer. 2. Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The Declaration shall be made by the person having full authority and responsibility for the quality of the end product. 4. Quality Control programs shall be resubmitted for validation.  11/2016 CRN expires April 6th, 2033	Use this space for the Official Seal   My Commission Expires Jul 23, 2022 DEPT OF JUSTICE PUBLIC SAFETY BOILER & PRESSURE VESSEL ACT  REGISTRATION ONLY CRN <u>0H6700.57 Rev3</u>  CHIEF BOILER INSPECTOR DATE <u>5/19/23</u>  Sect 1.0 - Fittings Rev.2 <input type="checkbox"/> BLRs <input type="checkbox"/> PVs <input checked="" type="checkbox"/> FITTINGS <input type="checkbox"/> NUCLEAR COMPONENTS
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# **UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS**

New Brunswick  
Nunavut

Nova Scotia  
Yukon

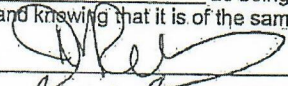
Prince Edward Island  
Northwest Territories

Newfoundland and Labrador

Manufacturers Name: <u>Acme Cryogenics, Inc.</u>	
Manufacturers Address: <u>2801 Mitchell Avenue, Allentown, PA 18103</u>	
Plant Locations: <u>same as above</u>	
<p><b>Category of Fittings to be registered. Circle one Category only</b></p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers</p> <p>B Flanges: all flanges</p> <p>C Valves: all line valves</p> <p>D Expansion joints, flexible connections, and hose assemblies: all types</p> <p>E Strainers, filters, separators, and steam traps</p> <p>F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters</p> <p>G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs</p> <p><input checked="" type="radio"/> H Pressure retaining components that do not fall into one of the above categories</p> <p>N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting CNSC or ASME requirements)</p>	<p><b>Title of the Standard of Construction</b></p> <p>ASME B31.3, CGA V-6</p>
<p>Show Manufacturers Name, Trademark, or Logo as it will appear on the product</p> <div align="center">  </div>	
<p><b>Type of Construction</b></p> <p>Forged <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Wrought <input type="checkbox"/></p> <p>Cast <input type="checkbox"/> Other <input type="checkbox"/></p> <p>Describe other:</p>	
<p><b>List of supporting documentation and identification of the actual items to be registered:</b></p> <p>Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations</p> <p>Scope: CRN renewal. CGA standard cryogenic connections. Includes Liquid Transfer Conn. (Nitrogen, Oxygen and Argon), Standard Carbon Dioxide Transfer Connections and Liquid Natural Gas LNG Fittings.</p> <p>Note: If the registered fittings are connected to a hose assembly, the hose assembly must be qualified by proof testing and registered under a different CRN. Scope of registration: CRN-D-08051 Sheet 1 TO 4 Rev.C (DGallant)</p>	

## **Declaration:**

I, David M. Rakos, Director of Quality and Engineering (see note 3) employed by Acme Cryogenics, Inc. and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by TUV Rheinland as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

Signature of Declarer: 

Declared before me at Acme Cryogenics Inc

This 13th day of July AD 2022


Commissioner of Oaths

Or Notary Public: (sign) Eileen R Petrasovits

(Affix Official seal to the right)

Use this space for the Official Seal

Commonwealth of Pennsylvania - Notary Seal  
EILEEN R PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
Commission Number 1191577

<p>CRN: <u>0H6700.5 Rev3</u></p> <p>FID#: <u>1556</u></p> <p>Notes:</p> <ol style="list-style-type: none"> <li>All Fittings shall be registered in the name of the Manufacturer.</li> <li>Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.</li> <li>The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.</li> <li>Quality Control programs shall be resubmitted for validation.</li> </ol> <p>1/1/2016</p> <p>CRN expires April 6th, 2033</p>	<p align="center">This space for Regulatory Authority use.</p> <p align="center">This registration must be revalidated after ten (10) years from the date of acceptance.</p> <p align="center"><b>ACCEPTED</b></p> <p align="center"><b>PROVINCE OF PRINCE EDWARD ISLAND</b></p> <p align="center"><b>COMMUNITIES, LAND &amp; ENVIRONMENT</b></p> <p>CRN: <u>0H6700.57 REV 3</u></p> <p>DATE: <u>MAY 19/23</u></p> <p></p> <p align="center"><b>INSPECTION SERVICES SECTION</b></p> <p align="center"><b>BOILER/PRESSURE VESSEL BRANCH</b></p> <p align="right">Sect 1.0 - Fittings Rev.2</p>
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# **UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS**

New Brunswick  
Nunavut

Nova Scotia  
Yukon

Prince Edward Island  
Northwest Territories

Newfoundland and Labrador

Manufacturers Name: <u>Acme Cryogenics, Inc.</u>	
Manufacturers Address: <u>2801 Mitchell Avenue, Allentown, PA 18103</u>	
Plant Locations: <u>same as above</u>	
<p><b>Category of Fittings to be registered. Circle one Category only</b></p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers</p> <p>B Flanges: all flanges</p> <p>C Valves: all line valves</p> <p>D Expansion joints, flexible connections, and hose assemblies: all types</p> <p>E Strainers, filters, separators, and steam traps</p> <p>F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters</p> <p>G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs</p> <p><input checked="" type="radio"/> H Pressure retaining components that do not fall into one of the above categories</p> <p>N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting CNSC or ASME requirements)</p>	<p><b>Title of the Standard of Construction</b></p> <p>ASME B31.3, CGA V-6</p>
<p>Show Manufacturers Name, Trademark, or Logo as it will appear on the product</p> <p align="center"><b>ACME</b> CRYOGENICS</p>	<p><b>Type of Construction</b></p> <p>Forged <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Wrought <input type="checkbox"/></p> <p>Cast <input type="checkbox"/> Other <input type="checkbox"/></p> <p>Describe other:</p>
<p><b>List of supporting documentation and identification of the actual items to be registered:</b></p> <p>Drawing CRN-D-08051, Rev. B, Scope of CRN Registration, Calculations</p> <p>Scope: CRN renewal. CGA standard cryogenic connections. Includes Liquid Transfer Conn. (Nitrogen, Oxygen and Argon), Standard Carbon Dioxide Transfer Connections and Liquid Natural Gas LNG Fittings.</p> <p>Note: If the registered fittings are connected to a hose assembly, the hose assembly must be qualified by proof testing and registered under a different CRN. Scope of registration CRN-D-08051 Sheet 1 TO 4 Rev.C (DGallant)</p>	

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Signature of Declarer: [Signature]

Declared before me at Acme Cryogenics Inc

This 13<sup>th</sup> day of July AD 2022


Commissioner of Oaths

Or Notary Public: (sign) Eileen R. Petrasovits

(Affix Official seal to the right)

Use this space for the Official Seal

Commonwealth of Pennsylvania - Notary Seal  
EILEEN R. PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
Commission Number 1191577

<p>CRN: <u>0H6700.5 Rev3</u></p> <p>FID#: <u>1556</u></p> <p>Notes:</p> <ol style="list-style-type: none"> <li>All Fittings shall be registered in the name of the Manufacturer.</li> <li>Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.</li> <li>The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.</li> <li>Quality Control programs shall be resubmitted for validation.</li> </ol> <p>11/2016 CRN expires April 6th, 2033</p>	<p align="center">This space for Regulatory Authority use.</p> <p align="center">This registration must be revalidated after ten (10) years from the date of acceptance.</p> <div align="center">   <b>Northwest Territories</b>  <b>REGISTERED</b>  <b>UNDER THE AUTHORITY OF</b>  <b>THE BOILER AND PRESSURE</b>  <b>VESSEL ACT.</b>  <b>C.R.N. 0H6700.5T Rev3</b>  <b>SIGNED: [Signature]</b>  <b>DATE: May 23/23</b> </div> <p align="right">Sect 1.0 - Fittings Rev.2</p>
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65.00



# **UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS**

New Brunswick  
Nunavut

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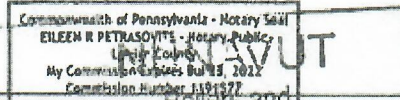
This 13<sup>th</sup> day of July AD 2022

Commissioner of Oaths

Or Notary Public: (sign) [Signature]

(Affix Official seal to the right)

Use this space for the Official Seal



<p>CRN: <u>0H6700.5 Rev3</u></p> <p>FID#: <u>1556</u></p> <p>Notes:</p> <ol style="list-style-type: none"> <li>All Fittings shall be registered in the name of the Manufacturer.</li> <li>Each Category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.</li> <li>The Declaration shall be made by the person having full authority and responsibility for the quality of the end product.</li> <li>Quality Control programs shall be resubmitted for validation.</li> </ol> <p>11/2016 CRN expires April 6th, 2033</p>	<p>This space for Regulatory Authority use.</p> <p>This registration must be reval'dated after ten (10) years from the date of acceptance</p> <p align="center"><b>REGISTERED</b></p> <p>CRN <u>0H6700.5N Rev 3</u></p> <p>Date <u>2023-05-19</u></p> <p>Signed <u>[Signature]</u></p> <p align="center">Chief Inspector</p> <p align="center">Territorial Registration Fee</p>
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# UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

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Signature of Declarer: [Signature]

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Commissioner of Oaths

Or Notary Public: (sign) [Signature]

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EILEEN R. PETRASOVITS - Notary Public  
Lehigh County  
My Commission Expires Jul 23, 2022  
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CRN: 0H6700.5 Rev3

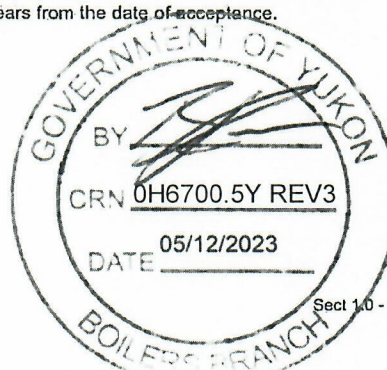
FID#: 1556

Notes:

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4. Quality Control programs shall be resubmitted for validation.

11/2016

CRN expires April 6th, 2033



Sect 1.0 - Fittings Rev.2