

HVAC | INDUSTRIAL PLANT | FACILITY | FOOD & BEVERAGE

# GOODWAY®

INNOVATIVE & TECHNOLOGY-DRIVEN  
**MAINTENANCE SOLUTIONS**



ALL NEW REDESIGNED  
TUBE CLEANERS.  
SEE PAGE 6 FOR DETAILS



Proud Recipients of the Presidents'  
Excellence in Exporting "E" Award

# ROTARY TUBE CLEANERS



**RAM PRO®**  
WET, SMOOTH BORE AND ENHANCED TUBES

**RAM PRO XL®**  
WET, SMOOTH BORE AND ENHANCED TUBES

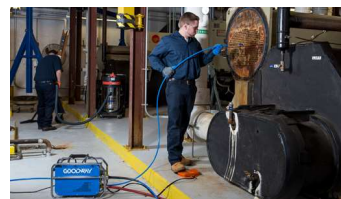
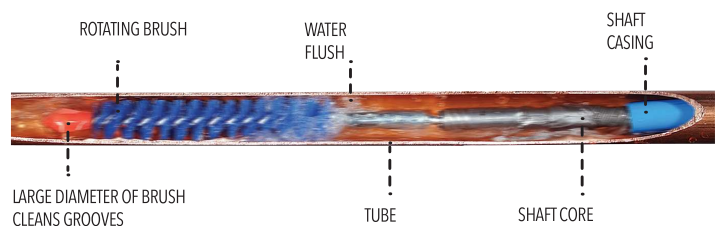
**RAM-4**  
WET, SMOOTH BORE AND ENHANCED TUBES

**RAM-5DC**  
WET AND SMOOTH BORE TUBES (WITH MANUAL OR MECHANICAL FEED)

SPECIFICATIONS	RAM PRO	RAM PRO XL	RAM-4	RAM-5DC
Tube Size Range	6,35 mm - 25,4 mm I.D.	6,35 mm - 25,4 mm I.D.	6,35 mm - 25,4 mm I.D.	6,35 mm - 25,4 mm I.D. (manual) 11,09 mm - 25,4 mm I.D. (mechanical)
Motor Power	0,19 kW (115 V) 0,37 kW (230 V)	0,37 kW	0,37 kW	0,56 kW
Input Power	Standard: 5,5 Amps, 115 V, 60 Hz AC Optional: 5,5 Amps, 115 V, 50 Hz; AC 4,5 Amps, 230 V, 60 Hz AC; or 4,5 Amps, 230 V, 50 Hz AC	Standard: 10 Amps, 110 V, 50/60 Hz AC Optional: 10 Amps, 230 V, 50/60 Hz AC	Standard: 9 Amps, 115 V, 60 Hz AC Optional: 9 Amps, 115 V, 50 Hz AC; 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 AC; 6 Amps, 230 V, 60 Hz AC; or 6 Amps, 230 V, 50 Hz AC
Power Supply Cord	3,65 m, 18-3 GFCI	6,40 m, 14-3 GFCI	6,40 m, 14-3 GFCI	6,40 m, 14-3 GFCI
Air Requirement	-	-	-	-
Shaft Speed	862,5 RPM	Adjustable, 0-900 RPM	862,5 RPM	Adjustable, 200-862,5 RPM
Shaft Length	Standard up to 22,86 m	Standard up to 22,86 m	Standard up to 22,86 m	Standard up to 22,86 m
Special Features	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 (standard) Water flush Quick Connect shaft manifold	Reversible shaft rotation Water flush Chain Drive Quick Connect shaft manifold Mechanical feed up to 1 m per second Mechanical feed force at 22,7 Kg

## FEATURES

- Heavy-duty construction
- Quick Connect threadless shaft manifold
- Interchangeable wet, dry and high temperature flexible shafts
- Interchangeable cleaning brushes and tools
- Simultaneous water flush or vacuum (depending on model)
- Foot switch or gun activation (depending on model)



SPECIFIC MODELS ONLY



SPECIFIC MODELS ONLY

# ROTARY TUBE CLEANERS



**I-RAM-EX-100**

WET OR DRY SMOOTH BORE  
TUBES/PIPES/HOSES



**AWT-100**

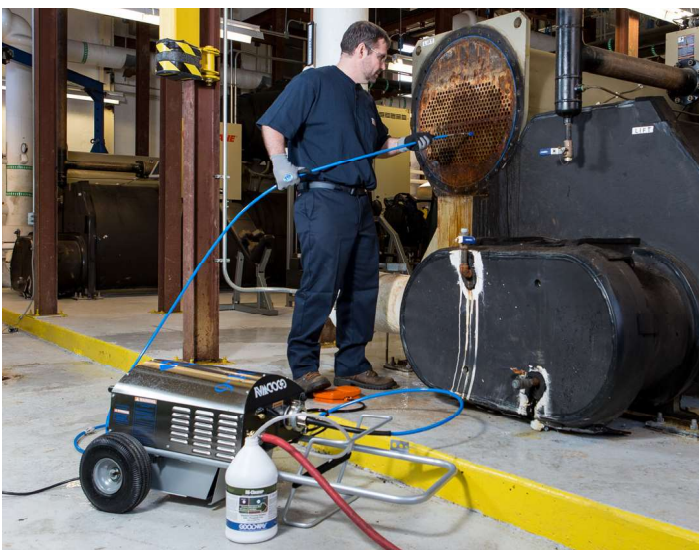
WET OR DRY SMOOTH BORE  
TUBES/PIPES/HOSES



**AWT-100X**

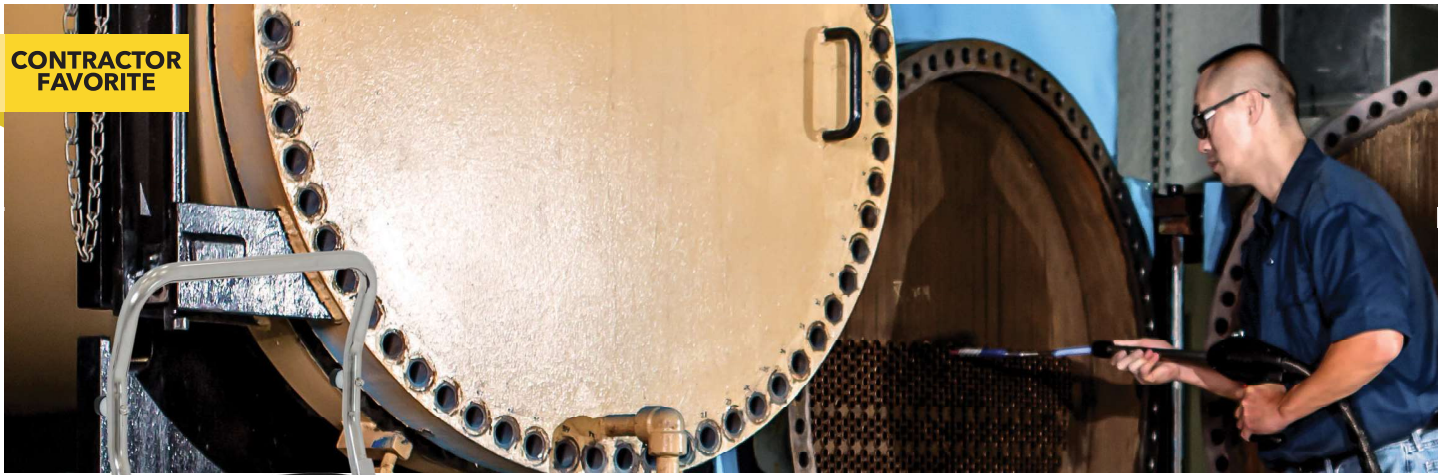
WET OR DRY SMOOTH BORE  
TUBES/PIPES/HOSES

SPECIFICATIONS	I-RAM-EX-100	AWT-100	AWT-100X
Tube Size Range	7 mm - 25 mm	6,35 mm I.D. and up	6,35 mm I.D. and up
Motor Power	0,37 kW	1,1 kW	Up to 2,9 kW
Input Power	Standard: 230 V 50/60 Hz AC at 4.5 A Optional: 115 V 50/60 Hz at 9.0 A	-	-
Power Supply Cord	6,1 m 14/3 GFCI	-	-
Air Requirement	-	Minimum 4,1 BAR at 15 CFM, Maximum 6,9 BAR at 70 CFM	Minimum 4,1 BAR at 85 CFM, Maximum 6,9 BAR at 130 CFM
Shaft Speed	860 RPM	Adjustable, 500-3,000 RPM	Adjustable, 500-3,000 RPM
Shaft Length	3,6 m, 5,2 m, 7,6 m, 10,7 m, and 13,7 m (Available Lengths)	Standard up to 22,9 m	Standard up to 22,9 m
Special Features	Hand carried Water flush Reversible shaft rotation Quick Connect shaft manifold On-board storage	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



# RESULTS DRIVEN & SUITED FOR LARGE TUBE BUNDLES

**CONTRACTOR FAVORITE**



*\*Vs manual feed rotary tube cleaner*

**AUTO FEED TUBE CLEANER**

**NEW!**

CE

**UP TO 4X FASTER THAN OTHER TUBE CLEANERS\***

## FEATURES

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

**RAM-5DC-ID-60:** Speed-Feed Tube cleaner, including speed-feed gun, 4,5 m guide hose, one set of shaft feeder gears (specify size), mobile dolly, tool storage box and two-direction foot switch

**Note:** See pages 11-15 for shafts and accessories.

## RAM-5DC – Revolutionary Speed

With patented technology and 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.

No more hand feeding shafts down the tubes. Just pull the trigger and let the gun do all the work. As the cleaning tool loosens debris, the shaft casing provides a steady stream of water, flushing out debris and restoring system efficiency. With the Speed-Feed gun and variable speed function, you control the direction of shaft rotation, water flow, brush rpm and feed rate.

The updated RAM-5 delivers more. It boasts a more portable design, with ergonomic features, and intuitive controls.

### SPECIFICATIONS

### RAM-5DC

Motor Power	0,5 kW
Input Power	Standard: 12 amps, 115V, 60 Hz AC Optional: 12 amps, 115V, 50 Hz; 6 amps, 230V, 60 Hz; or 6 amps, 230V, 50 Hz
Power Supply Cord	6,4 m, 14-3 GFCI
Flexible Shaft Speed	Adjustable, 200-862.5 rpm
Speed-Feed Gun Race	Adjustable, 0,2-0,9 m per second
Speed-Feed Gun Force	22,6 Kg, push/pull
Water Requirements	Minimum 32 BAR at 7,5 LPM
Dimensions (Excluding gun and guide hose)	939,8 mm (H) x 2508 mm (W) x 431,8 mm (D)
Weight	34 Kg, net dry



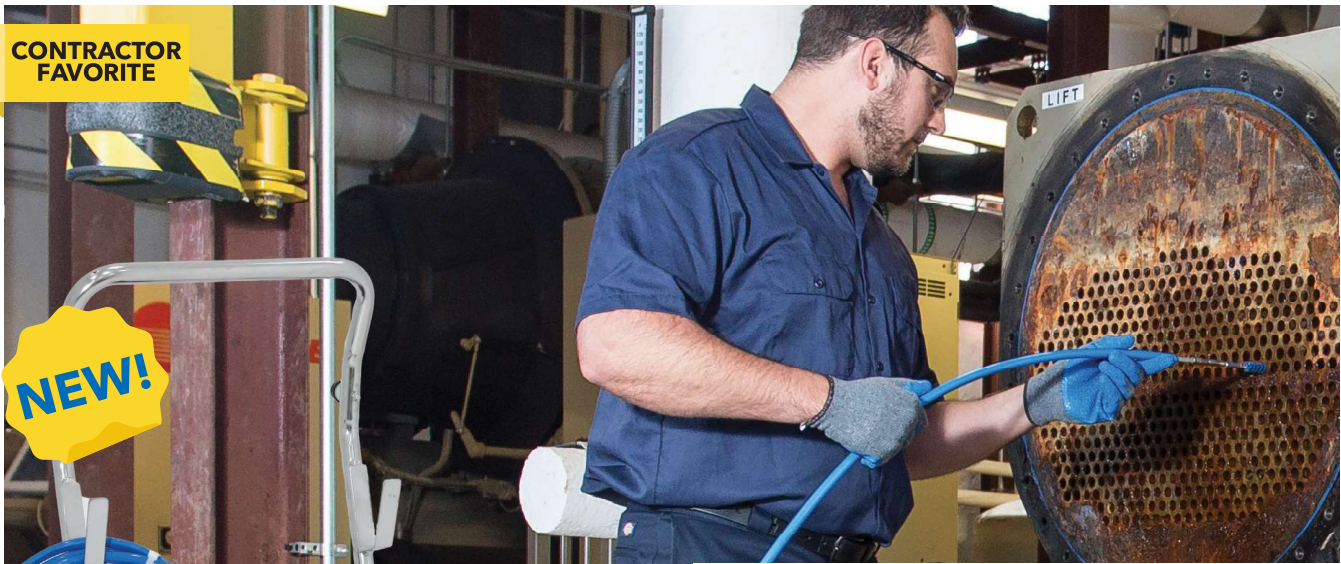
### RAM-5 Guide Reverse Stop Assembly

Make tube cleaning even faster! Get auto forward AND reverse stopping with the this new assembly. Please note that this reverse stop guide is only compatible with the RAM-5.

# TOP OF THE LINE TUBE CLEANER

CONTRACTOR FAVORITE

NEW!



CE

CE certification only applies to RAM-4-A-50Hz model.

## FEATURES

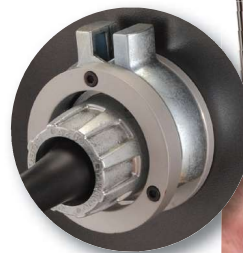
- Stainless steel construction
- Simultaneous water flush
- Quick connect threadless shaft manifold, with advanced water seal technology
- Foot switch activation
- Reversible shaft rotation
- Interchangeable cleaning tools
- Increased portability
- Updated, ergonomic design
- Integrated dolly

**RAM-4-ID-60-R:** Tube cleaner, including mobile dolly, tool storage box and two-direction foot switch (115V, 50/60 Hz)

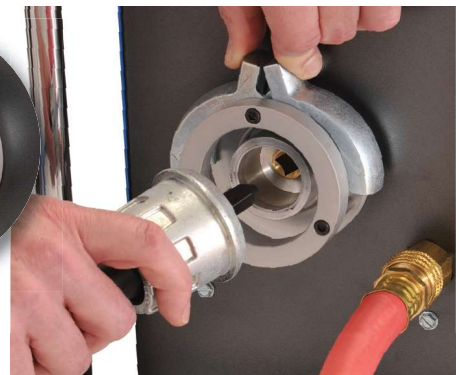
## RAM-4 – The Original Rotary Tube Cleaner Got Better

With a Goodway tube cleaner in your arsenal, you're backed by many years of proven tube-cleaning performance. The latest generation RAM-4 includes an updated design, better portability, and easy-to-use 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.



EXCLUSIVE THREADLESS QUICK CONNECT SHAFT COUPLING

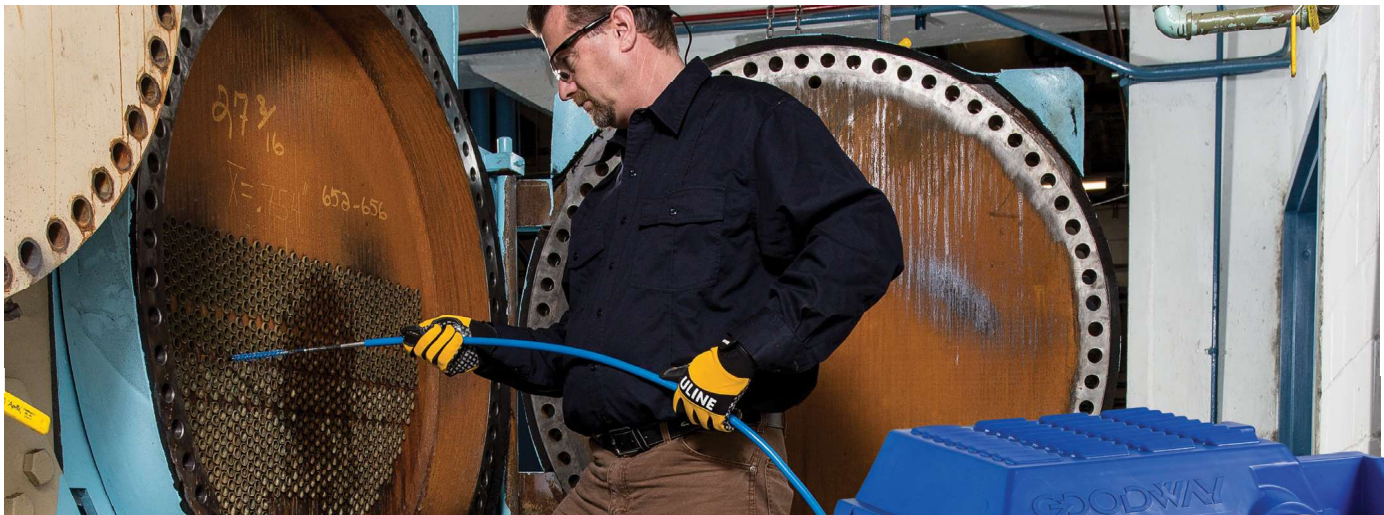


## SPECIFICATIONS

### RAM-4

Motor Power	0.4 kW
Input Power	Standard: 9 amps, 115V, 60 Hz AC Optional: 9 amps, 115V, 50 Hz; 4.5 amps, 230V, 60 Hz; or 4.5 amps, 230V, 50 Hz
Power Supply Cord	6,4 m, 14-3 GFCI
Flexible Shaft Speed	862.5 rpm
Water Requirements	Minimum 2,7 BAR, 7,5 LPM
Dimensions	940 mm (H) x 508 mm (W) x 432 mm (D)
Weight	22 Kg, Net Dry

# SMALL SIZE. BIG RESULTS.



## I-RAM-EX-100 - Portable and Compact

The new I-RAM-EX-100 is the latest in the line of award-winning tube cleaners. Designed for the ultimate experience in portability, this compact tube cleaner includes all the innovative features you expect and the benefits you demand from a Goodway product. Integrated flush, 860 RPM reversible shaft rotation, quick connect shaft and brushes and all at half the size of our traditional tube cleaners. That's big news.

**I-RAM-EX-100:** Tube cleaner, two-direction foot switch (115V, 50/60 Hz).



### FEATURES

- Foot pedal compartment for easy storage
- Built-in Electric cord holder
- Metric sized brushes & shafts
- Quick Connect shaft to manifold and shaft to brush
- 0.37Kw Motor
- Available in 115v 50/60Hz AC or 230v 50/60Hz AC
- Portable, compact design
- Rugged/Durable molded outer shell

### SPECIFICATIONS I-RAM-EX-100

Tube Range	7 mm - 25 mm
Motor Power	0,37 kW
Input Power	230 V 50/60 Hz 4.5 Amps   115 V, 50/60 Hz, 9,0 Amps
Power Supply Cord	6 m 14/3 GFCI
Air Requirement	None
Shaft Speed	860 rpm
Weight	17,2 Kg
Shaft Length	3,6 m, 5,2 m, 7,6 m, 10,7 m, & 13,7 m (Available Lengths)
Dimensions	229 mm (H) x 559 mm (W) x 419 mm (D)

### I-RAM-EX-100 SHAFTS AND BRUSHES

PART #	DESCRIPTION
GTC-701EX-3.6M	Flexible Shaft for tubes 6.4-9.5mm I.D., 3,6 meter length
GTC-701EX-7.6M	Flexible Shaft for tubes 6.4-9.5mm I.D., 7,6 meter length
GTC-702EX-3.6M	Flexible Shaft for tubes 11.1-12.7mm I.D., 3,6 meter length
GTC-702EX-5.2M	Flexible Shaft for tubes 11.1-12.7mm I.D., 5,2 meter length
GTC-702EX-7.6M	Flexible Shaft for tubes 11.1-12.7mm I.D., 7,6 meter length
GTC-702EX-10.7M	Flexible Shaft for tubes 11.1-12.7mm I.D., 10,7 meter length
GTC-702EX-13.7M	Flexible Shaft for tubes 11.1-12.7mm I.D., 13,7 meter length
GTC-703EX-3.6M	Flexible Shaft for tubes 14.3-25.4mm I.D., 3,6 meter length
GTC-703EX-5.2M	Flexible Shaft for tubes 14.3-25.4mm I.D., 5,2 meter length
GTC-703EX-7.6M	Flexible Shaft for tubes 14.3-25.4mm I.D., 7,6 meter length
GTC-703EX-10.7M	Flexible Shaft for tubes 14.3-25.4mm I.D., 10,7 meter length
GTC-703EX-13.7M	Flexible Shaft for tubes 14.3-25.4mm I.D., 13,7 meter length
GTC-704EX-3.6M	Flexible Shaft for tubes 25.4-27.0mm I.D., 3,6 meter length
GTC-704EX-5.2M	Flexible Shaft for tubes 25.4-27.0mm I.D., 5,2 meter length
GTC-704EX-7.6M	Flexible Shaft for tubes 25.4-27.0mm I.D., 7,6 meter length
GTC-704EX-10.7M	Flexible Shaft for tubes 25.4-27.0mm I.D., 10,7 meter length
GTC-704EX-13.7M	Flexible Shaft for tubes 25.4-27.0mm I.D., 13,7 meter length
GTC-240Q-13	Plastic Brush with Quick Connect, 13mm Diameter
GTC-240Q-16	Plastic Brush with Quick Connect, 16mm Diameter
GTC-240Q-17.5	Plastic Brush with Quick Connect, 17,5mm Diameter
GTC-240Q-19	Plastic Brush with Quick Connect, 19mm Diameter
GTC-240Q-22	Plastic Brush with Quick Connect, 22mm Diameter
GTC-240Q-25	Plastic Brush with Quick Connect, 25mm Diameter

# A CONTRACTOR'S BEST FRIEND



TUBE CLEANERS

CUSTOMER FAVORITE



U.S. PATENT NO. D767,846

QUICK CONNECT SHAFT

## SPECIFICATIONS RAM PRO

Tube Size Range	6,4 to 25,4 mm I.D.
Motor Power	0,19 kW (115 V Model) 0,37 kW (230 V Model)
Input Power	5,5 Amps, 115 V, 60 Hz AC Optional 5,5 Amps, 115 V, 50 Hz AC; 4,5 Amps, 230 V, 60 Hz AC; or 4,5 Amps, 230 V, 50 Hz AC
Power Supply Cord	3 m, 18-3 GFCI
Shaft Speed	862,5 RPM
Shaft Feed Method	Manual
Shaft Length	Maximum 22,9 m
Water Requirements	Minimum 2,1 BAR at 7,6 LPM
Special Features	Roll Cage Quick Connect Threadless Shaft Manifold Reversible Shaft Rotation Water Flush
Dimensions	405 mm (H) x 230 mm (W) x 510 mm (D)
Weight	15 Kg, Net Dry

## RAM PRO® - Rugged and Dependable

The powerful RAM PRO handles the demanding environment of commercial contracting work like no other tube cleaner.

**DESIGNED FOR CONTRACTORS:** Sturdy roll cage protects the RAM PRO at the job site and in the back of a crowded work truck.

**SAVES TIME:** Quick Connect shaft attaches with a simple push - and quickly disassembles for transport.

**PEAK ON-SITE PERFORMANCE:** No more slipped belts or equipment down time. Chain drive system replaces traditional rubber belt for smooth performance in challenging situations.

**HANDLES ROUGH ENVIRONMENTS:** Motor assembly is connected with vibration isolators to help tolerate bumps and jolts.

**COMPACT AND LIGHTWEIGHT:** Easy to carry and less than half the weight of other tube cleaners.

## FEATURES

- Heavy-duty roll cage construction
- Ultra compact design
- Quick Connect threadless shaft manifold
- Interchangeable flexible shafts
- Interchangeable cleaning brushes and tools
- "Sweet Spot" 862, 5 RPM
- Simultaneous water flush
- Forward and reverse foot switch activation



# WHY EVERY HVAC TECHNICIAN NEEDS TUBEGUARD-XL-4



- 1 CLEAN**  
Variable shaft speed has a reversible shaft rotation and simultaneously flushes 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 RAM-PRO-XL is an innovative new tube cleaner that utilizes TubeGuard technology with a custom formulated tablet designed specifically for chiller tubes. The XL version is the more powerful big brother to the popular RAM-PRO.

The TubeGuard-XL tablet dispenser along with variable shaft speed control and reversible shaft rotation makes it the most advanced portable tube cleaner available today.

**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:** 230 V, 50/60 Hz.

## TubeGuard® -XL Corrosion Inhibitor

A custom formulated tablet design is the best available technology for corrosion inhibition of copper and ferrous metal tubes. The TubeGuard-XL tablet is safe to handle, completely biodegradable and designed with environmentally friendly chemicals.

Specifically designed to work with the all new RAM-PRO-XL, this revolutionary tube cleaning process will forever change the ease and effectiveness of both eliminating bio-film and preventing corrosion. 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 in EPA certified bio-film removal compounds.

**TUBEGUARD-XL-4:** Package of four tube cleaning tablets (for three average sized chiller cleanings). For use with the RAM-PRO-XL.

### FEATURES

- On-board TubeGuard dispensing system
- Heavy-duty roll cage construction with integrated dolly
- 0,372 kW motor
- Direct Drive
- Quick Connect threadless shaft manifold
- Interchangeable cleaning tools
- Variable shaft speed
- Reversible shaft rotation
- Simultaneous water flush
- Power cord and foot pedal storage



U.S. PATENT NO. D722,737

SPECIFICATIONS	RAM PRO XL
Motor Power	Standard: 0,37 kW
Input Power	Standard: 5.5 Amps, 115 V, 50/60 Hz AC Optional: 3 Amps, 230 V, 50/60 Hz AC
Power Supply Cord	6,4 m, 14-3 GFCI
Flexible Shaft Speed	Variable 0-900 RPM
Water Requirements	2 BAR at 7,57 LPM
Dimensions	508 mm (H) x 406 mm (W) x 660 mm (D)
Weight	24,94 Kg, Net Dry





# TOOLS FOR BASIC MAINTENANCE AND REPAIR



## PSM-500 - Easy Handling

Small, straight tubes can often be the source of some not so straight forward problems. Tubes measuring 25 mm I.D. and smaller can easily trap debris or become clogged from just a minor buildup of deposits. Fortunately, the PSM-500 Tube Cleaning Drill was designed to clear virtually any straight, small ID tube you're likely to encounter. An in-line water flush makes easy work of removing a wide range of debris, from solid clogs to soft deposits. After just one cleaning with the PSM-500, you'll be amazed at how easy it is to maintain an optimal tube condition in all your straight, small tubes.

**PSM-500:** Tube Cleaning Drill including air drive unit, 4,5 m air hose, 4,5 m water hose, 4,5 mm or 6,35 mm starter drill.



GTC-705-4



### RECOMMENDED:

For better air regulation and quality, plus longer motor life, we recommend the combination air lubricator, filter and regulator unit (GTC-705-4).

**GTC-705-4:** Combination Air Lubricator, Filter and Regulator (see page 19)

### OPTIONAL:

**3012-500:** Carrying Case, with room for up to eight 1,2 m long hollow drills



### FEATURES











- Compact, rugged construction
- Independent air motor and water flow controls to reduce water consumption
- Push button trigger to reduce fatigue

SPECIFICATIONS	PSM-500
Drill Speed	950 RPM (Free Speed)
Motor Power	Up to 0,5 kW Depending on Air Pressure and Volume
Air Requirements	Minimum 3,4 BAR at 18 m <sup>3</sup> /h Maximum 6,2 BAR at 32 m <sup>3</sup> /h
Water Requirements	Minimum 2,1 BAR at 7,6 LPM, Maximum 6,9 BAR at 7,6 LP
Hoses	4,6 m Air Hose and 4,6 m Water Hose
Dimensions	290 mm Long
Weight	2,5 Kg
Optional Carrying Case	360 mm (H) x 1360 mm (W) x 120 mm (D)

SEE PAGE 21 FOR OPTIONAL EQUIPMENT AND ACCESSORIES. CALL FOR ASSISTANCE.



# HEAVY DUTY ACCESSORIES FOR SMALL TUBES

ACCESSORY	APPLICATION	PART NO.	SIZES
<b>Blue Nylon Brushes</b> 	Removing soft deposits in straight, ferrous and nonferrous tubes. Brush should be equal to or 1,6 mm smaller than tube I.D.	GTC-211	6,4 to 25,4 mm (in 1,6 mm increments)
<b>Brass Brushes</b> 	Removing soft and light scale deposits in straight, ferrous and nonferrous tubes. Brush should be equal to or 1,6 mm smaller than tube I.D.	GTC-200B	6,4 to 25,4 mm (in 1,6 mm increments)
<b>Stainless Steel Brushes</b> 	Removing soft and light scale deposits in straight, ferrous tubes. Brush should be equal to or 1,6 mm smaller than tube I.D.	GTC-210	6,4 to 25,4 mm (in 1,6 mm increments)
<b>Adjustable Buffing Tool</b> 	Removing light to medium scale deposits or for finishing tubes previously "roughed out" with other cleaning tools. They can be used in straight, ferrous and nonferrous tubes. Buffing tools can only be used in a clockwise (forward) direction and cannot be used in internally enhanced tubes. They are adjustable to a 6,4 mm range.	GTC-203P GTC-203PDT GTC-205 GTC-205DT GTC-206 GTC-206DT GTC207/208A/208B	Buffing Tool for tubes 7,9 to 12,7 mm I.D. Same as GTC-203PDT with drill tip Buffing Tool for tubes 12,7 to 14,3 mm I.D. Same as GTC-205DT with drill tip Buffing Tool for tubes 15,9 to 25,4 mm I.D. Same as GTC-206DT with drill tip Replacement Blades for GTC-203P, GTC-205 and GTC-206 (specify Buffing Tool)
<b>Adjustable Triangular Scraping Tool</b> 	Removing heavy scale deposits in straight, ferrous tubes. They can only be used in a clockwise (forward) direction and cannot be used in internally enhanced tubes. They are adjustable to a 6,4 mm range.	TST-500 TST-750	Triangular Scraper Tool for tubes 12,7 to 19,1 mm I.D. Triangular Scraper Tool for tubes 19,1 to 25,4 mm I.D.
<b>Starter Drills</b> 	Making pilot holes in deposits of completely clogged tubes.	GTC-975A GTC-975B	Starter Drill, 4,8 or 6,4 mm Starter Drill, 9,5 mm and up
<b>Hollow Drills</b> 	Cleaning severely or completely clogged tubes. (Effective length 840 mm for 0,9 m drills and 1.140 mm for 1,2 m drills.)	GTC-960-3 GTC-961-3	Hollow Drill, 4,8 mm x 0,9 m Hollow Drill, 6,4 mm x 0,9 m  NOTE: HOLLOW DRILLS ARE AVAILABLE IN DIAMETERS FROM 3,2 TO 19,1 MM UP TO 1,8 M LONG.
<b>Hollow Shafts</b> 	Adapt brushes, buffing tools, hollow carbide drills and twist drills to PSM-500.	GTC-964-3  GTC-965-3  GTC-965-KIT  GTC-989-KIT  GTC-998	Hollow Shaft, 0,9 m long with coupling for 6,4 mm brushes Note: GTC-964 Hollow Shaft is available up to 1,8 m long. To order, change suffix on GTC-964 to length specifications beyond 0,9 m standard (e.g. GTC-964-6 is a 1,8 m Hollow Shaft.)  Hollow Shaft, 0,9 m long with coupling for 7,9 mm brushes, coupling for 9,5 mm brushes, and coupling for 11,1 to 25,4 mm brushes and all buffing tools for 7,9 to 25,4 mm I.D. tubes  Hollow Shaft Kit for tubes 7,9 to 12,7 mm I.D. including three 990 mm long hollow extension shafts with couplings to form a 3 m shaft, a 305 mm short hollow extension shaft, coupling to connect shaft to PSM-500 and couplings to connect brushes, buffing tools, hollow carbide drills and twist drills to shaft  Hollow Shaft Kit for tubes 14,3 to 25,4 mm I.D. including three GTC-998 Hollow Extension Shafts with couplings to form a 3 m long shaft, a 0,3 m shaft, coupling to connect shaft to PSM-500, coupling to connect brushes, buffing tools, hollow carbide drills and twist drills to shaft, and assembly tools  Hollow Extension Shaft, 990 mm long for GTC-989-KIT
<b>Hollow Drill Tips</b> 	Hollow Drill Tips attach to Hollow Shafts and are used to clean severely or completely clogged tubes.	GTC-RWB-031 GTC-RWB-037 GTC-RWB-042 GTC-RWB-050 GTC-RWB-056 GTC-RWB-062 GTC-RWB-075 GTC-RWB-100	Hollow Drill Tip, 7,9 mm Hollow Drill Tip, 9,5 mm Hollow Drill Tip, 11,1 mm Hollow Drill Tip, 12,7 mm Hollow Drill Tip, 14,3 mm Hollow Drill Tip, 15,9 mm Hollow Drill Tip, 19,1 mm Hollow Drill Tip, 25,4 mm
<b>Twist Drills</b> 	Twist Drills attach to Hollow Shafts and are used to clean severely or completely clogged tubes.	GTC-TD-031 GTC-TD-037 GTC-TD-042 GTC-TD-050 GTC-TD-056 GTC-TD-062 GTC-TD-075 GTC-TD-100	Twist Drill, 7,9 mm Twist Drill, 9,5 mm Twist Drill, 11,1 mm Twist Drill, 12,7 mm Twist Drill, 14,3 mm Twist Drill, 15,9 mm Twist Drill, 19,1 mm Twist Drill, 25,4 mm



# BIG RESULTS COME IN SMALL PACKAGES



## AWT-100 – Compact and Powerful

For situations where electricity is not available or desirable, the air-powered AWT-100 is up to the task. Both portable and lightweight, the AWT-100 is perfect for tight spaces and remote locations. 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.

**AWT-100:** Air-powered Tube Cleaner, including adjustable speed/torque control, Quick Connect air and water fittings, and single-direction foot switch.



### 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

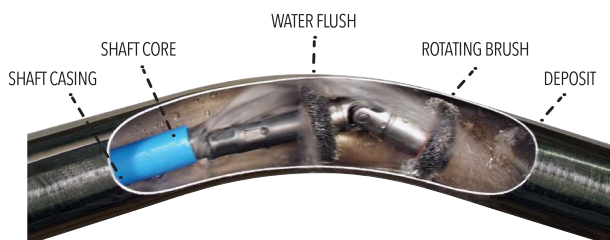
### RECOMMENDED:

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.



GTC-705-4



SPECIFICATIONS	AWT-100
Motor Power	Up to 1,1 kW depending upon air pressure and volume
Air Requirements	Minimum 44,1 BAR @ 25,5 m <sup>3</sup> /h, Maximum 6,9 BAR @ 119 m <sup>3</sup> /h
Flexible Shaft Speed	Adjustable, 500-3,000 rpm
Water Requirements	Minimum 2 BAR at 7,6 LPM
Dimensions	263,5 mm (H) x 152 mm (W) x 482,6 mm (D)
Weight	13 Kg, Net Dry

# GLOBAL CHOICE FOR BOILER TUBE CLEANING



**CUSTOMER FAVORITE**



SPECIFIC MODELS ONLY

## SAM-3 - Easy Operation

You might as well be burning money if you're allowing soot to collect in your boiler firetubes. At five times the insulating value of asbestos, just a small amount of soot can cause dramatic heat loss and substantially increase fuel consumption. Now in its 3rd generation, the SAM-3 Firetube Boiler Cleaner removes soot and scale in almost no time, enabling your system to run at optimal efficiency. A cleaning tool mounted to a 7,9 m spring steel tape does the dirty work of loosening soot buildup while an in-line vacuum attachment handles clean-up duties. All you have to do is flip the switch. It's that easy. And yes, it's that efficient.

### BOILER CLEANING SYSTEMS (WITH VACUUMS):

#### SAM-3-20-KIT

Boiler Firetube Punching Machine, including a 50,8 mm x 3,66 m hose, 457,2 mm straight bayonet nozzle (specify diameter), brush and GTC-540-20SS SootVac<sup>®</sup> Vacuum.

#### SAM-3-15-KIT

Boiler Firetube Punching Machine, including a 50,8 mm x 3,66 m hose, 457,2 mm straight bayonet nozzle (specify diameter), brush and GTC-540-15SS SootVac Vacuum.

#### SAM-3-30-KIT

Boiler Firetube Punching Machine, including a 50,8 mm x 3,66 m hose, 457,2 mm straight bayonet nozzle (specify diameter), brush and GTC-540-30DD SootVac Vacuum.

#### SAM-3-55-KIT

Boiler Firetube Punching Machine, including a 50,8 mm x 3,66 m hose, 457,2 mm straight bayonet nozzle (specify diameter), brush and GTC-540-55DD SootVac Vacuum.

NOTE: REFER TO TUBE SIZES CHART ON PAGE 24 AND MATCH TO NOZZLE AND BRUSH SIZES.



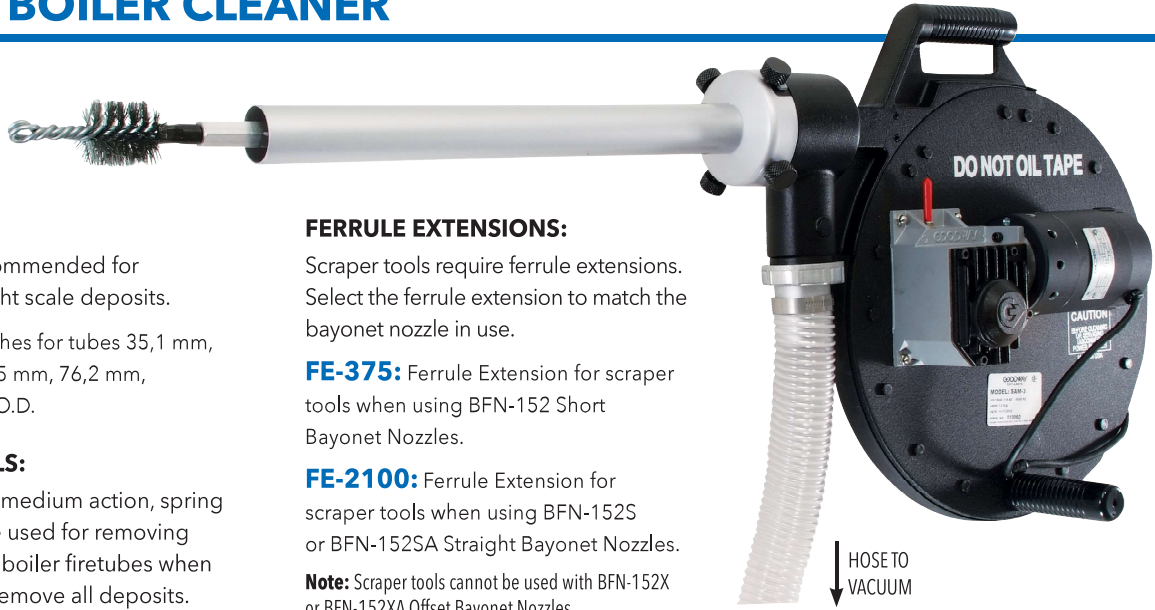
### FEATURES

- Spring steel tape
- Auto feed trigger switch
- Brush travel indicator
- Interchangeable cleaning tools
- Simultaneous vacuum to remove deposits
- Carrying handle and stand

SPECIFICATIONS	SAM-3
Motor Power	0,4 kW
Input Power	Standard: 7 Amps, 115 V, 50/60 Hz AC Optional: 3,5 Amps, 230 V, 50/60 Hz
Tape Length	7,9 m
Power Supply Cord	7,2 m, 18-3
Vacuum Hose	51 mm diameter x 3,7 m long
Dimensions	546 mm long (without nozzle)
Weight	17,2 Kg
Optional Carrying Case	610 mm (H) x 711 mm (W) x 229 mm (D)

DEPOSITS AND BOILER PERFORMANCE		
SOOT IN BOILER TUBES	HEAT LOSS	INCREASED FUEL CONSUMPTION
0,8 mm	12%	2.5%
1,5 mm	24%	4.5%
3,3 mm	47%	8.5%

# FIRETUBE BOILER CLEANER



## STEEL BRUSHES:

Steel brushes are recommended for removing soot and light scale deposits.

**GTC-151:** Steel Brushes for tubes 35,1 mm, 41,4 mm, 50,8 mm, 63,5 mm, 76,2 mm, 88,9 mm or 101,6 mm O.D.

## FTS SCRAPER TOOLS:

FTS Scraper Tools are medium action, spring loaded tools. They are used for removing light scale deposits in boiler firetubes when steel brushes do not remove all deposits. Ferrule extension required.

**FTS-200:** Scraper Tool for tubes 50.8 mm O.D.

**FTS-250:** Scraper Tool for tubes 63.5 mm O.D.

**FTS-300:** Scraper Tool for tubes 76.2 mm O.D.



## FERRULE EXTENSIONS:

Scraper tools require ferrule extensions. Select the ferrule extension to match the bayonet nozzle in use.

**FE-375:** Ferrule Extension for scraper tools when using BFN-152 Short Bayonet Nozzles.

**FE-2100:** Ferrule Extension for scraper tools when using BFN-152S or BFN-152SA Straight Bayonet Nozzles.

**Note:** Scraper tools cannot be used with BFN-152X or BFN-152XA Offset Bayonet Nozzles.

## STANDARD BAYONET NOZZLES:

**BFN-152:** Short Bayonet Nozzle, 88.9 mm long for tubes 35,1 mm, 41,4 mm, 50,8 mm, 63,5 mm, 76,2 mm or 88,9 mm O.D.

**BFN-152S:** Straight Bayonet Nozzle, 457,2 mm long for tubes 35,1 mm, 41,4 mm, 50,8 mm, 63,5 mm, 76,2 mm or 88,9 mm O.D.

**BFN-152SA:** Straight Bayonet Nozzle, 457,2 mm long with ferrule extension for tubes 101,6 mm O.D.

**BFN-152X:** Offset Bayonet Nozzle, 457,2 mm long for tubes 35,1 mm, 41,4 mm, 50,8 mm, 63,5 mm, 76,2 mm or 88,9 mm O.D.

**BFN-152XA:** Offset Bayonet Nozzle, 457,2 mm long with ferrule extension for tubes 101,6 mm O.D.

**NOTE:** CONTACT FACTORY IF LONGER STRAIGHT OR OFFSET BAYONET NOZZLES ARE NEEDED FOR YOUR APPLICATION.

**NOTE:** WHEN ORDERING BAYONET NOZZLES OR BRUSHES, SPECIFY PART NUMBER AND SIZE ACCORDING TO THE TABLE (ORDER BY TUBE O.D.). BAYONET NOZZLE AND BRUSH DIAMETERS WILL FIT TUBE I.D.

## CARRYING CASE:

**SC-682:** Carrying Case for SAM-3 Boiler Firetube: Punching Machine and accessories.



## SCALEBREAK LIQUID DESCALER:

### SCALEBREAK LIQUID DESCALER

After cleaning the fireside of tubes, check the waterside. Chances are they are covered in scale deposits. ScaleBreak quickly dissolves accumulated scale deposits, dramatically improving system efficiency.



**NOTE:** SEE PAGE 30 FOR PRODUCT INFORMATION.

TUBE SIZES	
STANDARD BOILER O.D. SIZE	APPROXIMATE BOILER I.D. SIZE
35,1 mm	32 mm
41,4 mm	38 mm
50,8 mm	44 to 48 mm
63,5 mm	57 to 60 mm
76,2 mm	70 to 73 mm
88,9 mm	83 mm
101,6 mm	95 mm

# ELIMINATE DEPOSITS WITH AIR-POWERED PERFORMANCE



## 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 (see page 19 for details on the Dry Pickup Attachment and Vacuum). 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. For superior air-powered technology that handles all your tough cleaning applications, this unit will blow you away.

SPECIFICATIONS	AWT-100X
Motor Power	Up to 2,9 kW depending upon air pressure and volume
Air Requirements	Minimum 4,1 BAR at 144,4 m <sup>3</sup> /h, Maximum 6,8 BAR at 220,8 m <sup>3</sup> /h
Flexible Shaft Speed	Adjustable, 500-3,000 rpm
Water Requirements	Minimum 2 BAR at 11,3 LPM
Dimensions	939,8 mm (H) x 508 mm (W) x 431,8 mm (D)
Weight	24,4 kg net dry

### 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

**AWT-100X-ID:** Heavy-Duty Air-powered Tube Cleaner, including air lubricator, adjustable speed/torque control, mobile dolly, tool storage box and single-direction foot switch

### RECOMMENDED:

**ASH-B50-G:** Air Supply Hose, 12,7 mm x 15,2 m

### 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)\*

### SPECIALTY TOOLS



Or visit [www.goodway.com](http://www.goodway.com) to see more!

# ROTARY FIRETUBE BOILER CLEANERS



## FEATURES

- Stainless steel construction
- Quick Connect threadless shaft manifold
- Interchangeable cleaning tools
- Integrated dolly
- Simultaneous vacuum
- Foot switch activation

**FLEXIBLE SHAFTS (HEAT RESISTANT 149°C RIGID COVERED STEEL CASING) FOR TUBES 25,4 MM I.D. AND UP**

- GTC-721G-15:** Flexible Shaft, 4,6 m.
- GTC-721G-25:** Flexible Shaft, 7,6 m.
- GTC-721G-35:** Flexible Shaft, 10,7 m.
- GTC-721G-50:** Flexible Shaft, 15,2 m.



### 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 35, 41, 51, 64 or 76 mm O.D.
- SFB-300:** Spring Filled Brushes for tubes 51 or 76 mm I.D.



### DRY PICKUP ATTACHMENT:

**GTC-DPA:** Dry Pickup Attachment, including 51 mm x 3,7 m hose with quick connect fitting (order nozzle below).



### BAYONET NOZZLES:

**BFN-152S:** Straight Bayonet Nozzle, 460 mm long for tubes 35, 41, 51, 64, 76 or 89 mm O.D.

**BFN-152SA:** Straight Bayonet Nozzle, 460 mm long for tubes 102 mm O.D.



SPECIFICATIONS	RAM-4X-ID	RAM-4X2A
Application	Smooth Bore Tubes/Pipes/Hoses	Smooth Bore Tubes/Pipes/Hoses
Tube Size Range	25,4 mm I.D. and Up	25,4 mm I.D. and Up
Motor Power	0,7 kW	1,5 kW
Input Power	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	11,5 Amps, 230 V, 60 Hz AC Optional 11,5 Amps, 230 V, 50 Hz
Power Supply Cord	6,5 m, 14-3 GFCI	6,5 m, 14-3 GFCI
Shaft Speed	1.725 RPM (Optional: 862,5)	1.725 RPM (Optional: 862,5)
Shaft Feed Method	Manual	Manual
Shaft Length	Maximum 22,9 m	Maximum 22,9 m
Water Requirements	Minimum 2,1 BAR at 11,4 LPM	Minimum 2,1 BAR at 11,4 LPM
Special Features	Optional Vacuum Attachment	Optional Vacuum Attachment
Dimensions	940 mm (H) x 510 mm (W) x 430 mm (D)	940 mm (H) x 510 mm (W) x 430 mm (D)
Weight	27 Kg	35 Kg

# SOOTVAC® SOOT RECOVERY VACUUM



## FEATURES

- Two heavy-duty motors
- Exhaust muffler (only 82 dBA)
- Reusable filters
- Four tank sizes
- 38 mm or 50,08 mm hoses



SPECIFIC MODELS ONLY



SPECIFIC MODELS ONLY



SPECIFICATIONS	GTC-540-20
Motor Power	1,7 kW
Input Power	14 Amps, 115 V, 50/60 Hz AC Optional: 7 Amps, 230 V, 50/60 Hz AC
Power Supply Cord	11,3 m, 14-3
Static Water Lift	1,3 m
Air Displacement	459 m <sup>3</sup> /h
Filtration	15 Microns Polypropylene/Dacron
Tank	76 liters Stainless Steel
Dry Capacity	76 liters
Noise Level	78 dBA
Special Features	Polyethylene Tank Liner Disposable Collection Bag
Dimensions	430 mm (D) Tank x 1,2 m (H)
Weight	32 Kg

## ATTACHMENTS:

**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, 50 mm x 3,7 m for Soot-A-Matic.

**GTC-170SQD:** Hose, 50 mm x 3,7 m with sleeve, quick connect and washer.



## REPLACEMENT FILTERS, DRUM LINER AND BAGS:

**GTC-175:** Polypropylene Filter.

**GTC-176:** Dacron Filter.

**PDL-30:** High Density Polyethylene Liner for 76 or 114 liter drum.

**POLY-20-25:** Disposable Polyethylene Bag (package of 25) for 76 liter drum.

**POLY-30-25:** Disposable Polyethylene Bag (package of 25) for 114 liter drum.

