



# Sediment Removal Separator Model SRS

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**INSTALLER:** PLEASE LEAVE THIS MANUAL FOR THE OWNER'S USE.

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## **SAFETY INSTRUCTION**

This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THE INSTRUCTION MAY RESULT IN A SAFETY HAZARD!**

## **DESCRIPTION**

The Bell & Gossett Model SRS Sediment Removal Separator is recommended for both sediment and air removal in hydronic systems. It is designed and constructed to the requirements of the ASME Boiler & Pressure Vessel Code Section VIII Div. 1. It is an efficient separator utilizing centrifugal action to remove system sediment.

## **TEMPERATURE AND PRESSURE LIMITS**

Maximum Operating Temperature: 350°F  
Maximum Operating Pressure: 125 psig

## **INSTALLATION INSTRUCTIONS**

1. It is recommended that the SRS be installed in the system main so that full system flow is directed through the SRS. This permits fast elimination of sediment and solids that may damage pump seals or other system components. Bypass installations may be used but they will not be nearly as effective in protecting system components.



**WARNING:** Lifting lugs supplied on top of SRS are not strong enough to support the SRS full of fluid. Do not use these lugs to support or hang the SRS in the piping system. Failure to follow these instructions could result in serious personal injury or death and property damage.

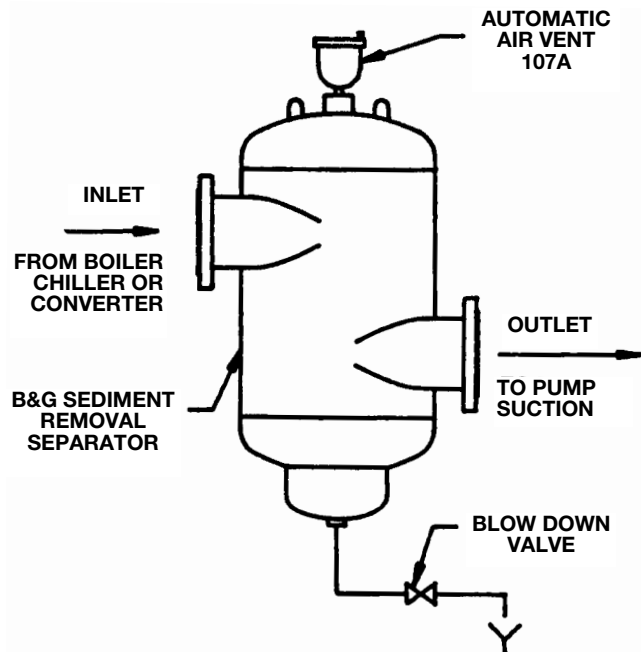
2. SRS sizes through an SRS-8 can be supported in the piping system as long as pipe hangers are attached to the tangential nozzles as close to the SRS shell as possible. Sizes larger than an SRS-8 will need to have additional supports such as cradle under the SRS acting on a diameter as close to the SRS outside diameter as possible or factory installed clips welded to the shell for overhead hanging.

**WARNING:** The SRS is an ASME Code Section VIII Div. 1 designed and constructed pressure vessel. Welding by uncertified welders will void the ASME certification and result in an unsafe condition. Failure to follow these instructions could result in serious personal injury or death and property damage.

3. The SRS needs to be mounted sufficiently high off the floor to allow blow down piping to be attached.
4. The SRS should be located near a drain to facilitate the removal of collected sediment. If an automated blowdown/purge valve is used, air or electricity will have to be provided to this location. For installation of blowdown components, follow the instructions provided with this equipment.

**IMPORTANT:** Purge/blowdown valves selected must be designed for sediment service or else clogging, seat wear or damage will occur resulting in valve leakage.

5. If the air separation feature of the SRS is to be utilized an automatic air vent, such as a Bell & Gossett 107A Air Vent, must be installed in the SRS top connection. The SRS can also be piped to a standard compression tank. Refer to Bell & Gossett Instruction Manual S10300 for installation instructions.
6. Figure 1 shows a typical installation with some of the optional equipment that can be utilized with the SRS.



## OPERATING INSTRUCTIONS

1. The SRS separates sediment from the system by centrifugal force. Heavier than water sediment particles are thrown against the inner walls of the SRS and move down the walls to the sump in the bottom of the SRS where it collects.

**IMPORTANT:** The SRS is designed only for the removal of undissolved, inorganic, heavier than water sediment/solids that enter through cooling towers, make-up water or via system installation. The SRS is not intended for removal of dissolved sediment or organic material like algae.

2. Collected sediment must be periodically blown down (removed) from the 1" NPT sump connection on the bottom of the SRS. If excessive amounts of sediment are allowed to collect without being periodically removed, sediment will start to pass through the SRS and not be removed. Purging (blowdown) of the sump can be accomplished manually but a much preferred method is by the use of an automatic valve and adjustable timer system. The timer cycle and the length of time the purge (blowdown) valve is open will vary depending on the amount of sediment in the system.

**IMPORTANT:** Failure to adequately purge the SRS may result in a buildup of sediment in the sump which may clog and prevent discharge of sediment.

**WARNING:** The SRS is not designed for fresh water service. Excessive corrosion of steel construction will occur. Do not use in systems with fresh water being added unless corrosion inhibitors are present. Failure to follow these instructions could result in serious personal injury or death and property damage.

## SERVICE INSTRUCTIONS

1. The SRS must be inspected periodically for signs of corrosion. If corrosion exceeds .050" the SRS must be replaced.

**WARNING:** Excessive corrosion will cause the SRS to leak or rupture. Periodic inspections must be made to check for corrosion. Failure to follow these instructions could result in serious personal injury or death and property damage.

2. There are no moving parts or strainers in the SRS that require service.
3. Purge valves and associated equipment may require service. Refer to the instruction manuals supplied with these devices for service requirements.

**xylem**  
Let's Solve Water

Xylem Inc.  
8200 N. Austin Avenue  
Morton Grove, Illinois 60053  
Phone: (847) 966-3700  
Fax: (847) 965-8379  
[www.xyleminc.com/brands/bellgossett](http://www.xyleminc.com/brands/bellgossett)

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