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CSA INTERNATIONAL

Standards
Development

QMI
Management Systems Registration

Certification
and Testing

To:	TSSA	From:	Renzo Pupulin
Company:	Ashcroft Inc.	Phone:	416 - 747- 2345
Fax:	416 - 231-6183	Fax:	416 - 401- 6789
Pages:	6	Location:	Toronto
Our File:	ANR-1444	Date:	December 7, 2009

Your File: 178560

Subject: Request for Design Registration

Dear Ms. Francis,

CSA has reviewed the documentation submitted by TSSA on behalf of Ashcroft Inc . These fittings have been registered by CSA for the Province of Québec. In accordance with an agreement between CSA, the Provinces of Québec, Manitoba and Saskatchewan, this registration is recognized by both Manitoba and Saskatchewan, (see copies of attachments), and these fittings are acceptable for use in these Provinces. A copy of the stamped Statutory Declaration is attached with the prefix CSA per the agreement.

The CRN is CSA-0F12994.56ADD1.

The cost for this service is \$ 760.00 plus GST.

A copy of the Statutory Declaration with an original stamp affixed will be forwarded to you along with our invoice by regular mail.

Yours truly

Renzo Pupulin
Project Group Manager HVAC

renzo.pupulin@csa-international.org
[CSA International <http://www.csa-international.org/>](http://www.csa-international.org/)



TECHNICAL STANDARDS &
SAFETY AUTHORITY
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4

ASHCROFT

See Attached Summary MAWP-02

STATUTORY DECLARATION

Registration of Fittings

I, Robert D Thomas, VP Development Engineering

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

of Ashcroft Inc.

(Name of Manufacturer)

Located at 250 East Main Street, Stratford, CT, USA

(Plant Address)

203.378.8281

(Telephone No.)

203.385.0408

(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

CSA B51, ASME BPV Code Section VIII Division 1, ASME B31.3, ASME B31.1, CSA C22.2 61010-1

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with 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 9001:2000 which has been verified by the following authority, Lloyd's Register Quality Assurance (LRQA Inc. Houston).

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

PRP01-DS-001, Rev 1; MAWP-02

(drawings, calculations, test reports, etc.)

Declared before me at Stratford, CT USA in the County of Fairfield
the 25 day of June AD 2009.

Commissioner for Oaths:

Olimpia M. DeCrescenzo
(Printed name)

O.M. DeCrescenzo exp. 8/31/09
(Signature)

[Signature]
(Signature of Declarer)

FOR OFFICE USE ONLY

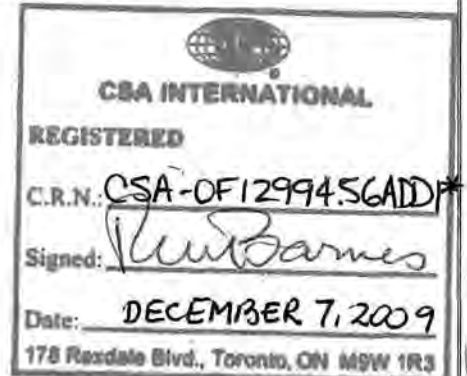
To the best of my knowledge and belief, the application meets the requirements of the *Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation*, and CSA Standard B51 and is accepted for registration in Category F.

CRN: CSA-OF12994.56ADD1*

Registered by: R. BARNES

Dated: DECEMBER 7, 2009

NOTE: This registration expires on MAY 1, 2019



250 East Main Street
Stratford, CT 06614
USA
Tel: 203-378-8281
Fax: 203-385-0408
Email: info@ashcroft.com
www.ashcroftinc.com

Ms. Cathy Turylo
Manager, Engineering Services
Boilers and Pressure Vessels Safety
Technical Standards & Safety Authority
14th Floor, Centre Tower
Toronto, Ontario
Canada M8X 2X4



RE: **Summary of Addendum to 0F12994 - Ashcroft, Inc**

Dear Ms. Turylo

The attached request for addendum addresses the omission of the diaphragm seal types 105 & 205 from the original approved CRN 0F12994.

Seal configurations were identified in chapter 2 of the design registration package DCR01-DS-001, Rev. 0 as the weakest components, and witness burst test results were accordingly conducted and included in the design registration package under approved CRN 0F12994. Seal configurations associated with diaphragm seal types 105 & 205 do not differ from those previously burst tested under ASME BPV code Section VIII, Div. 1 UG-101 and approved in CRN 0F12994. Furthermore, catalogue information included in CRN 0F12994 does not need to be updated.

This addendum pertains exclusively to the omission of the circumferential and longitudinal stress calculations for the process connections of diaphragm seal types 105 and 205 respectively, the inclusion of the relevant drawings in the design registration, and the inclusion of these diaphragm seal types in the summary table, that is referenced by the statutory declaration.

Accordingly, Appendix I of this letter summarizes the inclusion of tabular circumferential and longitudinal stress calculation for diaphragm seal types 105 and 205. Appendix II includes the drawings. A revision of the original MAWP tabular summary, with changes highlighted, is found in Appendix III.

As always, thank you for your kind assistance.

Yours Truly,

Robert D Thomas
VP Development Engineering
Ashcroft Inc.



ASHCROFT

HEISE

WILLY

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WEKSLER



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

**Ashcroft, Inc.
Stratford, Connecticut, USA**

has been approved by Lloyd's Register Quality Assurance
to the following Quality Management System Standards:

ISO 9001:2000

The Quality Management System is applicable to:

**Design and Manufacture of Pressure and Temperature
Calibration Equipment. Distribution of Pressure and
Temperature Control Equipment Sourced Globally.**

Approval
Certificate No: UQA 0100118

Original Approval: January 11, 1994

Current Certificate: February 1, 2009

Certificate Expiry: January 31, 2012


Issued by: Lloyd's Register Quality Assurance, Inc.



Manitoba



Labour

Mechanical and Engineering

500 — 401 York Avenue
Winnipeg MB R3C 0P8
CANADA

PH: (204) 945-3373
FAX: (204) 948-2308

April 22, 1998

The Province of Manitoba will be participating with Quebec, Saskatchewan and the Canadian Standards Association in a pilot project for the registration of fittings. We will recognize registrations done by CSA and accept such fittings for use in Manitoba. The letters CSA will be applied in front of the CRN to indicate which fittings have been registered in this manner. I would appreciate it if you could inform your clients of this additional marking request.

You may now inform your clients that the CSA registration is acceptable in Manitoba.

Yours truly,

I.W. Mault, P.Eng.
Director



Saskatchewan
Municipal
Government

Saskatchewan

Protection Services
330 - 1851 Victoria Avenue
Regina, Saskatchewan
S4P 3V7

787-4509

April 23, 1998

Re: Fittings Registration

The Province of Saskatchewan will be participating with Quebec, Manitoba and the Canadian Standards Association (CSA) in a pilot project for the registration of fittings. We will recognize registrations done by CSA and accept such fittings for use in Saskatchewan.

The letters CSA will be applied as a prefix to the CRN to indicate which fittings have been registered in this manner. I would appreciate if you could inform your clients of this additional marking requirement.

You may also inform your clients that fittings registered by CSA are accepted for use in Saskatchewan.

Yours truly,

N. Surtees, P. Eng.
Executive Director



250 East Main Street, Stratford, CT, USA 06614. Tel 203.378.8281. Fax 203.385.0408.

MAWP-02

Ashcroft Diaphragm Seal Type	Size (in) (1)	Diaphragm Material (4)	Bottom Housing Material (4)	MAWP at ambient (psi or ASME B16.5 class #) (3)			Maximum Design Temperature T (°F)	MAWP at Maximum Design Temperature (psi or ASME B16.5 class #) (3)			Codes of Construction	
				Seal A	Seal B	Seal C		Seal A	Seal B	Seal C		
100, 101, 104, 107, 105	1/4, 1/2, 3/4, 1, 1.5, 3, 4	Metallic	Metallic	1250			750	730			ASME B31.1	
			PVC or Kynar	200			74, 125, 150	200, 125, 80 (2)				
Metallic	150#				750	150#						
Teflon	290				150	270						
102, 103	1/2, 3/4, 1, 1.5, 2, 3	Metallic	PVC or Kynar	75			100	75				
	1, 1.5, 2											
200, 201, 204, 207, 205	1/4, 1/2, 3/4, 1, 1.5, 3, 4		Metallic	Metallic			1250	750		730		ASME B31.3
			Teflon				1250	400		875		
		Viton				500	350		365			
		Kalrez			500	212		425				
		Metallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)			
		Nonmetallic				200	74, 125, 150		200, 125, 80 (2)			
202, 203	1/2, 3/4, 1, 1.5, 2, 3	Metallic	Metallic			150#, 300#, 600#	750		150#, 300#, 600#	ASME B16.5		
		Teflon					400					
		Viton				150#	350		150#			
		Kalrez					212					
	1, 1.5, 2	Metallic	Teflon			290	150		270			
		Nonmetallic				290		270				
		Metallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)			
		Nonmetallic				75	100		75			
300, 301, 304	1/4, 1/2, 3/4, 1, 1.5	Teflon	Metallic			1250	400		875	CSA C22.2 61010-1 ANNEX G		
		Viton				500	350		365			
		Kalrez				500	212		425			
		Nonmetallic	PVC or Kynar			200	74, 125, 150		200, 125, 80 (2)			
302, 303	1/2, 3/4, 1, 1.5, 2, 3	Teflon	Metallic				400					
		Viton				150#	350		150#			
		Kalrez					212					
	1.5, 2	Nonmetallic	Teflon			290	150		270			
		Nonmetallic	PVC or Kynar			75	100		75			
500, 501	1/4, 1/2, 3/4, 1	Metallic	Metallic			500		290	CSA C22.2 61010-1 ANNEX G			
400, 401					4400		750	2580				
402, 403	1/2, 3/4, 1, 1.5, 2, 3					150#, 300#, 600#				150#, 300#, 600#		

Notes:

- (1) Types 104, 204, and 304 not available in 1.5". Types 107 and 207 also available in 2". (consult factory). Only Type 105, 205 available in 3" and 4"
- (2) Maximum Allowable Working Pressure (MAWP) at respective Maximum Design Temperature. (consult factory)
- (3) Seal A - Threaded capsule diaphragm; Seal B - Welded and clamped or welded only diaphragm; Seal C - Bonded/Welded and Clamped or Clamped only diaphragm (consult factory)
- (4) Nickel constructions excluded. Metallic materials UNS S31603 equivalent or stronger are qualified under this CRN registration. (consult factory)