

Revised - Features of Approved Amalgam Separators (June 2010)

The following listing of Features of Approved Amalgam Separators should be used as a replacement for page 14 of your "re: amalgam recovery" booklet. The listing will change occasionally throughout the course of the voluntary amalgam recovery program. Before making purchasing decisions, please reference this Web site or call the MDA office at 612-767-8400.

Manufacturer or distributor of amalgam separator: Air Techniques
Model name or number: Guardian Amalgam Collector
Removal technology used: Sedimentation
Capacity: Variable, as determined by the volume of the air-water separator tank
Flow rate factors: 3 liters per minute
Location: Single central location at the outlet of an air-water separator
Physical dimensions: Height: 7.5", Width: 10.5", Depth: 6.25"
Cost: \$1,500 initial purchase (which includes 1 replacement box, \$750 for additional replacement boxes)
Other information: System designed for gravity flow, so the amalgam collection container must be installed below the air- water separator. An air-water separator must be purchased if current vacuum system does not include one. Cost includes amalgam recycling fees. Replacement boxes typically needed every 6-12 months.

Manufacturer or distributor of amalgam separator: R&D Services
Model name or number: The Amalgam Collector CH9 or CH12
Removal technology used: Sedimentation
Capacity: 1 per chair
Flow rate factors: Working capacity is 2.3 liters for the CH9 and 3.7 liters for the CH 12
Location: Chairside
Physical dimensions: Height: 9" or 12" (plus 4" for fittings), Diameter: 8"
Cost: \$495
Other information: Select height of a unit to be purchased based on your flow rate. Dental office regularly adjusts outlet tube height, decants liquid and occasionally empties the sludge waste. Canisters may be replaced or reused. Dental office manages their amalgam waste solids.

Manufacturer or distributor of amalgam separator: R&D Services
Model name or number: The Amalgam Collector CE18 or CE24
Removal technology used: Sedimentation
Capacity: Variable
Flow rate factors: Working capacity is 6.5 liters for the CE 18 and 16.4 liters for the CE 24
Physical dimensions: Height: 18" or 24" (plus 4" or 6" for fittings), Diameter: 8" or 10"
Cost: \$695 for the CE1 8 and \$1,250 for the CE 24
Other information: Select height of a unit to be purchased based on your flow rate. Dental office regularly adjusts outlet tube height, decants liquid and occasionally empties the sludge waste. Canisters may be replaced or reused. Dental office manages their amalgam waste solids.

Manufacturer or distributor of amalgam separator: American Dental Accessories
Model name or number: Asdex AS-9, Super Premium
Removal technology used: Filtration
Capacity: One filter unit per chair
Flow rate factors: 1 L/minute
Location: Chairside
Physical dimensions: Height: 11.5", Diameter: 3"
Cost: \$203 for the initial unit; \$79 per filter (\$300 for four filters)
Other information: Dental office replaces a used filter with a new filter every 4-6 weeks. Dental office to manage waste filters.

Manufacturer or distributor of amalgam separator: American Dental Accessories
Model name or number: Asdex AS-20, Super Premium
Removal technology used: Filtration
Capacity: 4 chairs
Flow rate factors: 1 L/minute
Location: Single Central Location
Physical dimensions: Height: 23", Diameter: 4"
Cost: \$300 for the initial unit; \$177 per filter (\$654 for four filters)
Other information: Dental office replaces a used filter with a new filter every 6-12 months. Dental office to manage waste filters.

Manufacturer or distributor of amalgam separator: American Dental Accessories
Model name or number: AD-1000
Removal technology used: Filtration
Capacity: 12 chairs
Flow rate factors: 2 L/minute
Location: Single central location at outlet of air/water separator for either a wet or dry vacuum pump system
Physical dimensions: Height: 8", Width 14", Depth 10.5"
Cost: \$796 for the initial unit; \$496 per replacement filter box
Other information: Filter lasts 18 months based on one full time dentist. Cost of replacement filter includes pre-paid mailer and disposal.

Manufacturer or distributor of amalgam separator: Dental Recycling North America (DRNA)
Model name or number: BullfroHg 1 0
Removal technology used: Sedimentation
Capacity: 6 chairs
Flow rate factors: Holding tank volume is 10 liters
Physical dimensions: Height: 20.5", Diameter: 8.5"
Cost: \$50/month service agreement (2 year minimum contract)
Other information: 120 VAC power supply needed to pump settled effluent from unit. Unit utilizes an automatic timer. Service fee includes recycling of amalgam waste. Unit is available in larger sizes and priced accordingly.

Manufacturer or distributor of amalgam separator: Dental Recycling North America (DRNA)
Model name or number: MRU
Removal technology used: Sedimentation, filtration and ion exchange
Capacity: 6 chairs
Flow rate factors: Holding tank volume is 1 0 liters
Location: Single central location just upstream of the vacuum pump
Physical dimensions: Height: 24", Width 16", Depth 12"
Cost: Call DRNA for pricing information
Other information: 120 VAC power supply needed to pump settled effluent from unit. Unit utilizes an automatic timer. Service fee includes recycling of amalgam waste. Unit is available in larger sizes and priced accordingly.

Manufacturer or distributor of amalgam separator: SolmeteX
Model name or number: Hg5 – Rev K
Removal technology used: Sedimentation
Capacity: 10 chairs
Flow rate factors: 1L/minute, Surge tank capacity is 4.6 liters
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 29", Width: 14", Depth: 8"
Cost: \$750 for the initial unit, \$170 per replacement collection container, \$285 per replacement collection container and recycling
Other information: Filter replaced 1 2 months or when sediment reaches full line.

Manufacturer or distributor of amalgam separator: SolmeteX
Model name or number: Hg 10
Removal technology used: Sedimentation, filtration, and chemical binding
Capacity: 10-25 chairs
Flow rate factors: Not applicable since it uses a 95 liter (25 gallon) holding tank and batch treatment
Location: Single central location downstream of the vacuum pump.
Physical dimensions: Tank Dimensions: Height: 48", Diameter: 25", plus 6 filters mounted on the wall
Cost: \$7,450 for the initial unit and filters, \$1,050 for a 6-filter replacement kit. Individual filter units are also available.
Other information: Units are custom made to accommodate an office's flow rate. Filter kit would be replaced from quarterly to annually. 120V AC power supply needed to pump effluent through the treatment.

Manufacturer or distributor of amalgam separator: Maximum Separation Systems
Model name or number: MSS 2000
Removal technology used: Sedimentation and filtration
Capacity: 16 chairs
Flow rate factors: -Surge tank capacity: 22 liters - Flow through rate: 2.5liters/minute
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 28", Width: 18.5", Depth: 15"
Cost: \$1,395 per unit - \$165 per settling tank plus \$185 recycling fee.
Other information: Initial cost includes two initial settling tanks, both of which would last one dentist approximately two years or two dentists approximately one year. 120V AC power supply needed.

Manufacturer or distributor of amalgam separator: Maximum Separation Systems
Model name or number: MSS 1000
Removal technology used: Sedimentation and filtration
Capacity: 6 chairs
Flow rate factors: - Surge tank capacity: 11 liters - Flow through rate: 1 liter/minute
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 24", Width: 18.5" , Depth: 15"
Cost: \$968 per unit, \$165 per settling tank plus \$185 recycling fee.
Other information: The MSS 1000 has one settling tank which will last one dentist approximately one year. 1 20V AC power supply needed.

Manufacturer of distributor of amalgam separator: AB Dental Trends
Model name or number: Rasch 890 Single-Stage series
Removal technology used: Sedimentation, filtration, and ion exchange
Capacity: 12 chairs
Flow rate factors: 2 liters/minute
Location: Single central location at the vacuum pump
Physical dimensions: Height: 9.0", Width: 9", Depth: 12.25"
Note that the dimensions will increase if an air/water separator is necessary to complete the installation.
Cost: \$736 for canister and connectors
If an air-water separator is also necessary, the overall cost will be \$865 - \$1070
Other information: Cost of a replacement canister is \$649. The canister is typically replaced approximately every 18 months per doctor. Canister replacement cost includes management of the waste.

Manufacturer or distributor of amalgam separator: AB Dental Trends
Model name or number: Rasch 890-4000 Two-Stage series
Removal technology used: Sedimentation, filtration, and ion exchange.
Capacity: 12 chairs
Flow rate factors: 4 liters/minute
Location: Single central location at the vacuum pump
Physical dimensions: Height: 6", Width: 9", Depth: 12"
Note that the dimensions will increase if an air/water separator is necessary.
Cost: Approx. \$1330, or \$1900 overall if an air-water separator is necessary
Other information: The 4000 series models (4000 & 4500) each use two canisters in series. The cost of each replacement canister is \$649. Each primary stage canister is typically replaced approximately every 18 months. Canister cost includes management of the waste. The secondary canister is replaced approximately every 5 years.

Manufacturer or distributor of amalgam separator: Rebec LLC
Model name or number: Catch 1000 (formerly called RME 2000-CatchHg)
Removal technology used: Sedimentation and filtration
Capacity: 8 chairs
Flow rate factors: 1 liter/minute. Surge tank capacity: 19 liters
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 23.5", Width: 20", Depth: 8"
Cost: \$1,895 per unit - \$395 per replaced settling tank.
Other information: Cost includes processing of the waste. For 8 operatories, the settle tank would be changed out annually. Larger systems are available.

Manufacturer or distributor of amalgam separator: Rebec LLC
Model name or number: Catch 400
Removal technology used: Sedimentation and filtration
Capacity: 4 chairs
Flow rate factors: 1L/minute. Surge tank capacity: 8 liters
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 18", Width: 14", Depth: 8"
Cost: \$985 per unit - \$395 per replaced settling tank.
Other information: Cost includes processing of the waste. For 4 operatories, the settle tank would be changed out annually. Larger systems are available.

Manufacturer or distributor of amalgam separator: Rebec LLC
Model name or number: Catch 9000
Removal technology used: Sedimentation
Capacity: 30 chairs
Flow rate factors: 1L/minute. Surge tank capacity: 33 liters
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 48", Width: 24", Depth: 22"
Cost: \$3,920 per unit. \$795 annual collectors/buffer replacement
Other information: Unit comes with a metal stand and can accommodate pipe sizes to 4". Annual collector replacement includes shipping, recycling, and documentation

The following units are no longer available in their original configuration. Both are modified and are listed above with the appropriate specifications.

Manufacturer or distributor of amalgam separator: SolmeteX
Model name or number: Hg 5
Removal technology used: Sedimentation, filtration, and chemical binding
Capacity: 10 chairs
Flow rate factors: 50 ml/minute, Surge tank capacity is 4.6 liters
Location: Single central location just upstream of the vacuum pump.
Physical dimensions: Height: 29", Width: 14", Depth: 8"
Cost: \$695 for the initial unit; \$250 per filter
Other information: Filter replaced approximately every 6 months or when full. The \$250 filter purchase includes recycling.

Manufacturer or distributor of amalgam separator: American Dental Accessories
Model name or number: Asdex AS-9
Removal technology used: Filtration
Capacity: One filter unit per chair
Flow rate factors: 500 ml/minute
Location: Chairside
Physical dimensions: Height: 11.5", Diameter: 3"
Cost: \$229 for the initial unit; \$79 per filter
Other information: Dental office replaces a used filter with a new filter every 4-6 weeks. Dental office to manage waste filters.