Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 16OCT98 Revision: A Revision Date:30May2003*  Specification No. **7.4.24** PAGE: 1 of 7

## INSTALLATION, OPERATION, & MAINTENANCE MANUAL

# INSTALLATION, OPERATION AND MAINTENANCE MANUAL

ROSEDALE PRODUCTS, INC.



TANDEM MODEL 8

300 PSIG RATED FILTER UNIT

# Table of Contents

| I.   | Installation   |
|------|--|
| IV.  | Spare Parts Diagram  |
| III. | Spare Parts List   |
| II.  | Operation 3   Tandem Filter System Start-Up Procedure: 3   Filter Media Cleaning/Replacement Procedure 3 |
| I.   | Installation 2   |

Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 16OCT98 Revision: A Revision Date:30May2003*  Specification No. 7.4.24 PAGE: 2 of 7

#### **INSTALLATION, OPERATION, & MAINTENANCE MANUAL**

- Please remove all shipping and crating materials carefully, and dispose of safely. Be sure to remove the plugs from the inlet and outlet openings. Position the Model 8 Tandem Filter System in its proper location.
- Your Rosedale Model 8 Tandem Filter System consists of two identical 300 psig Rosedale Model 8 Filter units, (Filter -A-) and (Filter -B-), mounted in tandem to a common support stand. The inlet (upper) and outlet (lower) connections are 1" NPT and should be connected to the coolant system of the machine tool. In the cover of each unit there is a pressure relief valve. This valve is used to relief latent pressure from each vessel prior to opening for service. There is a 1" NPT drain located near the bottom of each Model 8 Filter unit. These ports can remain plugged or used for pressure gauges or special fittings as your application requires.
- Some installations require electrical grounding of all equipment, be sure to provide adequate grounding where necessary.
- After completing installation be sure to double check connections for integrity. Your Model 8 Tandem Filter System has been factory pressure tested leak free, therefore, any seepage problems usually occur from improper installation connections.
- Your Model 8 Tandem Filter System has been shipped with the proper filter baskets and bags (if applicable) pre-installed. However, it is a good idea to inspect the inside of each unit to insure that the proper parts have been installed correctly prior to operation of the filter system. See the Spare Parts List & Diagram for a full description.

Using the cover vent, relieve any latent pressure that might be present in each unit. Remove the cover of each unit by loosening the cover eye nuts. The eye nuts in the slotted corners should be loosened sufficiently to swing free of the cover. Loosen the last eye nut sufficiently to allow the top cover and closure assembly to swing away from the top of the unit.

- Before replacing cover assembly, inspect cover seal gasket (replacing as necessary). Close cover and alternately tighten the six clamp assemblies evenly to ensure a leak proof seal between the cover and housing body. The recommended torque value for 5/8"-11 closure assemblies is 60-90<sup>ft-lbs</sup>.
- Connect the differential pressure switches of the Filter system to the PLC via the 4 pin electrical connector located on the back of the control panel.

Your Rosedale Model 8 Tandem Filter System is now ready for operation!

Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103

7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



Issue Date: 16OCT98 Revision: A Revision Date:30May2003 Specification No. **7.4.24** PAGE: 3 of 7

## INSTALLATION, OPERATION, & MAINTENANCE MANUAL

#### **II.** Operation

Under normal working conditions, both individual filter units are in operation. When it is determined that an individual filter vessel needs cleaning or replacement see *Filter Media Cleaning/Replacement Procedure*.

#### Tandem Filter System Start-Up Procedure:

IOM

Prior to turning on the flow to the inlet service, please make the following checks:

- 1. Check inside the filter unit to be sure the proper basket and filter bag (if applicable) are in the housing and do not require cleaning or replacement. If necessary install a clean filter basket and bag (if applicable).
- 2. Check to insure that the filter unit cover is securely fastened to the housing, and that the pressure relief valve is closed. You are now ready to open the flow to the inlet service line. Slowly open the inlet service line approximately 25% of normal operational flow (open slowly as not to displace filter bag inside the housing). After filter unit is pressurized and vented, slowly open outlet service line valve until completely open. Continue opening the inlet service line until the desired flow rate is reached.

Once the desired service flow has been established, the filter will operate efficiently until dirty. However, under no circumstances should the system be exposed to a differential pressure higher than 15 psig. Operating the filter unit with a high differential pressure may cause filter bags to rupture and/or cause damage to the filter system and/or downstream equipment.

To prevent excessive pressure drop through the filter unit, regular inspection of the filter media is required. Monitoring of differential pressure through the housing can be utilized as a means of determining whether or not the filter media needs cleaning or replacement. Your Tandem Filter System has been supplied with 2 Orange Research D.P. switches. Each differential pressure switch is connected to an individual housing. Both D.P. switches are used to communicate to the system PLC when the preset differential pressure has been reached and alert the system that service is necessary. The D.P. switches have been pre-calibrated to 15 PSIG, and setting the switches to a higher D.P. is *not* recommended.

#### Filter Media Cleaning/Replacement Procedure (Tandem Filter System not in service)

When it becomes necessary to clean or replace filter media, follow the procedure outlined below:

- 1. First close the flow from the inlet service line.
- 2. Close the flow to the outlet service line.
- 3. Relieve the pressure from the filter unit using the cover vent.



Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 16OCT98 Revision: A Revision Date:30May2003*  Specification No. **7.4.24** PAGE: 4 of 7

#### INSTALLATION, OPERATION, & MAINTENANCE MANUAL

- 4. Drain housing sufficiently to access filter basket using the 1" NPT drain provided.
- 5. Remove cover by loosening the cover eye nuts. The eye nuts in the slotted corners should be loosened sufficiently to swing free from the cover assembly. Loosen the last eye nut sufficiently to allow the top cover assembly to swing away from the top of the unit.
- 6. Remove filter basket and clean thoroughly, remove the filter bag (if applicable) and throw away. (*Cleaning and reusing the filter bag is not recommended.*)
- 7. Remove debris and sludge from inside the inlet portion of housing to avoid interference with cover seal or flow of fluid being filtered.
- 8. Remove the basket seal and inspect (replace if necessary). Clean basket seal groove and reinstall basket seal (see spare parts diagram for location of basket seal).
- 9. Install clean filter basket and filter bag (if applicable). Place the basket into the filter housing, making sure the basket flange is firmly seated onto the basket collar. If applicable, insert bag into the bag basket making sure filter bag ring is firmly seated inside the basket flange. For best results, be sure filter bag is installed fully extended to the bottom of the basket.
- 10. Inspect cover gasket for cuts or other signs of failure and make sure it is properly seated.
- 11. Move cover back into position, and alternately tighten the clamp assemblies evenly to ensure a leak proof seal between cover and housing body. The recommended torque value for 5/8"-11 closure assemblies is 60-90<sup>ft-lbs.</sup>

Your Rosedale Model 8 Tandem Filter System is now ready for operation. Refer to filter system start-up procedure.

Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 16OCT98 Revision: A Revision Date:30May2003*  Specification No. **7.4.24** PAGE: 5 of 7

### INSTALLATION, OPERATION, & MAINTENANCE MANUAL

#### **III.** Spare Parts List

Your Rosedale Model 8 Tandem Filter System will give you many years of reliable service provided periodic inspections are made of various components and replacement of worn parts are made promptly. The following is meant to be a recommended spare parts list, these parts are illustrated in the "Spare Parts Diagram" on the following page.

| SPARE PARTS LIST |  |                        |                        |                |  |
|------------------|--|------------------------|------------------------|----------------|--|
| Balloon          | Description                                | Prt. No.<br>Filter -A- | Prt. No.<br>Filter -B- | Time-<br>Frame |  |
| 1                | Eye Nut                                    | 8-4256                 | 8-4256                 | as needed      |  |
| 2                | Rod End                                    | 8-4816                 | 8-4816                 | as needed      |  |
| 3                | Cover                                      | C17111.16.1            | C17111.15.1            | as needed      |  |
| 4                | Cover Seal                                 | 8-0013                 | 8-0013                 | as needed      |  |
| 5                | Clevis Pin Assembly                        | 8-4827                 | 8-4827                 | as needed      |  |
| 6                | Filter Basket                              | B10250.157.1           | B-2860                 | as needed      |  |
| 7                | Basket Seal                                | 8-0094                 | 8-0094                 | as needed      |  |
| 8                | Filter Bag                                 | SEE ORDER              | SEE ORDER              | as needed      |  |
| 9                | 1" Ball Valve                              | 5-2352                 | 5-2352                 | as needed      |  |
| 10               | Differential Pressure<br>Switch Left-side  | 5-5231                 |                        | as needed      |  |
| 11               | Differential Pressure<br>Switch Right-side | 5-5169                 |                        | as needed      |  |

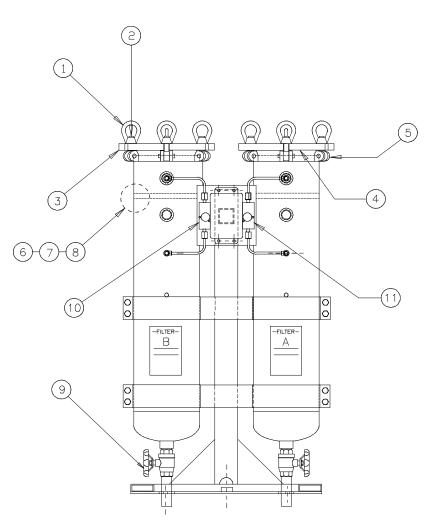
Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 160CT98 Revision: A Revision Date:30May2003*  Specification No. **7.4.24** PAGE: 6 of 7

## INSTALLATION, OPERATION, & MAINTENANCE MANUAL

### IV. Spare Parts Diagram



Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 IOM 7\_4\_24 Model 8 Tandem 300 Psig.wpd n:\iom\



*Issue Date: 16OCT98 Revision: A Revision Date:30May2003*  Specification No. **7.4.24** PAGE: 7 of 7

### INSTALLATION, OPERATION, & MAINTENANCE MANUAL

#### **Important Notice**

<u>Warranty:</u> In the event any Rosedale Products, Inc. filtration product is found to be defective in material, workmanship, or not in conformance with any expressed warranty for a specific purpose, Rosedale's only obligation and your exclusive remedy, shall be to repair, replace or refund the purchase price of such parts or products upon timely notification thereof and substantiation that the product has been stored, maintained and used in accordance with Rosedale's written instructions.

EXCLUSIONS TO WARRANTY: THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, EXCEPT OF TITLE AND AGAINST PATENT INFRINGEMENT.

**LIMITATION OF LIABILITY:** Except as provided above, Rosedale shall not be liable or responsible for any loss or damage, whether direct, indirect, incidental, special or consequential, arising out of sale, use or misuse of Rosedale filtration products, or the user's inability to use such products.

THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE.

#### Rosedale Products, Inc. 3730 West Liberty Road Ann Arbor, MI 48103 USA 734-665-8201 800-821-5373 Fax. 734-665-2214 filters@rosedaleproducts.com http://www.rosedaleproducts.com