# **Solmetex**<sup>®</sup>

# Hg5<sup>®</sup> HV Amalgam Separator Installation and Operations Manual



Thoroughly read and understand instructions prior to installing, operating and servicing the Hg5<sup>®</sup> HV Amalgam Separator. These instructions are also available on our website at <u>www.Solmetex.com</u>.

## WARNING

The waste stream treated by the Hg5<sup>®</sup> HV is discharge from a dental vacuum system and as such may contain concentrations of solid and soluble mercury and silver.

- Always wear protective gear when handling full Hg5<sup>®</sup> HV collection containers (latex gloves, safety glasses or face shield) and dispose of per local regulations and codes.
- Full collection containers should be handled, stored and disposed of according to regulations applying to hazardous waste containing mercury.
- Any spills should be considered hazardous and should be handled in accordance with standard hazardous materials handling procedures.

## Solmetex Warranty

Solmetex Hg5<sup>®</sup> HV Air Water Separators are warrantied against defects in material and workmanship for a period of two (2) years from the date of purchase, established by proof of purchase or formal warranty registration. During the warranty period, Solmetex will at its option repair or replace products that prove to be defective.

Solmetex Hg5<sup>®</sup> HV Collection Containers are warrantied against defects in material and workmanship for a period of one (1) year from the date of purchase, established by proof of purchase or formal warranty registration. During the warranty period, Solmetex will at its option repair or replace products that prove to be defective.

Labor, transportation and service charges are not included.

## Limitations of Warranty

The warranty shall not apply to defects resulting from improper installation, maintenance, abuse, unauthorized modification, or operation outside of the environmental specifications for the product or damages that occur due to improper repackaging of equipment for return to Solmetex.

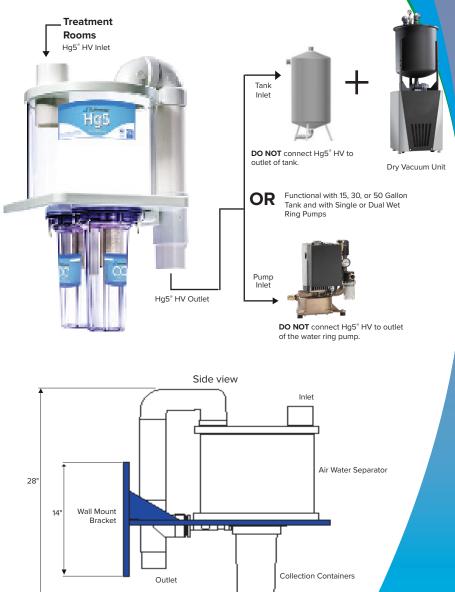
Use of third party collection containers or line cleaners having a pH less than or equal to 6 or greater than 8 will void these warranties.

For a complete list of recommended cleaners, visit our website at <u>www.Solmetex.com</u>.

No other warranty is expressed or implied. Solmetex specifically disclaims the implied warranties of merchantability and fitness for particular purpose.

# Hg5<sup>®</sup> HV Amalgam Separator Initial Set-Up

The Hg5  $^{\odot}$  HV Amalgam Separator is a Type 2 device with a maximum flow of 2000 ml/min and maximum fillable volume of 1900 ml.



## Hg5<sup>®</sup> HV Installation

When choosing the location to mount the Hg5®HV Amalgam Separator, remember that you must leave room to:

- Complete the piping.
- Access the front and sides of the unit for collection container replacement.
- Have the unit mounted higher than the pump and drain.

The wall mounted support bracket must be mounted to the wall prior to installation of the Hg5®HV Amalgam Separator. The support bracket should be stud mounted in order to support the filled weight of approximately 100 pounds. The inlet and outlet connections are 3" Schedule 40 PVC Pipe. It is recommended that flexible pipe couplings be used to connect the unit to the existing vacuum lines. Since pipe sizes can vary from site to site, bushings may be required to adapt the unit to the vacuum line piping at your facility.

- Remove all components from package(s) make sure you have everything, prior to proceeding.
- The unit is piped into the vacuum line between the treatment rooms and the vacuum source. The line from the treatment rooms is piped to the inlet of the Hg5®HV and the outlet is piped to the vacuum source. DO NOT connect the unit to the outlet of the separating tank (dry vacuum system) or water ring pump (wet vacuum system).
- Determine the location of unit with respect to existing plumbing; pump location, drain and ease of collection container change out.
- Mount the back plate to an existing wall using lag bolts. The structure and bolts should be capable of supporting 100 pounds. Mount directly into the studs using the pre-drilled holes in the backplate. If no studs are available, molly bolts may be used providing they and the wall are capable of supporting the load.
- After mounting the bracket, lower the Hg5®HV onto the bracket. It will sit between the two side supports. Use the four 1/4-20 bolts supplied with the unit to secure the unit to the bracket.
- After the unit is installed, the two collection containers can be installed. (See included installation instructions).
- Write the installation date on each collection container.
- Complete the registration form and return to Solmetex.

#### **Environmental Specifications:**

- Overall Dimensions: 17.625" W x 28" H x 22.5" D
- One Hg5 HV will serve up to 20 chairs
- Minimize water lift height.
- Maximum Temperature = 120° F (52° C)
- Maximum Vacuum = 15" Hg (51 kPa)
- For Dental Use ONLY

## **Collection Container**

Your collection container must be changed once every twelve (12) months or when the sediment level reaches the full line, whichever occurs first. Check the sediment level of the collection container weekly.

## Maintenance

Line rinsing & vacuum line cleaners - cleaners should be non-foaming, deodorizing, sanitizing & have a pH greater than 6 and less than or equal to 8.

Using line cleaners outside of this pH range will void the warranty.

For a complete list of recommended cleaners, visit our website at www.Solmetex.com.

#### With Dental Vacuum Systems: Follow manufacturer's instructions.

Plan to rinse no more than 5 chairs every 10 minutes. Limit the total maximum flow to the Hg5<sup>®</sup> HV during rinsing to 1 liter per minute. Rinsing too much or too rapidly can overfill the Hg5<sup>®</sup> HV and could affect the unit's efficiency.

## **Exclusive Remedies**

The remedies provided herein are the buyer's sole and exclusive remedies. Solmetex shall not be liable for any direct, indirect, special, incidental or consequential damages, whether based on contract, tort or any other legal theory.

## Service & Troubleshooting

## NOTICE

- Refer to Hg5 $^{\circ}$  HV Collection Container Replacement & Recycle Procedure manual at www.Solmetex.com for removal and replacement of container.
- Always wear protective gear when handling full  $Hg5^{\otimes}$  HV collection containers.
- Keep the vacuum system running during the entire collection container replacement procedure.
- These procedures should be performed only when no operatories are being used as loss of chairside vacuum may occur.

The Hg5<sup>®</sup> HV is designed to provide years of trouble-free service, with minimal attention. In the unlikely event of system related problems, please review the review the following for product support.

#### **Q:** Little or no vacuum at the hand piece.

- A: Check sediment level of collection container, if full change the collection container.
  - If the vacuum gauge reads normal but there is little or no vacuum to the hand piece, there is probably a clog or a leak between the hand piece and the Hg5<sup>®</sup> HV.
  - If the vacuum gauge reads lower than normal these are the possible causes:

## Service & Troubleshooting (continued)

#### Did you just replace the collection container?

- Yes: Check installation of the new collection container. If the vacuum is low there is a possibility that the O-rings on the collection container did not seal into the receivers. With the vacuum running, remove the collection container, check the O-rings and re-install per the collection container installation procedure.
- No: If you have a solids collection cup (installed by others) check & clean or replace element/screen if necessary.

#### Check operation of the vacuum pump.

- Check all flexible hose for kinks, breaks, or loose clamps.
- Check all connections for breaks or cracks.
- Listen for vacuum leaks.

#### Q: Water in the upper chamber (Air Water Separator)

- A: Check sediment level of collection container, if full change collection container.
  - Check the pH of vacuum line cleaner: if less than or equal to 6 or greater than 8 change collection container and line cleaner. Visit www.Solmetex.com for a recommended list of cleaners.
  - Call or email your dental dealer for support if the problem cannot be solved easily.

#### **Q:** Solids reach full line of collection container:

A: Change the collection container.

#### Q: Solids are above full line of collection container:

A. Change the collection container. Inspect the top chamber for solids.

#### Q: Top chamber has some solids:

- A: System is backed up.
  - Turn on vacuum
  - Remove pins
  - Tilt container towards outlet pipe to allow air into top chamber
  - Place container back on and insert pins

#### Q: Top chamber is full with solids:

- A: System is in bypass.
  - Reduction in suction
  - Solids released into waste stream and environment
  - Top chamber needs to be replaced
  - Top chamber needs to be recycled

#### **Q:** The equipment/utility room has poor lighting:

A: Bring a flashlight to check the container. Using a flashlight from the backside of the system and shining it forward will help determine the level of sedimentation.

## Visual Inspection Log



# Visual Inspection Log

Solmetex provides a Visual Inspection Log for weekly maintenance reporting. Online at: www.solmetex.com/visualinspectionlog.

Use this log with the Hg5 Series of Amalgam Separators to ensure proper operation and maintenance. Visually inspect the collection container weekly to determine the level of solid week. Collection container is replaced when solids reach the full line or once a year, whichever comes first.

Office Name: \_

Account Number: \_

Date (MM/DD/	YY) Signature	
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	www.solmetex.com	1.800.216.550





In 1999, Solmetex designed the Hg5 that has quickly become the industry standard in Amalgam Separation. We have extensive experience in water chemistry, chemical separation science, process engineering, high performance manufacturing as well as Federal, State and local regulations governing water and hazardous wastes. What makes Solmetex different is our 'Total Solution Provider' concept – integrating waste handling and recycling into our complete product line to provide a truly green set of solutions. Solmetex is the global leader and our Hg5 system is the gold standard in high performance amalgam separation.

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