



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, Paul Wright Engineering Supervisor
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Crane Instrumentation & Sampling
(Name of Manufacturer)

Located at 405 Centura Court, Spartanburg, SC, 29303, USA
(Plant Address) (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 2020 Ed. (Unlisted Components)/ASME B31.3 2020 Ed. (Unlisted Components)
(Title of recognized North American Standard)
 which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;
- or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of _____ ISO 9001 which has been verified by the following authority, SAI Global.

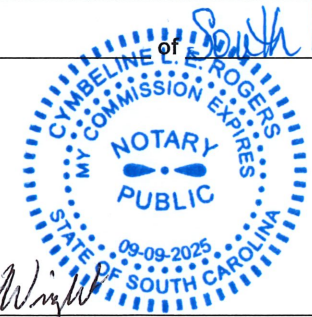
The items covered by this declaration, for which I seek registration, are category A type fittings. In support of this application, the following information and/or test data are attached as follows:

ER-GYROCRN
(drawings, calculations, test reports, etc.)

Declared before me at Spartanburg in the State of South Carolina
 the 3rd day of September AD 2021

Commissioner for Oaths:
Cymbeline L.B. Rogers
(Printed name)
Cymbeline L.B. Rogers
(Signature)

Paul Wright
(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 'A'.

CRN: _____

Registered by: _____

Dated: _____

NOTE: This registration expires on: Apr. 13, 2032

Technical Standards and Safety Authority Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0A23909.5

Signed: Lacene Z...

Date: April 13, 2022.

| | | |
|--|---|--|
|  ER-GYROCRN | Engineering Report Title Qualification of Hoke Gyrolok Tube and Pipe Fittings by Burst Test and Similarity | REV. B DATE: 14-FEB-2022 PAGE: 231 OF 232 |
|--|---|--|

Scope of Registration

| Description | Connection Type & Size Range | Material | Minimum Design Metal Temperature (MDMT) | Max. Allowable Working Pressure | | Design Code of Construction |
|-----------------------------------|--|--|--|---|---------------------------------|---|
| | | | | MDMT to 100°F | At Maximum Temperature | |
| Gyrolok Tube and Pipe Fittings | Gyrolok® Compression Fitting Ends Sizes 1/8" to 1" | F316/L SST (ASTM A182 / ASME SA-182) (Shaped fittings) | -20°F for ASME B31.1 applications -40 °F/°C | SEE TABLE BELOW | SEE TABLE BELOW | ASME B31.1 (UNLISTED COMPONENTS) & ASME B31.3 (UNLISTED COMPONENTS) |
| | Male NPT 1/16" to 2" | | | 316/L SST (ASTM A479 / ASME SA-479) (Straight Fittings) | 10,975 psig to 3800 psig | 7000 psig to 2900 psig @ 1000°F |
| | Male ISO-7 (tapered) 1/8" to 2" | 7000 psig to 3000 psig | | | 4700 psig to 2300 psig @ 1000°F | |
| | Female NPT 1/16" to 2" | | | 7000 psig to 3000 psig | | 4700 psig to 2300 psig @ 1000°F |
| Female ISO-7 (tapered) 1/8" to 2" | | | | | | |

| | | | |
|---|--|---|--|
|  ER-GYROCRN | <p style="text-align: center;">Engineering Report</p> <p style="text-align: center;">Title Qualification of Hoke Gyrolok Tube and Pipe Fittings by Burst Test and Similarity</p> | REV. DATE: PAGE: | <p style="text-align: center;">B</p> <p style="text-align: center;">14-FEB-2022</p> <p style="text-align: center;">232 OF 232</p> |
|---|--|---|--|

Scope of Registration (cont'd)

| Gyrolok End Connection Size | MAWP at temps. up to 100°F | MAWP at temps. at 1000°F (max. temp.) |
|-----------------------------|----------------------------|---------------------------------------|
| 1/8 in. | 8421 psig | 6442 psig |
| 1/4 in. | 7542 psig | 5749 psig |
| 3/8 in. | 6710 psig | 5133 psig |
| 1/2 in. | 5795 psig | 4433 psig |
| 9/16 in. | 5461 psig | 4178 psig |
| 5/8 in. | 5045 psig | 3860 psig |
| 3/4 in. | 4213 psig | 3223 psig |
| 13/16 in. | 3797 psig | 2905 psig |
| 7/8 in. | 3381 psig | 2586 psig |
| 15/16 in. | 2965 psig | 2268 psig |
| 1 in. | 2584 psig | 1977 psig |

THIS IS PART OF CRN
0A23909.5
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Boilers and Pressure Vessels Safety Program