

# Rotary Tube Cleaners | Comparison Chart

COST-SAVING, ENERGY-EFFICIENT SOLUTIONS FOR EVERY APPLICATION.



## RAM-PRO

Wet, Smooth Bore and Enhanced tubes

## RAM-PRO XL

Wet, Smooth Bore and Enhanced tubes

## RAM-4

Wet, Smooth Bore and Enhanced tubes

## RAM-5DC

Wet and Smooth Bore tubes (with manual or mechanical feed)

## RAM-6

Wet, Smooth Bore and Enhanced tubes (with 500 PSI water flush)

<b>Tube Size Range:</b>	1/4"-1" I.D.	1/4"-1" I.D.	1/4"-1" I.D.	1/4"-1" I.D. (manual feed) 7/16"-1" I.D. (mechanical feed)	1/4"-1" I.D.
<b>Motor Power:</b>	0.25 HP (115 V) 0.5 HP (230 V)	0.5 HP	0.5 HP	0.75 HP	1.5 HP
<b>Input Power:</b>	Standard: 5.5 amps, 115 V, 60 Hz AC Optional: 5.5 amps, 115 V, 50 Hz; 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz	Standard: 10 amps, 110 V, 50/60 Hz AC Optional: 10 amps, 220 V, 50/60 Hz AC	Standard: 9 amps, 115 V, 60 Hz AC Optional: 9 amps, 115 V, 50 Hz; 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz	Standard: 12 amps, 115 V, 60 Hz AC Optional: 12 amps, 115 V, 50 Hz; 6 amps, 230 V, 60 Hz; or 6 amps, 230 V, 50 Hz	Standard: 15 amps, 115 V, 60 Hz AC Optional: 15 amps, 115 V, 50 Hz; 7.5 amps, 230 V, 60 Hz; or 7.5 amps, 230 V, 50 Hz
<b>Power Supply Cord:</b>	12', 18-3 GFCI	21', 14-3 GFCI	21', 14-3 GFCI	21', 14-3 GFCI	21', 14-3 GFCI
<b>Air Requirements:</b>	•	•	•	•	•
<b>Shaft Speed:</b>	862.5 rpm	Adjustable, 0-900 rpm	862.5 rpm	Adjustable, 200-862.5 rpm	Adjustable, 200-800 rpm
<b>Shaft Length:</b>	Standard up to 75'	Standard up to 75'	Standard up to 75'	Standard up to 75'	Standard up to 75'
<b>Special Features:</b>	Reversible shaft rotation Water flush Chain Drive Quick connect shaft manifold Roll cage	Direct Drive Roll cage with integrated wheels and handle On-board chemical applicator	Reversible shaft rotation (optional) Water flush Quick connect shaft manifold	Reversible shaft rotation Water flush Chain Drive Quick connect shaft manifold Mechanical feed up to 3' per second Mechanical feed force at 50 lbs	Variable speed Reversible shaft rotation Chemical injection Up to 500 PSI water flush Quick connect shaft manifold
<b>More Info:</b>	See pages 4-5	See pages 6-7	See pages 8-9	See pages 10-11	See pages 12-13



**RAM-4X**

**Wet or Dry Smooth Bore  
Tubes/Pipes/Hoses**

**RAM-4X2A**

**Wet or Dry Smooth Bore  
Tubes/Pipes/Hoses**

**AWT-100**

**Wet or Dry Smooth Bore  
Tubes/Pipes/Hoses**

**AWT-100X**

**Wet or Dry Smooth Bore  
Tubes/Pipes/Hoses**

**PSM-500**

**Wet, Straight, Smooth Bore,  
Small Tubes**

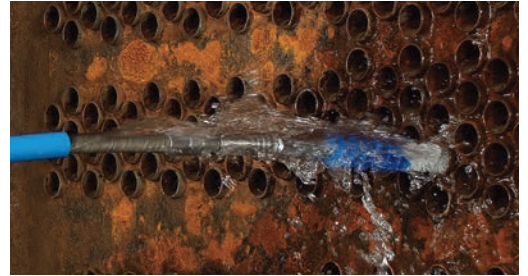
<b>Tube Size Range:</b>	1" I.D. and up	1" I.D. and up	¼" I.D. and up	¼" I.D. and up	¾"-1" I.D.
<b>Motor Power:</b>	1 HP	2 HP	Up to 1.5 HP	Up to 4 HP	Up to 0.7 HP
<b>Input Power:</b>	Standard: 13 amps, 115 V, 60 Hz AC Optional: 13 amps, 115 V, 50 Hz; 6.5 amps, 230 V, 60 Hz; or 6.5 amps, 230 V, 50 Hz	Standard: 11.5 amps, 230 V, 60 Hz AC Optional: 11.5 amps, 230 V, 50 Hz;	•	•	•
<b>Power Supply Cord:</b>	21', 14-3 GFCI	21', 14-3 GFCI	•	•	•
<b>Air Requirements:</b>	•	•	Minimum 60 PSI at 15 CFM, Maximum 100 PSI at 70 CFM	Minimum 60 PSI at 85 CFM, Maximum 100 PSI at 130 CFM	Minimum 50 PSI at 10.6 CFM, Maximum 90 PSI at 19 CFM
<b>Shaft Speed:</b>	Standard: 1,725 rpm Optional: 862.5 rpm	Standard: 1,725 rpm Optional: 862.5 rpm	Adjustable, 500-3,000 rpm	Adjustable, 500-3000 rpm	950 rpm (free speed)
<b>Shaft Length:</b>	Standard up to 75'	Standard up to 75'	Standard up to 75'	Standard up to 75'	Maximum 10'
<b>Special Features:</b>	Optional Reversible shaft rotation Water flush Quick connect shaft manifold Optional dry vacuum attachment	Water flush Optional dry vacuum attachment Quick connect shaft manifold	Air powered Variable speed Water flush Quick connect shaft manifold Optional dry vacuum attachment	Air powered Variable speed Water flush Quick connect shaft manifold Optional dry vacuum attachment	Air powered Water flush
<b>More Info:</b>	See page 40-41, 43	See pages 40-41	See page 44	See page 45	See page 31

# Trouble-Free Cleaning For Contractors

RAM-PRO™, DESIGNED FROM THE BOTTOM UP SPECIFICALLY FOR HVAC TECHNICIANS

## RAM-PRO – Rugged and Dependable

Tackle demanding commercial tube cleaning environments with the powerful RAM-PRO—engineered for contractors. Not only is this compact unit half the weight of other tube cleaners, it's also designed to save time. A sturdy roll cage that provides protection both on the job and inside a crowded work truck. Vibration isolators connect to the motor assembly to help tolerate bumps and jolts. The Quick Connect shaft attaches with a firm push, allowing for fast setup and easy breakdown and transportation. The performance drive system replaces traditional rubber belts with a metal chain drive. No more slipped belts!



### RAM-PRO-60

Compact Tube Cleaner including, roll cage, quick connect shaft manifold, and two-direction foot switch

**Note:** See pages 15-22 for shafts and accessories.

## FEATURES

- > Heavy-duty roll cage construction
- > Ultra compact design
- > Chain Drive
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > "Sweet Spot" 862.5 RPM
- > Simultaneous water flush
- > Foot switch activation
- > Reversible shaft rotation







**A brush with greatness.**

### Quick Connect Couplings

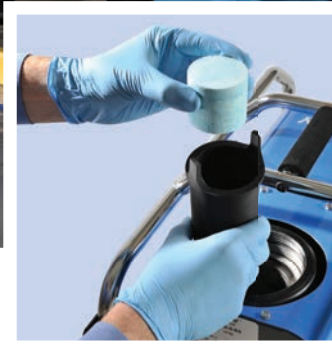
Save time with fast brush changes that require no tools.



Specifications	RAM-PRO
Motor Power	0.25 HP (115 V units) 0.5 HP (230 V units)
Input Power	Standard: 5.5 amps, 115 V, 60 Hz AC Optional: 5.5 amps, 115 V, 50 Hz; 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz
Power Supply Cord	12', 18-3 GFCI
Flexible Shaft Speed	862.5 rpm
Water Requirements	Minimum 30 PSI at 2 GPM
Dimensions	16" high x 9" wide x 20" deep
Weight	34 lbs net dry

# One Advanced System—For Chiller Tube Maintenance

ELIMINATE BIOFILM BUILD-UP AND PROTECT AGAINST CORROSION—ALL AT ONCE!



## TubeGuard™-XL

TubeGuard-XL is exclusively designed to work with the RAM-PRO-XL, providing the best available technology for corrosion inhibition in copper and ferrous metal tubes. No measuring or dosing of chemicals is required. The TubeGuard-XL tablet simply dissolves in the RAM-PRO-XL's on-board reservoir during tube cleaning; flushing the tubes with bio-film eliminating compounds.

### TUBEGUARD-XL-4

Package of four tube cleaning tablets (for 3 average sized chiller cleanings). For use with the RAM-PRO-XL



# 1 CLEAN

- > Variable shaft speed
- > Reversible shaft rotation
- > Simultaneous flush of TubeGuard-XL chemical

# 2 DISINFECT

- > TubeGuard-XL tablet eliminates biofilm

# 3 PROTECT

- > TubeGuard-XL tablet prevents corrosion



## RAM-PRO-XL – It's A Game Changer!

The cutting edge in chiller tube cleaning technology, RAM-PRO-XL combines the best in rotary tube cleaning mechanics with TubeGuard technology. TubeGuard is an advanced cleaning system that blasts biofilm and protects against corrosion. For cleaner, more efficient tubes it's as easy as 1, 2, 3.

### RAM-PRO-XL

Tube cleaner w/ quick connect manifold, integrated roll cage/dolly, two direction foot switch (115 V 50/60 Hz)

### RAM-PRO-XL-A (230V 50/60 Hz)

**Note:** See pages 15-22 for shafts and accessories.

- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Variable shaft speed
- > Reversible shaft rotation
- > Simultaneous water flush
- > Power cord and foot pedal storage

Specifications	RAM-PRO-XL
Motor Power	Standard: 0.5 HP (90 VDC)
Input Power	Standard: 5.5 amps, 115 V, 50/60 Hz AC Optional: 3 amps, 230 V, 50/60 Hz AC
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	Variable 0-900 rpm
Water Requirements	Minimum 30 PSI at 2 GPM
Dimensions	20" high x 16" wide x 26" deep
Weight	55 lbs net dry

# The Newest Generation Of The Original Tube Cleaner

WITH ADVANCED ROTARY TUBE-CLEANING TECHNOLOGY.



## RAM-4 – The Original Rotary Tube Cleaner

With a Goodway tube cleaner in your arsenal, you’re backed by 47 years of proven tube-cleaning performance. The fourth generation RAM-4 includes an array of interchangeable cleaning tools designed for a variety of situations. It’s never been this simple to restore tubes to optimal performance. The cleaning tool safely and effectively scours debris away without damaging tube walls. A casing around the shaft feeds water to the rotating tool, flushing out deposits as they are loosened. The RAM-4 is one of the most effective weapons you can use to optimize your system’s power requirements.

### RAM-4-60-R

Tube Cleaner, including mobile dolly, tool storage box and two-direction foot switch

### RAM-4-60

Tube Cleaner, including mobile dolly, tool storage box and single-direction foot switch

**Note:** See pages 15-22 for shafts and accessories.

## FEATURES

- > Stainless steel construction
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Integrated dolly
- > Simultaneous water flush
- > Foot switch activation
- > Reversible shaft rotation (RAM-4-60-R only)

Specifications	RAM-4
Motor Power	0.5 HP
Input Power	Standard: 9 amps, 115 V, 60 Hz AC Optional: 9 amps, 115 V, 50 Hz; 4.5 amps, 230 V, 60 Hz; or 4.5 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	862.5 rpm
Water Requirements	Minimum 30 PSI at 2 GPM
Dimensions	37" high x 20" wide x 17" deep
Weight	49 lbs net dry



Exclusive threadless Quick Connect Shaft coupling

**Contractor Dolly:**

This durable, ergonomic dolly with storage rack and accessory bin is ideal for off-site job locations.

**RAM-DOLLY-C**

Heavy-Duty Contractor Dolly (upgrade)\*



RAM-DOLLY-C

**RAM-4 Service Kit:**

Bring your RAM-4 back into shape with a rebuild kit including all the major wear items. This includes illustrated instructions, upper and lower bearings, manifold snap ring, seal, shaft/driver, screen washer and even the screws to put everything back together.

**RAM4-SVC-KIT** RAM-4 Service Kit including, 805 O-ring, 824 Seal, 825 Bearing, 826 Snap Ring, 833 Lower Bearing, 873 Shaft/Driver, 803 Screen Washer and HWST-1037-P Cover Screws (package of six)



RAM4-SVC-KIT

**Chiller Tube Cleaning System:**

This is our most commonly used package for cleaning Trane, Carrier, York, McQuay and other units. It has everything you need for cleaner, more efficient chiller performance.

**R4R-25Q**

Chiller Tube Cleaning System with quick connect fittings:

- 1 – RAM-4-60-R Ream-A-Matic Tube Cleaner
- 2 – GTC-703Q-25 Flexible Shafts
- 1 – 9401 Chiller Bib Bag
- 1 – 9402 Chiller Bib Frame
- 25 – GTC-211Q Blue Nylon Brushes (specify size)
- 15 – SGBQ Spin-Grit Brushes (specify size)
- 2 – GTC-205Q or GTC-206Q Buffing Tools (specify size)
- 8 – Replacement Blades for Buffing Tools (not shown)
- 1 – REP-703Q-KIT Repair Kit for GTC-703Q Flexible Shafts

**R4R-25**

Same as R4R-25Q except with threaded fittings



CHILLER BIB



REPAIR KIT



BLUE NYLON BRUSH



SPIN GRIT BRUSH



BUFFING TOOL



# High Performance For Large Tube Bundles

CLEAN OVER 1,000 TUBES PER HOUR!



## FEATURES

- > Adjustable shaft auto feed
- > Stainless steel construction
- > Speed control to set auto feed and shaft rotation at optimum speed for each application
- > Chain Drive
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Integrated dolly
- > Simultaneous water flush
- > Trigger controlled or foot switch activation
- > Reversible shaft rotation

Specifications	RAM-5DC
Motor Power	0.75 HP
Input Power	Standard: 12 amps, 115 V, 60 Hz AC Optional: 12 amps, 115 V, 50 Hz; 6 amps, 230 V, 60 Hz; or 6 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	Adjustable, 200-862.5 rpm
Speed-Feed Gun Rate	Adjustable, 0.7'-3' per second
Speed-Feed Gun Force	50 lbs, push/pull
Water Requirements	Minimum 30 PSI at 2 GPM
Dimensions (Excluding Gun and Guide Hose)	37" high x 20" wide x 17" deep
Weight	75 lbs net dry

## RAM-5DC – Revolutionary Speed

With patented technology and over 15 years of proven performance, it's no wonder why the RAM-5DC is the machine of choice among contractors and facility managers with large tube bundles. The revolutionary Speed Feed gun combined with Goodway Blue Nylon Brushes will clean tubes up to four times faster than any other rotary tube cleaner. Minimal training time is required. As the cleaning tool loosens debris, the shaft casing provides a steady stream of water, flushing out debris and restoring system efficiency. While the Speed Feed gun lets you control the direction of shaft rotation as well as the flow of water, the variable speed function allows you to control both the brush rpm and the feed rate.

### RAM-5DC-60

Speed-Feed Tube Cleaner, including speed-feed gun, 15' guide hose, one set of shaft feeder gears (specify size), mobile dolly, tool storage box and two-direction foot switch

**Note:** See pages 15-22 for shafts and accessories.

### Optional:

#### 834R-SF

Two-Direction Foot Switch for cleaning internally enhanced tubes



#### SFG-702

Speed-Feed Gears for GTC-702 Shaft

#### SFG-703

Speed-Feed Gears for GTC-703 Shaft

#### SFG-704

Speed-Feed Gears for GTC-704 Shaft

#### 2248-36

Extension Guide Tube with sliding handle for Speed-Feed gun, 36" long



### Contractor Dolly:

The durable, ergonomic dolly with storage rack and accessory bin makes the RAM-5SFVS easy to transport

#### RAM-DOLLY-C

Heavy-Duty Contractor Dolly (upgrade)\*

**\*Note:** When not ordered as an upgrade with a machine, the RAM-DOLLY-C is \$295.00.



RAM-DOLLY-C



### RAM-5DC Service Kit:

The RAM-5DC Speed Feed Tube Cleaner is a hard-working machine but after thousands of tubes it could probably use a break. Here's a service kit to get your machine back up to speed. The kit has everything from illustrated instructions, shaft/driver, O-ring, seal, snap ring and bearings to a new set of Speed Feed gears, and even replacement parts for the Speed Feed gun.

### R5-SVC-KIT-3

RAM-5DC Service Kit including, 805 O-ring, 824 Seal, 825-R5 Bearings (package of ten), 826 Snap Ring, 833-1 Lower Bearing, 2209 Key, 2229 Shaft/Driver, 803 Screen Washer, SFG-703 Speed Feed Gears, 2224 Trigger, 2225 Trigger Pads (package of two), 2245 Trigger Pin and HWST-1037-P Cover Screws (package of six)



R5-SVC-KIT-3



BLUE NYLON BRUSH



CHILLER BIB

PATENTED

REPAIR KIT



### Speed-Feed Chiller Tube Cleaning System:

This is our most commonly used package for cleaning chiller tubes with speed-feed technology. It has everything you need for cleaner, more efficient chiller performance.

### R5SFVS-45Q

Speed-Feed Chiller Tube Cleaning System with quick connect fittings:

- 1 – RAM-5DC-60 Ream-A-Matic Tube Cleaner
- 2 – GTC-703Q-45-R5 Flexible Shafts
- 1 – 9401 Chiller Bib Bag
- 1 – 9402 Chiller Bib Frame
- 25 – GTC-211Q Blue Nylon Brushes (specify size)
- 1 – REP-703Q-KIT Repair Kit for GTC-703Q Flexible Shafts

### R5SFVS-45

Same as R5SFVS-45Q except with threaded fittings



# Better Performance On Internally Enhanced Tubes

CLEAN ENHANCED TUBES QUICKLY AND EFFECTIVELY WITH THIS SPECIALLY DESIGNED UNIT.



## FEATURES

- > Stainless steel construction
- > Speed control to set shaft rotation at optimum speed for each application
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Integrated heavy-duty contractor dolly and large pneumatic tires
- > Integral pump provides simultaneous cleaning solution injection; and increased water pressure and flow over standard units
- > Foot switch activation
- > Reversible shaft rotation

Specifications	RAM-6
Motor Power	1.5 HP
Input Power	Standard: 15 amps, 115 V, 60 Hz AC Optional: 15 amps, 115 V, 50 Hz; 7.5 amps, 230 V, 60 Hz; or 7.5 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	Adjustable, 200-800 rpm
Water Requirements	Minimum 25 PSI at 2.2 GPM
Dimensions	46" high x 24" wide x 18" deep
Weight	103 lbs net dry

## RAM-6 – Clean in forward and reverse

The RAM-6 is equipped with a reversible motor for cleaning internally enhanced tubes. The two-direction foot switch permits forward rotation for entering the tubes and reverse rotation for exiting. While the design of the brush and the spiral in the tube causes the brush to be self-propelled through the tube, the variable speed of the RAM-6 allows you to set the flexible shaft speed to match the natural feed rate of the spiral in your tube, preventing slip and allowing the brush to thoroughly clean both the lands and the grooves of the tube.

### RAM-6-60

Tube Cleaner, including contractor dolly, tool storage box, two-direction foot switch and a 1 gallon bottle of tube cleaning solution

**Note:** See pages 15-22 for shafts and accessories.

## RAM-6 Service Kit:

Get your RAM-6 working like new with the RAM6-SVC-KIT. This tune-up package includes illustrated instructions as well as all the replacement wear items you will need will need to get your unit running at peak performance.

**RAM6-SVC-KIT** RAM-6 Service Kit including, 805 O-ring, 6005 Seal, 825 Bearing, 826 Snap Ring, 6020 Snap Ring, 833 Lower Bearing, 6003 Shaft/Driver, 803 Screen Washer, 6006 Back-up Washer, 6012 V Belt and HWST-1037-P Cover Screws (package of six)



RAM6-SVC-KIT





# Maintain Optimal Firetube Boiler Efficiency

DON'T LET HEAVY SCALE AND DEPOSITS WREAK HAVOC ON YOUR SYSTEM'S PERFORMANCE.



## RAM-4X and RAM-4X2A – Turbine Action

It doesn't take long for heavy build-up of scale and soot to form in firetube boilers. That's why it's imperative to thoroughly and frequently clean your system of contaminants that can cause drastic increases in wasteful fuel consumption. Both the RAM-4X and the RAM-4X2A use the same trusted technology as the popular RAM-4 unit to clean larger I.D. boiler tubes. Powerful turbine action does the dirty work. With a variety of brushes and cleaning tools to choose from, these units make any boiler-cleaning operation an easy, one-person job that pays dividends in increased efficiency.



### Boiler Cleaning Systems (No Vacuums):

#### RAM-4X-60

Firetube Boiler Cleaner, including mobile dolly, tool storage box and single-direction foot switch

#### RAM-4X-2A-60

Firetube Boiler Cleaner, including mobile dolly, tool storage box and single-direction foot switch

**Note:** See pages 46-53 for shafts and accessories.

**Note:** See Tube Sizes Chart on page 37 for nozzle and brush sizes.

## FEATURES

- > Stainless steel construction
- > Interchangeable cleaning tools
- > Integrated dolly
- > Simultaneous water flush or vacuum
- > Foot switch activation
- > Reversible shaft rotation (optional)

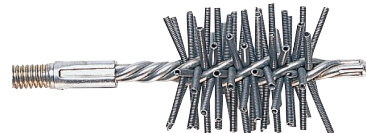
Specifications	RAM-4X
Motor Power	1 HP
Input Power	Standard: 13 amps, 115 V, 60 Hz AC Optional: 13 amps, 115 V, 50 Hz; 6.5 amps, 230 V, 60 Hz; or 6.5 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	1,725 rpm (can be decreased to 862.5 rpm by changing pulley ratio request 2:1 ratio drive for greater torque)
Dimensions	37" high x 20" wide x 17" deep
Weight	59 lbs

### Spring Filled Brushes:

Spring Filled Brushes are recommended for removing heavy scale deposits. The spring bristles dig into the scale, breaking it free from the tube wall.

**SFB-200** Spring Filled Brushes for tubes 1 3/8", 1 5/8", 2", 2 1/2", or 3" O.D.

**SFB-300** Spring Filled Brushes for tubes 2" or 3" I.D.



## Boiler Cleaning Systems (With Vacuums):

### RAM-4X-20-KIT

Firetube Boiler Cleaner, including mobile dolly, tool storage box, single-direction foot switch, dry pickup attachment, 2" x 12' hose, 18" straight bayonet nozzle (specify diameter), 25' GTC-721G Flexible Shaft, spring filled brush and GTC-540-20SS Vacuum

### RAM-4X-2A-20-KIT

Same as RAM-4X-20-KIT except 2 HP, 230 V

### RAM-4X-15-KIT

Firetube Boiler Cleaner, including mobile dolly, tool storage box, single-direction foot switch, dry pickup attachment, 2" x 12' hose, 18" straight bayonet nozzle (specify diameter), 25' GTC-721G Flexible Shaft, spring filled brush and GTC-540-15SS Vacuum

### RAM-4X-2A-15-KIT

Same as RAM-4X-15-KIT except 2 HP, 230 V

### RAM-4X-30-KIT

Firetube Boiler Cleaner, including mobile dolly, tool storage box, single-direction foot switch, dry pickup attachment, 2" x 12' hose, 18" straight bayonet nozzle (specify diameter), 25' GTC-721G Flexible Shaft, spring filled brush and GTC-540-30DD Vacuum

### RAM-4X-2A-30-KIT

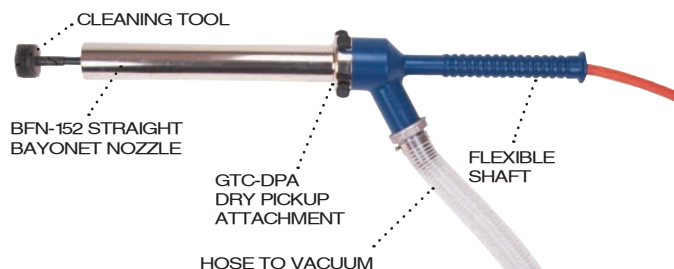
Same as RAM-4X-30-KIT except 2 HP, 230 V

### RAM-4X-55-KIT

Firetube Boiler Cleaner, including mobile dolly, tool storage box, single-direction foot switch, dry pickup attachment, 2" x 12' hose, 18" straight bayonet nozzle (specify diameter), 25' GTC-721G Flexible Shaft, spring filled brush and GTC-540-55DD Vacuum

### RAM-4X-2A-55-KIT

Same as RAM-4X-55-KIT except 2 HP, 230 V



Specifications	RAM-4X2A
Motor Power	2 HP
Input Power	Standard: 11.5 amps, 230 V, 60 Hz AC Optional: 11.5 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	1,725 rpm (can be decreased to 862.5 rpm by changing pulley ratio request 2:1 ratio drive for greater torque)
Dimensions	37" high x 20" wide x 17" deep
Weight	75 lbs

## Dry Pickup Attachment:

The GTC-DPA can be used with the RAM-4X, RAM-4X2A, AWT-100 and AWT-100X Tube Cleaners for the recovery of dry deposits. After connecting the vacuum (see page 38) the operator simply inserts a special dry application flexible shaft (GTC-721, GTC-721G or GTC-821) through the Dry Pickup Attachment and into the tube. While the operator feeds the rotating shaft through the tube, the cleaning tool breaks up deposits which are immediately pulled into the vacuum drum.

**GTC-DPA** Dry Pickup Attachment, including 2" x 12' hose with quick connect fitting (order nozzle below)

**BFN-152S** Straight Bayonet Nozzle, 18" long for tubes 1 $\frac{3}{8}$ ", 1 $\frac{5}{8}$ ", 2", 2 $\frac{1}{2}$ ", 3" or 3 $\frac{1}{2}$ " O.D.

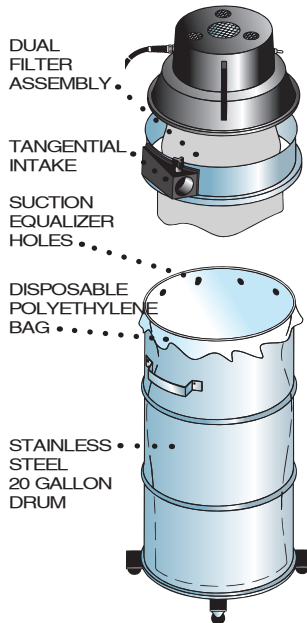
**BFN-152SA** Straight Bayonet Nozzle, 18" long for tubes 4" O.D.

# Welcome To SootVac® Central

EVERYTHING YOU WILL EVER NEED FOR EASY AND EFFICIENT REMOVAL OF SOOT, AND MUCH MORE.



GTC-540-20SS



## FEATURES

- > Two heavy-duty motors
- > Exhaust muffler (only 82 dBA)
- > Reusable filters
- > Four tank sizes
- > 1½" or 2" hoses

## Maximize Boiler Efficiency

The SET-200 Stack Efficiency Tester measures O<sub>2</sub> and CO content, and stack temperature, then calculates CO<sub>2</sub>, excess air and combustion efficiency. It features automatic calibration to assure accuracy and gives a real time display of measurements and calculations to see the effects of boiler adjustments as they are made. An optional printer allows you to keep a hard copy record of test results.

**Note:** See page 86 for specifications and prices.



Specifications	GTC-540
Motor Power	2 1/4 HP
Input Power	Standard: 14 amps, 115 V, 50/60 Hz AC Optional: 7 amps, 230 V, 50/60 Hz AC
Power Supply Cord	37', 14-3
Static Water Lift	50"
Air Displacement	270 CFM
Filtration	15 microns polypropylene/dacron
Dry Capacity	20 gallons
Noise Level	78 dBA
Dimensions	15" diameter tank x 48" high (GTC-540-20SS)
Weight	25 lbs (head only) and 70 lbs (GTC-540-20SS)

## GTC-540 – Clean Solution

The GTC-540 is an essential companion to your Firetube Boiler Cleaner. Considering the costly effects of soot build-up, it pays to maintain your firetube boilers with this complete soot removal system. The high CFM rating of the GTC-540 vacuum ensures speedy and tidy elimination of performance-robbing substances with none of the filter clogging you'd expect from light, powdery materials like firetube soot.

### Soot Vacuum:

#### GTC-540-20SS

Heavy-Duty Soot Vacuum including filters, tangential intake port, 20 gallon stainless steel soot/powder recovery assembly, polyethylene tank liner, disposable polyethylene collection bag and dolly

#### GTC-540-15SS

Heavy-Duty Soot Vacuum, including filters, and 15 gallon stainless steel tank with handle and casters

#### GTC-540-30\*

Heavy-Duty Soot Vacuum, including filters and 18"-20" diameter drum adapter ring

#### GTC-540-55\*

Heavy-Duty Soot Vacuum, including filters and 22"-24" diameter drum adapter ring

**\$1,170.00**

\* **Note:** Fits any standard drum – 30 or 55 gallon depending on model.

### Drum Liner and Bags::

**PDL-30** High Density Polyethylene Liner for 20 or 30 gallon drum

**POLY-20-25** Disposable Polyethylene Bag (package of 25) for 20 gallon drum

**POLY-30-25** Disposable Polyethylene Bag (package of 25) for 30 gallon drum

### Vacuum Accessories:

**VAC-049QD** Steel Crevice Tool with quick connect

**GTC-167** Cleanup Tool with quick connect

**GTC-167R** Replacement Bristle for GTC-167 Cleanup Tool

**GTC-168** Flat Surface Paw Scraper Tool with quick connect

**GTC-170** Replacement Hose, 2" x 12' for SAM-3 and GTC-DPA Dry Pickup Attachment

**GTC-170S-QD** Hose, 2" x 12' with sleeve, quick connect and washer



VAC-049QD



GTC-167



GTC-168



GTC-170SQD



# Proven Cleaning Reliability For Large Tubes

TACKLES THE TOUGHEST TUBE FOULING PROBLEMS.

## RAM-4X – Powerful and Versatile

The RAM-4X is a large-diameter tube-cleaning specialist that offers you more versatility than conventional tube cleaners. For wet applications, you get the superior cleaning performance of our water flow technology. For dry applications, use the GTC Dry Pickup Attachment and companion Vacuum to remove deposits. (See pages 41 for details on the Dry Pickup Attachment and Vacuum.) Foot switch operation is easy and requires minimal training. With interchangeable cleaning tools available and an integrated dolly, the RAM-4X is both highly versatile and highly mobile for all your heavy-duty tube-cleaning jobs.

### RAM-4X-60

Heavy-Duty Tube Cleaner, including mobile dolly, tool storage box and single-direction foot switch

### Contractor Dolly:

The RAM-4X is available with an integrated contractor dolly for total mobility at multiple job locations.

### RAM-DOLLY-C

Heavy-Duty Contractor Dolly (upgrade)\*



RAM-DOLLY-C



## FEATURES

- > Stainless steel construction
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Integrated dolly
- > Simultaneous water flush
- > Foot switch activation
- > Reversible shaft rotation (optional)

Specifications	RAM-4X
Motor Power	1 HP
Input Power	Standard: 13 amps, 115 V, 60 Hz AC Optional: 13 amps, 115 V, 50 Hz; 6.5 amps, 230 V, 60 Hz; or 6.5 amps, 230 V, 50 Hz
Power Supply Cord	21', 14-3 GFCI
Flexible Shaft Speed	1,725 rpm (can be decreased to 862.5 rpm by changing pulley ratio – request 2:1 ratio drive for greater torque)
Water Requirements	Minimum 30 PSI at 3 GPM
Dimensions	37" high x 20" wide x 17" deep
Weight	59 lbs

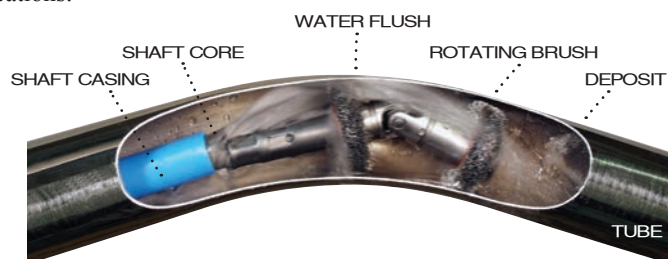
# Clean Tubes In Tight Locations

THE AWT-100 IS THE AIR POWERED SOLUTION FOR BETTER SYSTEM PERFORMANCE.



## AWT-100 – Compact and Powerful

For situations where electricity is not available or desirable, the air-powered AWT-100 is up to the task. With the appropriate cleaning tool attached, the flexible shaft will loosen unwanted deposits while the shaft casing provides water to flush out the loosened debris for better system efficiency. The unit also does double duty as a dry tube cleaner when accompanied by a Dry Pickup Attachment and Vacuum. (See page 41 for details on the Dry Pickup Attachment and Vacuum). Both portable and lightweight, the AWT-100 is perfect for tight spaces and remote locations.



### AWT-100

Air Powered Tube Cleaner, including adjustable speed/torque control, quick connect air and water fittings, and single-direction foot switch

### Recommended:

For better air regulation and quality, plus longer motor life, we recommend the combination air lubricator, filter and regulator unit.

### GTC-705-4

Combination Air Lubricator, Filter and Regulator (see page 37)



GTC-705-4

### ASH-B50-A

Air Supply Hose, 1/2" x 50'

## FEATURES

- > Air powered
- > Compact
- > Speed/torque control to set shaft rotation to optimum speed for each application
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Simultaneous water flush
- > Foot switch activation

Specifications	AWT-100
Motor Power	Up to 1.5 HP depending upon air pressure and volume
Air Requirements	Minimum 60 PSI at 15 CFM, Maximum 100 PSI at 70 CFM
Flexible Shaft Speed	Adjustable, 500-3,000 rpm
Water Requirements	Minimum 30 PSI at 2 GPM
Dimensions	10 3/8" high x 6" wide x 19" deep
Weight	29 lbs net dry





# Win The War Against Deposits With Air Superiority

DO THE JOB WET OR DRY, WITH NO ELECTRICITY REQUIRED.

## AWT-100X – Air Powered Performance

The AWT-100X has power and versatility to clean virtually any tube or pipe in either wet or dry modes. You control the speed and torque of the unit's flexible shaft to suit your application. A variety of cleaning tools are available for the different kinds of deposits you face. It is equally effective in both wet and dry configurations. (See page 41 for details on the Dry Pickup Attachment and Vacuum). For superior air-powered technology that handles all your tough cleaning applications, this unit will blow you away.



### AWT-100X

Heavy-Duty Air Powered Tube Cleaner, including air lubricator, adjustable speed/torque control, mobile dolly, tool storage box and single-direction foot switch

### Contractor Dolly:

The AWT-100X is available with an integrated contractor dolly for total mobility at multiple job locations.

### RAM-DOLLY-C

Heavy-Duty Contractor Dolly (upgrade)\*

### ASH-B50-G

Air Supply Hose, 1/2" x 50'



## FEATURES

- > Air powered
- > Stainless steel construction
- > Air lubricator
- > Speed/torque control to set shaft rotation to optimum speed for each application
- > Quick connect threadless shaft manifold
- > Interchangeable cleaning tools
- > Integrated dolly
- > Simultaneous water flush
- > Foot switch activation



Specifications	AWT-100X
Motor Power	Up to 4 HP depending upon air pressure and volume
Air Requirements	Minimum 60 PSI at 85 CFM, Maximum 100 PSI at 130 CFM
Flexible Shaft Speed	Adjustable, 500-3,000 rpm
Water Requirements	Minimum 30 PSI at 3 GPM
Dimensions	37" high x 20" wide x 17" deep
Weight	54 lbs net dry