345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

January 03, 2019

SCOTT ISLIP
ROUND ENGINEERING INC
10 SEGWUN RD
WATERDOWN ON L8B 0K6
CA

Service Request Type: BPV-Fitting Registration
Service Request No.: 2459072
Your Reference No.: R-0984A
Registered to: CORROSION RESISTANT PRODUCTS LIMITED

Dear SCOTT ISLIP,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN: **0C20968.5**
Main Design No.: SAMPLE VALVES PFA LINED 1-1/2", 3", 6"
Expiry Date: 03-Jan-2029

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

Note: See 'scope of CRN registration' and design report number R-0984A page 1 of 34.

A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Alan Wu P. Eng.
Mechanical Engineer, BPV
Tel. : 416-734-3443
Fax : 416-231-6183
Email : awu@tssa.org

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

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

crp

STATUTORY DECLARATION
Registration of Fittings

I, David MacGregor, Engineering Manager
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Corrosion Resistant Products Limited
(Name of Manufacturer)

Located at Todmorden Road, Littleborough, OL15 9EG, United Kingdom +441706756404
(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 B31.3, ASME B16.34
(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 9001:2015 which has been verified by the following authority, ALCUMUS ISOQAR.

The items covered by this declaration, for which I seek registration, are category C - SAMPLE VALVES type fittings. In support of this application, the following information and/or test data are attached as follows:
SCOPE OF CRN REGISTRATION, REPORTS, DRAWINGS, CALCULATIONS
(drawings, calculations, test reports, etc.)

Declared before me at Littleborough **in the** County **of** Lancashire

the 13th **day of** December **AD 2018**.

JOHN A.C. PORTER LLB
Wrigley Claydon Solicitors
23/33 Union Street
Oldham
OL1 1HH

Commissioner for Oaths

JOHN PORTER
(Printed name)

(Signature)

David MacGregor
(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 6.

CRN: OC20968.5

Registered by: A Wu

Dated: Jan 3, 2019

NOTE: This registration expires on Jan 3, 2029

Technical Standards and Safety Authority — **Boilers and Pressure Vessels Safety Program**

REGISTERED

C.R.N.: OC20968.5

Signed: AS

Date: Jan 3, 19

PV 09553 (06/04)

SEE "SCOPE OF CRN REGISTRATION" AND DESIGN REPORT

JOHN A.C. PORTER LLB
Wrigley Claydon Solicitors
23/33 Union Street
Oldham
OL1 1HH

CORROSION RESISTANT PRODUCTS LIMITED
TODMORDEN ROAD
LITTLEBOROUGH
OL15 9EG, UNITED KINGDOM

08-Nov-18

SCOPE OF CRN REGISTRATION

Product Description	Model	End Connection Inlet/Outlet	Body Drawing	Design Code	Body Material Specification	CRN Design Conditions	Report Number
Sample Valves - PFA Lined	SD-IL Series 400	1-1/2" CL 150 Wafer	SD520 R7	ASME B31.3, ASME B16.34	Dual Rated Type 316/ 316L Stainless Steel UNS S31600/S31603	10 barg at 180°C / 145 psig at 356°F	R-0984A
		1-1/2" CL 150 Wafer	S0817 R1				
		3" CL 150 Wafer	SD526 R6				
		6" CL 150 Wafer	S0320 R0				

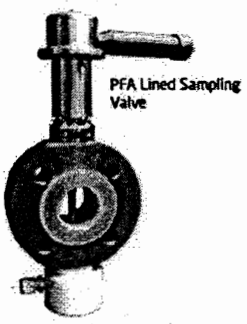
CORROSION RESISTANT PRODUCTS LIMITED
TODMORDEN ROAD
LITTLEBOROUGH
OL15 9EG, UNITED KINGDOM

08-Nov-18

Design Report Number
R-0984A

DESIGN CALCULATIONS IN ACCORDANCE WITH ASME B16.34

Product Description:	**SAMPLE VALVES - PFA Lined**
Models:	SD-IL Series 400
Size Range:	1-1/2", 3", 6"
Class:	CL. 150 per ASME B16.34
Connection Type:	Wafer (Valves bolt between ASME B16.5 CL 150 Flanges)
Valve Body Construction:	Dual Rated Type 316/316L Stainless Steel ASTM A240- 316/316L, ASTM A479-316/316L, ASTM A182-316/316L
Body Drawings:	Size 1-1/2" SD520 R7 (Standard Spindle), S0817 R1 (Special Spindle)
(Note)	Size 3": SD526 R6
	Size 6": S0320 R0
Pressure - Temp Ratings:	10 barg at 180C / 145 psig at 356F
MDMT:	-20F
Corrosion Allowance:	Nil
NDE:	None

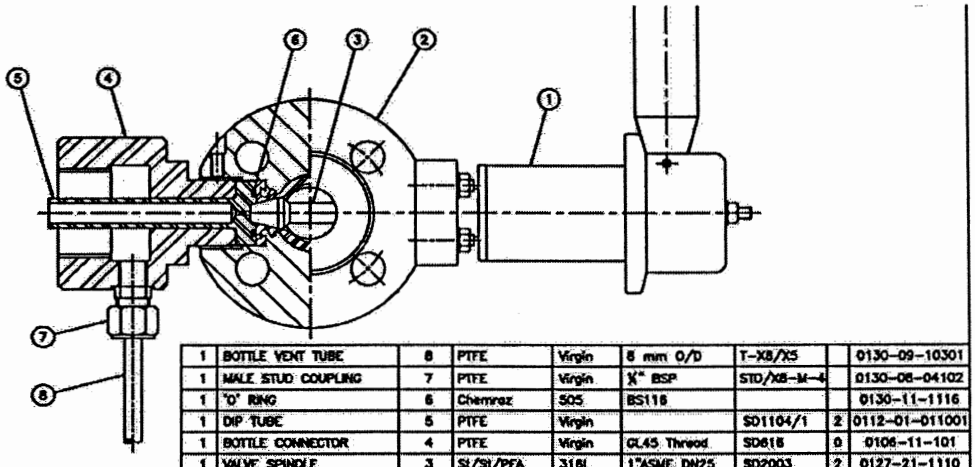

PFA Lined Sampling Valve

Note: See Appendix A for valve body drawings and product literature.

ALLOWABLE STRESS

Material:		**ASME SA240-316/316L**
Allowable Stress Values @	100 F=	20,000 psi, Stress Value from ASME Section II Part D Table 1A
Allowable Stress Values @	356 F=	19,608 psi, Stress Value from ASME Section II Part D Table 1A
Yield Stress @	100 F=	30,000 psi, Stress Value from ASME Section II Part D Table 1A
Tensile Stress @	100 F=	75,000 psi, Stress Value from ASME Section II Part D Table 1A
Material:		**ASME SA479-316/316L**
Allowable Stress Values @	100 F=	20,000 psi, Stress Value from ASME Section II Part D Table 1A
Allowable Stress Values @	356 F=	19,608 psi, Stress Value from ASME Section II Part D Table 1A
Yield Stress @	100 F=	30,000 psi, Stress Value from ASME Section II Part D Table 1A
Tensile Stress @	100 F=	75,000 psi, Stress Value from ASME Section II Part D Table 1A
Material:		**ASME SA182-316/316L**
Allowable Stress Values @	100 F=	20,000 psi, Stress Value from ASME Section II Part D Table 1A
Allowable Stress Values @	356 F=	19,288 psi, Stress Value from ASME Section II Part D Table 1A
Yield Stress @	100 F=	30,000 psi, Stress Value from ASME Section II Part D Table 1A
Tensile Stress @	100 F=	75,000 psi, Stress Value from ASME Section II Part D Table 1A

DESCRIPTION OF PRODUCT



No Off	Description	Item	Material	Spec	Remarks	Detail Drg. No.	Iss	Part Number
1	BOTTLE VENT TUBE	8	PTFE	Virgin	6 mm O/D	T-X8/X5		0130-09-10301
1	MALE STUD COUPLING	7	PTFE	Virgin	¼" BSP	STD/X8-M-4		0130-08-04102
1	"O" RING	6	Chemraz	505	BS118			0130-11-1116
1	DIP TUBE	5	PTFE	Virgin		SD1104/1	2	0112-01-011001
1	BOTTLE CONNECTOR	4	PTFE	Virgin	CL45 Thread	SD618	0	0106-11-101
1	VALVE SPINDLE	3	SI/SI/PFA	316L	1"ASME DN25	SD2003	2	0127-21-1110
1	VALVE BODY	2	SI/SI/PFA	316L	1"ASME 150lb	SD518/1	4	0103-21-1110
1	HANDLE & SEAL ASSEMBLY	1	As Details			SD8437	0	

FIGURE 1

Typical valve construction details are shown above. Media is safely sampled using systems with a PFA lining over a metal type 316/316L stainless steel valve body.