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May 6, 2021

ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6

**Workorder Type:** Registration - Fitting(Conventional)  
**Workorder No:** 8006561  
**Your Reference No.:** R-1358 - CRN#0H21333.2  
**Registered to:** WATSON MCDANIEL

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 : 0H21333.25  
Main Design No.: MSD600 Steam Distribution Manifold per Scope of Registration attached to the Statutory Declaration  
Expiry Date: Mar 15, 2031

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

The stamped copy of the approved registration and the invoice are mailed separately (There will be no hard copies for electronic submissions). Should you have any questions or require further assistance, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto: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,

Zivko Gacevic , P. Eng.  
Engineer, BPV  
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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, ROBERT HICKEY, GENERAL MANAGER  
*(Name and Position, e.g. President, Plant Manager, Chief Engineer)*

of WATSON MCDANIEL  
*(Name of Manufacturer)*

Located at 428 JONES BLVD., POTTSTOWN, PENNSYLVANIA, 19464      610-495-5131      610-495-5134  
*(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 B16.34, ASME B31.3, ASME B31.1  
*(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 9001:2015 which has been verified by the following authority, HSB

The items covered by this declaration, for which I seek registration, are category H-MSD600Manifold+ValveAss'y type fittings. In support of this application, the following information and/or test data are attached as follows:

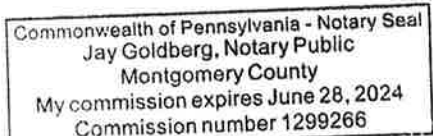
SCOPE OF CRN REGISTRATION, REPORTS, DRAWINGS, CALCULATIONS  
*(drawings, calculations, test reports, etc.)*

Declared before me at Pottstown in the State of Pennsylvania  
 the 5<sup>th</sup> day of January AD 2021.

Commissioner for Oaths:

Jay Goldberg  
 (Printed name)

Jay Goldberg  
 (Signature)



Member, Pennsylvania Association of Notaries

Robert Hickey  
 (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: \_\_\_\_\_

NOTE: This registration expires on: Mar. 15, 2031

Technical Standards and Safety Authority

Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0H21333.25

Signed: Jacques Zide

Date: May 6, 2021.

\*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**

Product Description	Design Code	Material Specification	Series	Branch Connections	Steam Inlet/ Condensate Outlet	MAWP at 100°F	MAWP at MAWT (psig at °F)	MDMT	Report Number
MSD600 Steam Distribution Manifold and Valve Assembly Main Drawing 2605400 Rev. A	ASME B16.34, ASME B31.3, ASME B31.1	Manifold Valve Body ASTM A105N, Manifold Valve Bonnet ASTM A351-CF8M, Flanges and Forged Fittings ASTM A105, Wrought Fittings ASTM A234-WPB, Pipe: ASTM A106-B <b>(Note 5)</b>	MSD600	1/2", 3/4" NPT or Socket Weld	1-1/2" Sch. 80 CL600 ASME B16.5 Flanged or 1-1/2" Sch. 80 Butt Weld or 3/4" NPT or 3/4" Socket Weld <b>(Note 6)</b>	1480 psig	1480 psig at 100°F 1360 psig at 200°F 1310 psig at 300°F 1265 psig at 400°F 1205 psig at 500°F 1135 psig at 600°F 1100 psig at 650°F 1060 psig at 700°F 1015 psig at 750°F 825 psig at 800°F	-20°F	R-1358 Rev. 0
					CL300 Flanged <b>(Note 6)</b>	740 psig	740 psig at 100°F 680 psig at 200°F 655 psig at 300°F 635 psig at 400°F 605 psig at 500°F 570 psig at 600°F 550 psig at 650°F 530 psig at 700°F 505 psig at 750°F 410 psig at 800°F		
					CL150 Flanged <b>(Note 6)</b>	285 psig	285 psig at 100°F 260 psig at 200°F 230 psig at 300°F 200 psig at 400°F 170 psig at 500°F 140 psig at 600°F 125 psig at 650°F 110 psig at 700°F 95 psig at 750°F 80 psig at 800°F		

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

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

**Note 3:** The pressure-temperature ratings shown are the maximum CRN pressure-temperature ratings. In all cases the MAWP may be limited by the seat or seal material or other considerations. Please consult Watson McDaniel literature.

**THIS IS PART OF CRN**  
 0H21333.25  
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 Program



**SCOPE OF CRN REGISTRATION**

**Note 4:** Per ASME B16.34 para. 2.3.2. the pressure rating for service at any temperature below -20F shall be no greater than the ASME B16.34 ratings for -20F. Products that are to operate at low temperatures shall conform to the rules of the applicable codes under which they are used.

**Note 5:** Other ASME B16.34 materials may be supplied for the MSD600 Manifold Valve Body under this CRN. When this is the case the pressure-temperature ratings are to be in accordance with the applicable ASME B16.34 Table 2 ratings.

**Note 6:** When ASME B16.5 CL. 150, CL. 300 and CL. 600 flanges are used the pressure-temperature ratings are to be limited to the applicable ASME B16.34 Table 2 ratings for each pressure class.

**Note 7:** The drain may be supplied with a 3/4" Condensate Drain pipe nipple with schedule 80 minimum thickness per ASME B36.10. Any valves installed on the drain are not part of this CRN.

**Note 8:** When used under the ASME B31.1 Code at temperatures greater than 750°F MT or PT or RT per ASME B31.1 Table 136.4.1-1 is required. Please inform Watson McDaniel if this requirement applies to your installation prior to placing an order.

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