# Advanced Artillery For Enhanced Tubes

BRUSHES DESIGNED TO CLEAN THE INTERNAL LANDS & GROOVES

# A – Tube O.D., is the measured outside diameter of a tube. B – Tube I.D. is the measured inside diameter of a tube. C – Tube Gauge (B.W.G.) is the wall thickness of the tube.

## **Brushes for internally enhanced tubes**

#### Available in Bags of 25



#### "Patriot®" Dual Diameter Nylon Brushes:

"Patriot" Dual Diameter Nylon Brushes are recommended for removing soft deposits (mud, algae, etc.) in straight, ferrous and nonferrous internally enhanced tubes. The large diameter end cleans into the grooves while its small diameter end cleans the lands of a tube's rifling.

ENN-0620 The "Patriot" Dual Diameter Nylon Brush for tubes 5/8" I.D.

ENN-090Q The "Patriot" Dual Diameter Nylon Brush for tubes 15/16" I.D.



#### **Dual Diameter Spin-Grit Brushes:**

Dual Diameter Spin-Grit Brush are recommended for removing soft and light scale deposits in straight, ferrous and nonferrous internally enhanced tubes. The large diameter end cleans into the grooves while its small diameter end cleans the lands of a tube's rifling.

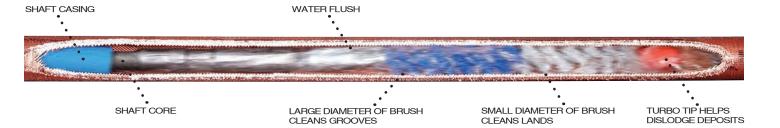
ESGB-Q-050 Dual Diameter Spin-Grit Brush for tubes 1/2" I.D.

ESGB-Q-062 Dual Diameter Spin-Grit Brush for tubes 5/8" I.D.

**ESGB-Q-075** Dual Diameter Spin-Grit Brush for tubes 3/4" I.D.

**ESGB-Q-100** Dual Diameter Spin-Grit Brush for tubes 1" I.D.

**Note:** All Goodway brushes are available with standard threaded couplings. To order, remove the "Q" from the part number.



## Heavy Duty Brushes For Tough Deposits

EXCLUSIVE TECHNOLOGY ELIMINATES UNWANTED SYSTEM POLLUTANTS.



#### **Brushes for smooth bore tubes**

#### **Blue Nylon Brushes:**

Blue Nylon Brushes are recommended for removing soft deposits (mud, algae, etc.) in straight, ferrous and nonferrous tubes. Brush should be equal to or ½6" smaller than tube I.D.

GTC-2110 Blue Nylon Brushes, 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16" or 1"

#### **Spin-Grit Brushes:**

Spin-Grit Brushes are recommended for removing soft and light scale deposits in straight, ferrous and nonferrous tubes.

SGB-050 Spin-Grit Brush for tubes 1/4" - 3/8" I.D.

SGB-Q-075 Spin-Grit Brush for tubes 7/16" - 5/8" I.D

SGB-Q-100 Spin-Grit Brush for tubes 11/16" - 3/4" I.D

SGB-Q-125 Spin-Grit Brush for tubes 13/16"- 1" I.D

#### **Brass Brushes:**

Brass Brushes are recommended for removing soft and light scale deposits in straight, ferrous and nonferrous tubes. Brush should be equal to or 1/16" smaller than tube I.D.

**GTC-200BQ** Brass Brushes, 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16" or 1"

#### **Stainless Steel Brushes:**

Stainless Steel Brushes are recommended for removing soft and light scale deposits in straight, ferrous tubes. Brush should be equal to or 1/16'' smaller than tube I.D.

**GTC-2100.** Stainless Steel Brushes,  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ ",  $\frac{1}{2}$ ",  $\frac{9}{16}$ ",  $\frac{5}{8}$ ",  $\frac{11}{16}$ ",  $\frac{3}{4}$ ",  $\frac{13}{16}$ ",  $\frac{7}{8}$ ",  $\frac{15}{16}$ " or 1"

**Note:** ¼" and ½16" threaded brushes require a #C-1 Coupling (\$4.00), and ¾" threaded brushes require a #C-2 Coupling (\$4.00) to connect to GTC-701 Flexible Shafts. (Couplings supplied with GTC-701 Flexible Shaft order.).

**Note:** All Goodway brushes are available with standard threaded couplings. To order, remove the "Q" from the part number.

#### Available in Bags of 15 or 25 – Depending on Size





#### Available in Bags of 15





#### Available in Bags of 15





#### Available in Bags of 15





# Unique Tools For Hard Deposits

BUFFERS, CUTTERS, HONES AND SCRAPERS FOR TUBES 1/4 TO 1 INCH I.D.





REPLACEMENT BLADES





## Cleaning tool for smooth bore tubes 1/4 to 1 inch I.D.

#### **Buffing Tools:**

Stainless Steel Wire Buffing Tools are used for 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.

GTC-203 Buffing Tool for tubes 5/16" - 3/8" I.D. GTC-203DT Same as GTC-203 with drill tip

GTC-2040 Buffing Tool for tubes 3/8" - 1/2" I.D. GTC-204Q-DT Same as GTC-204Q with drill tip

GTC-2050 Buffing Tool for tubes 1/2" - 9/16" I.D. GTC-205Q-DT Same as GTC-205Q with drill tip

GTC-2060 Buffing Tool for tubes 5/8"-1" I.D. GTC-206Q-DT Same as GTC-206Q with drill tip

GTC-207 Replacement Metal Blades for GTC-203 and GTC-2040

GTC-208A Replacement Metal Blades for GTC-2050

GTC-208B Replacement Metal Blades for GTC-2060

Note: All Goodway buffing tools are available with standard threaded couplings. To order, remove the "Q" from the part number.

#### **Triangular Scraper Tools:**

Triangular Scraper Tools are used for 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 1/4" range.

TST-500 Triangular Scraper Tool for tubes 1/2" - 3/4" I.D.

TST-750 Triangular Scraper Tool for tubes 3/4" - 1" I.D.

#### **Carbide Drills:**

Carbide Drills are recommended for cleaning straight, ferrous tubes plugged solidly with deposit. PTB-025 1/4", PTB-037 3/8", PTB-043 7/16" or PTB-050 1/2"

PTB-056 9/16", PTB-062 5/8" or PTB-068 11/16"

Note: All drills run 10% oversize [e.g. PTB-062 Drill is 0.6875" O.D.].



#### **Flex-Hone Abrasive Tools:**

Flex-Hone Abrasive Tools are light pressure, soft application honing devices for cleaning straight, ferrous tubes. They consist of 180 grit silicon carbide abrasive globules (stones) bonded to high density nylon filaments. Order tool to correspond to tube I.D.

FHT-025 1/4", FHT-031 5/16", FHT-037 3/8", FHT-043 7/16" or FHT-050 1/2"

FHT-056 9/16", FHT-062 5/8" or FHT-068 11/16"

FHT-075 3/4", FHT-087 7/8" or FHT-100 1"

Note: Flex-Hone Abrasive Tools are normally used with a water flush for maximum life.

#### **Flex Hub Tools:**

Flex Hub Tools incorporate centrifugally activated blades for removing hard and heavy deposits in straight, ferrous tubes.

GTC-225 Flex Hub for straight tubes 1/2"-1" I.D.

GTC-225A Replacement Metal Blades for GTC-225 (set of three)

#### **U-Tube Tools:**

Consisting of brushes or grinding tips permanently mounted on 18" sections of flexible shafts, U-Tube Tools are designed to snake partially through each side of a U-bend, to thoroughly clean from both sides. **CBT-075B** Brass Cup Brush for tubes 1/2"-3/4" I.D.

CBT-075S Stainless Steel Cup Brush for tubes 1/2"-3/4" I.D.

WBT-075B Brass Wheel Brush, 3/4" diameter

WBT-100B Brass Wheel Brush, 1" diameter

WBT-075S Stainless Steel Wheel Brush, 3/4" diameter

WBT-100S Stainless Steel Wheel Brush, 1" diameter

GTT-050 Grinding Tip Tool, 1/2" diameter

GTT-625 Grinding Tip Tool, 5/8" diameter













## Quality Accessories For Quality Machines

DESIGNED FOR PEAK TUBE CLEANER PERFORMANCE.

### Air treatment, supply hoses and storage options



#### Air Lubricator, Filter and Regulator:

Air-operated equipment will last longer and run more efficiently with proper treatment of the air supply.

**Note:** All modules have 1/4" npt ports. Maximum pressure 150 PSI. Maximum temperature 140°F. Maximum air displacement 140 CFM.

GTC-705-4 Combination Air Lubricator, Filter and Regulator

#### **Air Supply Hoses:**

Made from 1/2" I.D. x 50' abrasion resistant black rubber, Goodway Air Supply Hoses provide high CFM airflow to pneumatic machinery for maximum power. They can be used for a variety of industrial applications.

Note: Maximum pressure 200 PSI.

ASH-B50-A Air Supply Hose for AWT-100 and GSL-705

ASH-B50-G Air Supply Hose for AWT-100X, JCL JetLaunch®, JL JetLoad®, LD-2X2 and QS-300 Quick Shot

**ASH-B50-P** Air Supply Extension Hose for PSM-500

ASH-B50-E Air Supply Extension Hose for all hoses listed above

#### **Water Supply Hoses:**

Made from 5\%" I.D. x 50' abrasion resistant red rubber, the Goodway Water Supply Hose provides higher GPM waterflow than conventional \(\frac{1}{2}\)" I.D. garden hoses. High flow is important for adequate flushing of tubes and for providing sufficient volume to all Goodway equipment. Use with water up to 180°F. Stays flexible to -25°F. It is ideal for any application requiring a high flow, high quality hose.

Note: Maximum pressure 150 PSI

WSH-R50 Red Rubber Water Supply Hose

#### Carrying Bag:

This heavy-duty 26" diameter carrying bag will store all size flexible shafts as well as basic accessories. **SB-26** Carrying Bag

#### **Heavy-Duty Contractor Dolly:**

The Goodway Heavy-Duty Contractor Dolly is designed for use with all RAM-4, RAM-4X, RAM-5SF, RAM-6, AWT-100X and AQ-R1500 Machines. It features an increased height, large pneumatic tires and bumpers for easier maneuverability and stair climbing ability, a storage rack for flexible shafts and water hoses, and a large storage bin with drainage for brushes and other accessories.

RAM-DOLLY-C Heavy-Duty Contractor Dolly





## Must-Haves For Tube Maintenance

ACCESSORIES TO COMPLEMENT OUR TUBE CLEANING MACHINES.









#### Chiller Bib®:

The Goodway Chiller Bib captures dirty water and debris during tuke cleaning operations, saving time and money on post-job cleanup. The unit consists of a 24" wide x 12" deep reusable aluminum frame and a disposable poly bag. It features two oversized soft nylon brushes, which slide into the chiller's tubes, to securely fasten the Chiller Bib to the tube sheet. These brushes also slide in channels on the frame, allowing it to move across the tube sheet for optimum positioning. A double edge combination of an EPDM gasket with a strip of underlying nylon bristles provides for a snug fit against an irregular tube sheet. The poly bag is equipped with a 25' integrated hose to funnel the water and debris to the

9401-3 Chiller Bib Bag (package of three)

BIB-KIT-3 Chiller Bib Frame with three Chiller Bib Bags

BAG-KIT-10 Chiller Bib Bag (package of ten)







#### **Adjustable Silicone Tube Plugs:**

Designed to conform to almost any inside tube surface, including coated tubes, and designed to not damage tube walls, these adjustable tube plugs provide a versatile option when it becomes necessary to plug tubes. Brass or stainless steel nuts and bolts, vulcanized silicone rubber and high performance plastic make materials compatibility a non issue.

Available in single seal configurations for lower pressure applications (less than 60 PSI) or double seal configuration for higher pressure applications (up to 150 PSI), these plugs are designed for long life at high temperatures, in fresh or salt water. Installation and removal is easy. Pre-set torque wrenches make proper instillation fool-proof.

They are manufactured in sizes to cover chiller and heat exchanger tubes  $\frac{5}{8}$ ",  $\frac{3}{4}$ ",  $\frac{7}{8}$ ",  $\frac{1}{1}$ " or  $\frac{11}{4}$ " 0.D. with BWG ranges 18-25.

TP-ADJ-B Adjustable Silicone Tube Plug with brass nuts and bolt

**TP-ADJ-S** Adjustable Silicone Tube Plug with stainless steel nuts and bolt

TP-ADJ-TW-SM T-Handle Torque Wrench for 5/8" to 3/4" O.D. plugs, preset to 17 in. lbs.

TP-ADJ-TW-LG T-Handle Torque Wrench for 7/8" to 11/4" O.D plugs, preset to 33 in. lbs.

Note: Additional style and size Tube Plugs available.

#### **Brass Tube Plugs:**

Got a leaky tube? Plug it with the original solution that always works, a one piece tapered brass tube plug. When installed properly, tapered brass tube plugs can stay in place for years. Precision engineered, Goodway Brass Tube Plugs are ideal for a wide range of tube applications, and should be driven into the tube with a hammer just far enough to form a seal. They are manufactured in sizes to cover chiller and heat exchanger tubes  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ , with BWG ranges 15-22.

TP-062S Brass Tube Plug for tubes 5/8" O.D. with BWG ranges 15-22

TP-075S Brass Tube Plug for tubes 3/4" O.D. with BWG ranges 15-22

TP-087S Brass Tube Plug for tubes 7/8" O.D. with BWG ranges 15-22

**TP-100S** Brass Tube Plug for tubes 1" O.D. with BWG ranges 15-22

Note: Additional style and size Tube Plugs available.



# Must-Have Helpers For Tube Maintenance

TUBE SHEET MAINTENANCE AND REPAIR









#### Tube Sheet Refacing Kit:

The Goodway Tube Sheet Re-Facing Kit contains all the materials you need to recondition up to 40 sq ft of tube sheet. After thoroughly cleaning the surface of the tube sheet, simply mix the two part epoxy and apply to the tube sheet with a roller or brush. Once mixed, you will have approximately 45 minutes to apply the epoxy to the tube sheet. The epoxy is a 100% solids coating and will provide superior protection to the tube sheet.

**TSRK** Tube Sheet Refacing Kit including 2 liters of base epoxy and 1 liter of hardener to recondition up to a 40 sq ft area, mixing bucket with stick, scraper, steel brush, cup brush (for use with a drill - not included), two mini rollers with frame, 3" bristled brush, detail brush, coverall suit, nitrile gloves and a plastic tarp all in a 5 gallon bucket

9801 Kit Re-fill of 2 liters of base epoxy and 1 liter of hardener

