The Leader in Small Mass Finishing

RAYTECH



About Us



WHO WE ARE

Through strong and innovative engineering, Raytech is clearly the leader in today's demanding marketplace. Raytech products are sold through specialized distributors around the world. We are confident in the superior quality of our products and would like to instill some of this confidence in the people who use them.

OUR VISION

Whether you make castings, stampings, or fabrications or you want to process gemstones, Raytech has a machine to suit your application. Raytech is the world's leader in the manufacturing of small mass finishing equipment and accessories.

We hold all of our equipment to the highest quality standards. In this catalog you will see Raytech's full product offering.

Each machine will deburr, finish, burnish, and perform many other applications.

They are task-oriented and designed to provide another tool in your tool box.

OUR MISSION

Raytech's mission is manufacturing excellence: serving industry, science, and craftsmen.

OUR HISTORY

Founded in 1958 in Stafford Springs, Connecticut, Raytech began as any small business does, with hard work and a dedication to supplying the highest quality products to craftsmen and hobbyists. In 1987, Raytech joined forces with Lyman Products Corporation, enhancing the manufacturing capabilities and product lines. For more than 60 years, Raytech Industries has continued this mission of manufacturing excellence.

In more recent years, Raytech has enhanced this tradition by meeting the demands of industrial users and professional craftsmen while continuing to serve the needs of the hobbyist.

WHY CHOOSE US

BUILT FOR INDUSTRIAL USERS, CRAFTSMEN, AND HOBBYISTS

Raytech products meet the demands of industrial users and professional craftsmen while continuing to serve the needs of the hobbyist

60 YEARS IN THE INDUSTRY
INCREASE EFFICIENCY & CUT COSTS THROUGH IN-HOUSE FINISHING

RAYTECH INDUSTRIES

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Our Products

Raytech®

VIBRATORY TUMBLERS

Used to deburr/finish irregular shapes

Vibratory finishing is a type of mass finishing process used to deburr, radius, descale, burnish, clean, and brighten a large number of relatively small workpieces. In this batch-type operation, vibratory machines often process more complex part configurations than tumblers.

Part size is not a problem: if it fits in the channel and rotates, it will finish.



CENTRIFUGAL MAGNETIC FINISHERS

Used to burnish/polish small non-ferrous metal parts/objects

The Raytech Centrifugal Magnetic Finishing machines are complete, direct drive, fan-cooled systems. The magnetic disk that actually turns the pins is made up of many powerful magnets that are precisely placed in a cast disk. The alternating polarity is constantly changing, thereby allowing the media to move freely in a liquid solution that is constantly changing its make-up. This, combined with centrifugal force, allows for quiet and fast time cycles to perform a myriad of applications.



ULTRASONIC CLEANING

Used to clean intricate and hard to reach spaces

Ultrasonic cleaning cleans intricate parts effortlessly. Most parts can be cleaned in less than 10 minutes. The heated tank and powerful transducers combined with Raytech's scientifically developed solutions deliver superior cleaning for a wide range of items. The ultrasonic cavitation lifts and dissolves grit, grime, scale and oily residue, and the engineered plastic basket is specially designed for holding small parts.



FINISHING MEDIA & COMPOUNDS

These compounds and media are specially made to help you get the most out of your Raytech products.

Tumbling Media are pieces of abrasive material used in vibratory tumbling machine applications for removal of excess material, burnishing, and finishing of workpiece surfaces. Media offerings range from Ceramic, Plastic, Porcelain, Dri-Shine, Soap flakes, and Steel Pins.

Compound solutions provide lubrication and viscosity to the media and the objects in the vibratory tumbler, to clean better, improve the deburring process, and offer corrosion and rust protection.







TV-5 TUMBLER

A favorite of hobbyists and used commercially as well.

Comes with a motorized base, one bowl and one lid. The working capacity of the Tumble-Vibe5 is approximately. 05cu.ft. (or three pints) or 4 pounds. The capacity includes both the media and the work pieces. This popular economical and versatile unit is a favorite of hobbyists and is used commercially as well. The .05 cubic foot 8-inch bowl with solid lid holds 25 ring castings with media or will process about four pounds of rock.

- · Deburring metal stampings and machined parts
- Descaling metal castings
- · Cutting radii on sharp edges of metal parts
- Polishing metal and plastic parts
- 8 "bowl capacity is .05 cubic feet
- May also be used commercially
- Comes in 115V and 230V CE

#23001R TV-5 Tumbler (115V) #24106R TV-5 Tumbler (230V)

TV-5 STARTER KIT

This is a must for any beginner.

Thousands of satisfied customers testify to the durability and simplicity of the Tumble-Vibe 5. Mated with a spare bowl and a GSH-2 Stone Finishing Kit, this kit comes complete and ready to operate with a motorized base, two bowls, clear lid, two rubber nuts, and all the grits necessary for accomplishing the grinding step through the final polish step of most gemstones. Rocks not included.

The four steps that are included are Silicone Carbide (100/120) – rough grind, Silicone Carbide (700F) – fine grind, Iolox 50 – pre-polish, and Raybrite TL - polish.

- · Comes in 115V CE
- 8 " bowl capacity is .05 cubic feet
- A must for beginners
- Durable & simple to use
- Includes two bowls and all grits
- Noise Level 82db

#23090R TV-5 Starter Kit 115V #24101R TV-5 Starter Kit 230V

Vibratory Tumblers





TWIN TUMBLER KIT

Includes 2 bowls and lids - for wet and dry media

Your 1200 Twin Standard Raytech Vibratory Tumbler has been supplied with 2 bowl and lid assemblies. The smaller 8" bowl is used for Wet Green Cutting Media and Dri-Shine® Media. The larger 10" bowl is used for the final dry polishing operation with the Dri-Shine® media to impart a highly reflective shine to the tumbled parts.

Use 1200 tumbler for parts up to 3 " long Includes:

- Tumbler Base with 6' 115 VAC Power cord CE
- One 2 1/2 lb bag of green pyramid cutting media
- · One 2 lb bag of corncob Dri-Shine media
- One 8" Wet/Dry Tumbler bowl and lid assembly
- One 10" Dry Tumbler Bowl and Lid Assembly
- Rubberized bowl and lid retaining nut
- Instructions

#23007R Twin Tumbler (115V)

PRO MAG KIT

Includes 2 bowls and lids - for wet and dry media

Your 2500 Twin Vibratory Tumbler has been supplied with 2 general purpose 12" bowls used for wet or dry polishing operations with the Green Cutting Media and Dri-Shine® Media, which will impart a highly reflective shine to the tumbled parts. Removes rust from metal without losing detail or rounded edges. Removes burrs from hardware stampings. Polishes difficult-to-reach surfaces to a high shine.

Use 2500 tumbler for parts up to 5-6" long

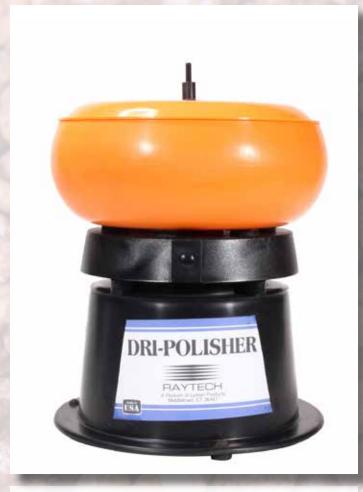
Includes:

- Heavy Duty Wet/Dry Media Tumbler Base With 6' 115 VAC Power Cord CE
- Two 12" Wet/Dry Bowls one with solid lid, one sifter lid
- · One 8 lb container of Green Pyramid Cutting Media
- · One 5 lb container Dri-Shine Media
- Instructions

#23124R Pro Mag Kit (115V)

Vibratory Tumblers

Raytech®





DRI-POLISHER

The Dri-Polisher is designed to be used as a polishing tumbler to finish parts to a high luster.

The DRI-SHINE III is a universal fast acting dry polish for brass, silver, copper, titanium, stainless steel and more. The Dri-Polisher features a 10-inch diameter bowl with a capacity of .12 cubic feet. All Dri-Polishers come with a free charge of Dri-Shine III, a Raytech exclusive universal polishing media. Clean to use. Formulation has a corn cob base with pointed irregular particles.

This unit cannot be operated wet. This machine can be operated with any dry media. Typical cycle time: 3-8 hours. Longer cycles will not harm parts but will only enhance the luster.

- · Comes in 115V
- 10" bowl capacity is .12 cubic feet
- Polish/finish parts to a high luster
- · Do not operate with wet media
- Cvcle time is 3-8 hours
- Includes free DRI-SHINE III

#23012R Dri-Polisher (115V)

TUMBLE-VIBE 10

Use for light deburring and polishing.

The industrial model TV-10 has heavy duty drive and suspension combined with a tough, cross-linked polyethylene 10-inch bowl. Bowl capacity is .10 cubic feet (35 to 40 rings), has a noise reducing lid and a liquid drain.

- Comes in 115V & 230V
- · 10" bowl capacity is .10 cubic feet
- · Heavy duty drive & suspension
- · Has noise reducing lid
- · Deburring metal stampings and machined parts
- Cutting radii on sharp edges of metal parts
- Polishing metal and plastic parts
- Smoothing and polishing preformed cabochons and small slabs
- · Has a drain

#23009R Tumble-Vibe 10 (115V) #24108R Tumble-Vibe 10 (230V)

Vibratory Tumblers



ADJUSTA-VIBE 18

Designed for heavy duty use to deburr or polish

The AV-18 has a capacity of .18 cubic feet. It has adjustable amplitude and is designed for heavy duty use with all medias. The 12-inch bowl is equipped with a drain. This model has many features of our larger machines for processing metal parts, whether for deburring or polishing. Used for descaling metal castings, deburring metal stampings and machined parts, cutting radii on sharp edges of metal parts, grinding and polishing baroque gemstones from rough chips, and smoothing and polishing preformed cabochons and small slabs.

- Comes in 115V & 230V
- 12 " bowl capacity is .18 cubic feet
- · Features adjustable amplitude
- · Can be used with all medias
- Has a drain
- Rated Horsepower: 115v 0.19 and 230v 0.18

#23024R Adjusta-Vibe (115V) #24113R Adjusta-Vibe (230V)

TECH TIPS: ADJUSTA-VIBE MACHINES

The amplitude (the amount of movement of the bowl) determines the force with which the tumbling media will act upon the workpieces.

The greater the amplitude, the more aggressive the tumbling action will be.

The Adjusta-Vibe makes it possible to adjust the amplitude of the tumbler to match the job to be done.

The adjustable weight system will produce a tumbling action that ranges from mild to aggressive.

The working capacity of the Adjusta-Vibe 40 and 40SS is .35 cubic feet, or three gallons.

The working capacity of the Adjusta-Vibe 75, 75SS and 75DC is .75 cubic feet, or approximately 6 gallons.

This capacity includes both the media and the workpieces.

The general rule of thumb is 70% media and 30% parts.

Used for:

- Deburring metal stampings and machined parts.
- Descaling metal castings.
- Cutting radii on sharp edge of metal parts.
- Polishing metal and plastic parts.

Tumble Dump models feature a built-in hinge system that allows the parts and media to be easily removed from the machine. This saves time and money by eliminating the tedious task of unloading and separating by hand.

Vibratory Tumblers

Raytech®





ADJUSTA-VIBE 25

Designed for heavy duty use to deburr or polish

Excellent for small part mass finishing, the AV-25 has capacity of .22 cubic feet. It has adjustable amplitude and is designed for heavy duty use with all medias. The 14inch bowl is equipped with a drain. This model has many features of our larger machines at a popular size for small production lots. It is commonly used for processing metal parts, whether for deburring or polishing.

- Features adjustable amplitude
- Has a drain
- 115V and 230V models available
- 14" bowl capacity is .22 cubic ft.
- Deburring metal stampings and machined parts
- Descaling metal castings
- Cutting radii on sharp edges of metal parts
- Polishing metal and plastic parts
- Rated Horsepower: 115v 0.19 and 230v 0.18

#23016R Adjusta-Vibe 25 (115V) #24111R Adjusta-Vibe 25 (230V)

ADJUSTA-VIBE 25SS

AV-SS version designed for use with steel media

Specifically designed for use where steel or stainless-steel media processing is required although all medias can be used. It is designed with a heavy-duty drive and suspension system and has adjustable amplitude. The 14-inch bowl has a discharge port for easier unloading and a capacity of .22 cubic feet. Steel or S/S media capacity is 50 pounds.

- Comes in 115V & 230V
- 14 "bowl capacity is .22 cubic feet
- Has a discharge port and a drain
- Designed for heavy duty use to deburr or polish
- Features adjustable amplitude
- Deburring metal stampings and machined parts
- Descaling metal castings
- Cutting radii on sharp edges of metal parts
- Polishing metal and plastic parts
- Rated Horsepower: 115v 0.19 and 230v 0.18

#23019R Adjusta-Vibe 25SS (115V) #24112R Adjusta-Vibe 25\$\$ (230V)

Vibratory Tumblers





ADJUSTA-VIBE 40

Designed for heavy duty use to deburr or polish

Model 40 vibratory machines are compact, yet have a capacity of .35 cubic feet and are equipped with amplitude adjustment, inlet and outlet ports for compound rinsing systems and heavy duty cross-linked 17-inch polyethylene bowl. Noise reducing lids are standard. When steel burnishing is required, use Model AV-40SS. Can use dry or wet media.

- Comes in 115V & 230V
- 17 " bowl capacity is .35 cubic feet
- Has a drain
- Designed for heavy duty use to deburr or polish
- Features adjustable amplitude
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23026R Adjusta-Vibe 40 (115V) #24114R Adjusta-Vibe 40 (230V)

ADJUSTA-VIBE 40SS

AV-SS version designed for use with steel media

The Adjusta-Vibe 40ss is specifically designed for use where steel or stainless-steel media processing is required although all medias can be used. The AV-40SS has all the features of the AV-40 and in addition, its 17-inch bowl is equipped with a discharge port for easier unloading. Steel or S/S media capacity is 100 pounds. Used to Deburr metal stampings and machined parts, descaling metal castings, cutting radii on sharp edges of metal parts, and polishing metal and plastic parts.

- Designed for heavy duty use to deburr or polish
- Features adjustable amplitude
- Discharge port
- Has a drain
- 115V and 230V models available
- 17 " bowl capacity is .35 cubic feet
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23027R Adjusta-Vibe 40SS (115V) #24116R Adjusta-Vibe 40SS (230V)

Vibratory Tumblers

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Designed for heavy duty use to deburr or polish

This machine is equipped with a heavy-duty drive system that includes amplitude adjustment. It is equipped with inlet and outlet ports for compound rinsing systems and a heavy duty, cross-linked, 21-inch polyethylene bowl. Noise reducing lids are standard.

This model has a 21-inch diameter bowl. The AV-75 is a .75 cubic foot capacity machine.

- Comes in 115V & 230V
- 21 " bowl capacity is .75 cubic feet
- · Designed for heavy duty use to deburr or polish
- Features adjustable amplitude
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23040R Adjusta-Vibe 75 (115V) #24121R Adjusta-Vibe 75 (230V)



ADJUSTA-VIBE 75DC

Adjusta-Vibe 75 with Drain Chute

This machine is equipped with a heavy-duty drive system that includes amplitude adjustment. It is equipped with inlet and outlet ports for compound rinsing systems and a heavy duty, cross-linked, 21-inch polyethylene bowl. Noise reducing lids are standard.

This model has a 21-inch diameter bowl. The AV-75DC is a .75 cubic foot capacity machine.

- Comes in 115V & 230V
- 21 " bowl capacity is .75 cubic feet
- · Has a drain chute
- · Designed for heavy duty use to deburr or polish
- Features adjustable amplitude
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23038R Adjusta-Vibe 75DC (115V) #24119R Adjusta-Vibe 75DC (230V)

Vibratory Tumblers





Features tumble dump tilting plate

These models incorporate all the features of the Adjusta-Vibe models with one addition: Raytech's patented Tumble-Dump tilting plate.

Used for deburring metal stampings and machined parts, descaling metal castings, cutting radii on sharp edges of metal parts, and polishing metal and plastic parts.

- Comes in 115V
- 17 " bowl capacity is .35 cubic feet
- · Inlet/outlet port for rinsing systems
- · Designed for heavy duty use to deburr or polish
- Has drain
- · Features adjustable amplitude
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23031R TD 40 (115V) #24115R TD 40 (230V)



TUMBLE-DUMP™ 75 & 75 DC

Features tumble dump tilting plate

These models incorporate all the features of the Adjusta-Vibe models with one addition: Raytech's patented Tumble-Dump tilting plate. Raytech's Tumble Dump models feature a built-in hinge system that allows the parts and media to be easily removed from the machine. This saves time and money by eliminating the tedious task of unloading and separating by hand. Drain chute on TD-75DC only.

- Comes in 115V & 230V
- 21" bowl capacity is .75 cubic feet
- · Large size offers increased productivity
- · Designed for heavy duty use to deburr or polish
- · Has a drain
- Features adjustable amplitude
- Rated Horsepower: 115v 0.38 and 230v 0.31

#23044R TD 75 (115V) #24122R TD 75 (230V) #23042R TD 75DC (115V)





CMF 300

1-6 ring capacity or workpiece capacity up to 30 grams

Raytech's smallest capacity magnetic finisher has a 3-inch (76.2mm) diameter chamber that finishes the equivalent of 1 to 6 rings. Pin capacity is 20-30 grams. The CMF-300 has a fixed speed with mechanical timer and molded bowl and cover.

- 3" bowl size
- 1-6 ring capacity
- Steel pin capacity 20-30 grams or up to 1 ounce
- Mechanical timer, fixed mechanical speed
- · Use only Stainless Steel Pin media
- Includes an ample amount of Steel Pin media
- Use with Raytech Compound M Solution
- 1/32 HP motor in 115 V and 230 V

#23043R CMF 300 (115V) #24138R CMF 300 (230V)

CMF 400

8-12 ring capacity or workpiece capacity up to 100 grams

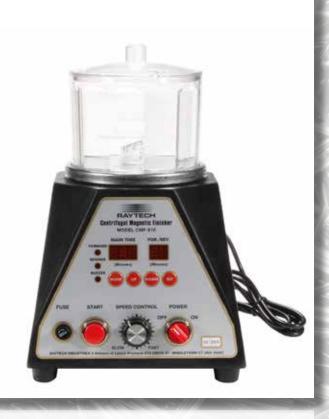
Raytech's CMF 400 magnetic finisher has a 4-inch (100mm) diameter chamber that finishes the equivalent of 8 to 12 rings. It comes complete with an ample amount of .5mm pins and compound (use one drop). Pin capacity is 100 grams. The CMF-400 has a fixed speed with mechanical timer and molded bowl and cover.

- 4" bowl size
- 8-12 ring capacity
- Steel pin capacity 50-100 grams or up to 3.5 ounces
- Mechanical timer, fixed mechanical speed
- · Use only Stainless Steel Pin media
- · Use with Raytech Compound M Solution
- 1/32 HP motor in 115 V and 230 V

#23048R CMF 400 (115V) #24139R CMF 400 (230V)

Magnetic Finishers





CMF 410

Includes wet and dry bowls for use with other medias

Same size as the CMF-400, except this upgraded model has programmable functions similar to the CMF-610, plus wet and dry bowls for use of other medias. It comes complete with an ample amount of .5mm pins and compound (use one drop). Spare bowl for CMF-400 can also be used with this model.

- · 4" bowl size
- 8-12 ring capacity or workpiece capacity up to 100 grams
- Steel pin capacity 50-100 grams or up to 3.5 ounces
- Programmable, variable speeds, FWD/REV & timer
- Wet bowl option for plastic, porcelain balls, steel pins
- Dry bowl option use corn cob, nut, shell, wood media
- Use with Raytech Compound M Solution
- 1/32 HP motor in 115 V and 230 V

#23049R CMF 410 (115V) #24140R CMF 410 (230V) #23084R CBD Dry Bowl #23085R CBD Wet Bowl

CMF 610

20-30 ring capacity or workpiece capacity up to 150 grams

This model is designed to integrate programmable functions. Variable speed, forward/reverse. Timer functions are easily programmed to suit your cycle times. The CMF-610 has a 6-inch (150mm) molded bowl with cover with a pin capacity of 150 grams and parts equivalent to 20-30 rings. .5mm pins and compound included. 1/12 hp motor.

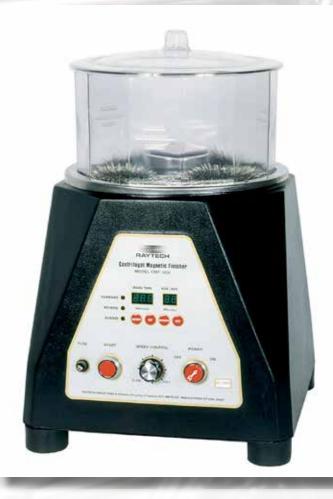
- 6" bowl size
- 20-30 ring capacity or workpiece capacity up to 150 grams
- Steel pin capacity 100-150 grams or up to 5 ounces
- Programmable, variable speeds, FWD/REV & timer
- Dry bowl option use corn cob, nut, shell, wood media
- Use with Raytech Compound M Solution
- 1/12 HP motor in 115 V only

#23051R CMF 610 (115V) #23086R CBD Dry Bowl #24142R CMF 610 (230V)

Magnetic Finishers

Raytech®





CMF 900

100 ring capacity or workpiece capacity up to 800 grams

This model is designed to meet the needs of the larger size manufacturers. The bowl is 9-inches (230mm) and has a pin capacity of up to 800 grams and parts equivalent of 100 rings. Pins are purchased separately. The CMF-900 is fully programmable and features variable speed and forward and reverse functions. 1/3 hp motor.

- Programmable, variable speeds, FWD/REV & timer
- 100 ring capacity or workpiece capacity up to 800 grams
- 9" bowl size Steel pin capacity 400-800 grams or up to 28 ounces
- Use only wet burnishing Stainless Steel Pin media
- Use with Raytech Compound M Solution
- 1/3 HP motor in 115V and 230v

#23052R CMF 900 (115V) #24143R CMF 900 (230V)

CMF 1200

225 ring capacity or workpiece capacity up to 1200 grams

Raytech's largest capacity magnetic finisher, the CMF 1200, has been re-engineered and is now be offered in a 115V model as well as the 230V Model. The unit's 12-inch (300mm) diameter bowl has a pin capacity of up to 1200 grams. The CMF-1200 is fully programmable and features variable speed and forward/reverse functions. Instead of one heavy metal disk, the new design features 12 small, light-weight magnetic disks inside the unit. The bowl is now a single molded piece so that leaking is not a problem. The upgrade also makes maintenance easier. 1/3 hp motor.

- Programmable, variable speeds, FWD/REV & timer
- 12" bowl size Steel pin capacity 800-1200 grams or up to 42 ounces
- · Use only wet burnishing Stainless Steel Pin media
- · Bowl is single molded piece to prevent leaks
- Use with Raytech Compound M Solution
- 1/3 HP motor in 115 V and 230 V

#23053R CMF 1200 (115V) #24145R CMF 1200 (230V)



STAINLESS STEEL MAGNETIC PINS

For CMF machines only.

Important! Under no circumstances should the pins be stored in the bowl on the machine. Doing so will cause the pins to magnetize, resulting in over-magnetizing of pins, thus lessening their effectiveness. Through use, discoloration (darkening) of the pins is normal. They can be cleaned using a tri-sodium phosphate solution. TSP is available at your hardware store.

- Heat treat scale removal
- High luster burnishing
- Edge smoothing/light radiusing
- .3 mm & .5 mm pins offered in 250g or 1 kilo
- Use with Raytech Compound M Solution

#41372R .3mm Pins, 250 Grams

#41374R .3mm Pins, 1 Kg

#41376R .5mm Pins, 250 Grams

#41378R .5mm Pins, 1 Kg

Magnetic Finishers

TECH TIPS: CENTRIFUGAL MAGNETIC FINISHERS

Fill the bowl with the correct amount of pins.

Fill the bowl with water to the fill line.

For the model 400, 410 and 610, use approximately 4-5 drops of Compound D provided with your unit. For the models 900 and 1200, add approximately (1-2) teaspoons of Compound D.

Break in the pins prior to use.

To break the pins in, place approximately (10-12) brass screws into the bowl with pins and water. Run the unit for at least (3) hours. If the pins turn black in the beginning, there is nothing wrong with them. The pins contain carbon and this is sometimes released into the water at initial use. If this should happen, fill your bowl approximately halfway and add (2) Tablespoons of Trisodium Phosphate (TSP - which is available at most paint or food markets). Run for 5-10 minutes, rinse and then repeat this cycle until water is clear. It is good practice to properly clean and rinse your pins on a daily basis.

Wet Bowl Usage:

The optional Wet Bowl is for use with only the CMF 410 or 610 units and utilizes medias such as plastic and porcelain. Fill the bowl with media and water not to exceed the fill lines. Run this bowl at half speed only!

Dry Bowl Usage:

The optional Dry Bowl is for use only with Raytech's Dri-Shine VII. <u>Run this bowl at half speed only!</u> Using other manufacturer's media will void the warranty. In most cases this is the final step in polishing.

Important! Under no circumstances should the pins be stored in the bowl on the machine. Doing so will cause the pins to magnetize, resulting in over-magnetizing of pins, thus lessening their effectiveness.

Through use, discoloration (darkening) of the pins is normal. They can be cleaned using a tri-sodium phosphate solution. TSP is available at your hardware store.

Ultrasonic Cleaning

Raytech®













TS 2500

2.6 quart capacity (2500ml)

Ultrasonic cleaners are adept in cleaning intricate and hard to reach spaces. Years of grime and varnish are stripped away by the ultrasonic cleaning action. The grease and dirt are easily lifted away from parts leaving them ultrasonic clean.

The 23096R Digital Ultrasonic Cleaner is ideal for cleaning and degreasing small batches of parts.

- · Used to lift and dissolve grit, grime, scale and oily residue off parts/objects
- 2.6 quart capacity, with a heater and timer
- Cleans intricate & hard to reach spaces
- Ultrasonic cavitation lifts & dissolves grit, grime, scale
- Grease & dirt easily lifted away
- Plastic basket holds small parts
- Use with degreaser or jewelry cleaner
- Does not have a drain

#23096R TS-2500 (115V)

TS 6000

6.3 quart capacity (6000ml)

Ultrasonic cleaners are adept in cleaning intricate and hard to reach spaces. Years of grime and varnish are stripped away by the ultrasonic cleaning action. The grease and dirt are easily lifted away from parts leaving them ultrasonic clean.

The 23100R Digital Ultrasonic Cleaner is ideal for cleaning and degreasing small batches of parts.

- · Used to lift and dissolve grit, grime, scale and oily residue off parts/objects
- 6.3 quart capacity, with a heater and timer
- Cleans intricate & hard to reach spaces
- Ultrasonic cavitation lifts & dissolves grit, grime, scale
- Grease & dirt easily lifted away
- Plastic basket holds small parts
- Use with degreaser or jewelry cleaner
- · Has a drain

#23100R TS-6000 (115V)

Ultrasonic Cleaning











POWER PRO

The market's largest and most powerful ultrasonic cleaning system.

The Power Pro's 34-3/4" tank is designed for high volume ultrasonic cleaning or for larger than normal items. The powerful industrial transducers aggressively deep clean and degrease items, both inside and out. Changing from cleaning to lubrication is easy with the built in drain system. Designed for volume professional usage, the Power Pro features an all stainless design and professional controls. For complete control of the process, the Power Pro has both a timer and an adjustable heat control. Temperatures up to 175 degrees can be selected.

- 7.7 gallon capacity (29L)
- Powerful transducers allow guick & easy cleaning
- Tank dimensions L 35.75" x W 8" x H 6 1/4"
- Adjust temp up to 175 degrees
- Power Pro Accessory Lube Tank option
- Use with Lyman Turbo Sonic Lube

#7631734 Power Pro Ultrasonic Cleaner (115V)

POWER PRO LUBE TANK

A perfect accessory for the Power Pro Ultrasonic Cleaner

This rugged, stainless tank is designed to sit in the Power Pro's cleaning tank which remains filled with cleaner. The unit's powerful ultrasonic action is transmitted through the cleaning solution into the accessory tank filled with lube. No tank draining or cleaning needed.

- A perfect and necessary accessory for the Power Pro Ultrasonic Cleaner
- Allows deep ultrasonic cleaning and sonic lubrication in the same unit solution, transferring the ultrasonic action to the lube
- Tough, welded metal construction.
- Large handles make moving the tank easy
- Huge time savings when cleaning and lubing multiple items

#7631739 Power Pro Lube Tank

Ultrasonic Cleaning







CR CLEANING SOLUTION

For use in Ultrasonic Cleaning

Concentrated corrosion remover and cleaning solution.

- Removes rust & oxidation
- Scientifically formulated to clean and recondition metals
- Removes tarnish, oxidation, rust, and scale better than competitive formulas.
- Ideal for oxidation removal on parts, hardware, fittings, and many other applications.
- Removes light rust on steel parts and scale from aluminum parts.
- · Cleans most items in 10 minutes or less.

#23102R CR Cleaning Solution (32 oz.)

JEWELRY CLEANING SOLUTION

For use in Ultrasonic Cleaning

Works in all ultrasonic cleaners. Scientifically formulated to clean ultrasonic safe jewelry. Removes dirt, oils, oxidation and tarnish. Excellent cleaner for diamonds, sapphires, zircon, gold and other jewelry. Works well for watches, bracelets and eye wear.

#7631709 Jewelry Cleaning Solution (16 oz.)

Ultrasonic Cleaning



TURBO SONIC LUBE

For use after Ultrasonic Cleaning

Specifically formulated for ultrasonic use right out of the container, Turbo Sonic Lube displaces moisture and penetrates all the hard to reach areas of any part making it ideal for use after ultrasonic cleaning. Formulated for superior lubrication and protection, the lube leaves a dry protective, lubricating film and can be reused repeatedly.

#7631735 Turbo Sonic Lube (1 Gallon)

TECH TIPS: ULTRASONIC CLEANING

Due to the unique nature of ultrasonic cleaning, grit and grime left behind by conventional cleaning methods is easily removed. Intricate parts such as carburetors, brake fittings, transmission parts, and hardware and tools are effortlessly cleaned. Years of grime and varnish are stripped away by the ultrasonic cleaning action. The ultra-clean obtained from these machines is the result of the cavitation bubbles created by the ultrasonic machine. These bubbles combined with the specially formulated solutions by Raytech, dig underneath the years of grime left on parts. The grease and dirt is easily lifted away from parts leaving them ultrasonic clean.

Ultrasonic cleaners may also be used for a variety of general purpose duties including jewelry, eyeglasses and more. It is extremely important when using the TurboSonic for uses other than steel parts that you use the correct cleaning solution or you risk damage to the item you are cleaning. For cleaning items other than brass cases or steel parts, we suggest contacting the manufacturer of the item to determine if ultrasonic cleaning is appropriate for that item.





Finishing Media

Raytech®



9/16 XF CONES

Plastic, Medium Cut

- · Use for very fine surface conditioning
- Often used in precision metals industry
- Use on soft metals, copper, brass, alum
- · Offers smooth finish but little shine
- 9/16" XF Cones
- Use with Raytech Compound B Solution

#41334R 9/16 XF Cones (20 lbs) #41337R 9/16 XF Cones (50 lbs)



VERY FINE CUT PYRAMIDS

Plastic, Light Green

- Use for very fine surface conditioning
- Often used in precision metals industry
- Use on soft metals, copper, brass, aluminum
- · Offers smooth finish but little shine
- 1/4" Pyramids
- Use with Raytech Compound B Solution

#41131R Very Fine Cut Pyramids (5 lbs)
#41135R Very Fine Cut Pyramids (50 lbs)



MEDIUM CUT PYRAMIDS

Plastic, Brown

- Use for medium cut surface conditioning
- Often used in precision metals industry
- Use on soft metals, copper, brass, aluminum
- · Offers smooth finish but little shine
- 1/4" Pyramids
- · Use with Raytech Compound B Solution

#41141R Medium Cut Pyramids (5 lbs) #41145R Medium Cut Pyramids (50 lbs)



LIGHT CUT PYRAMIDS

Plastic, Green

- · Use for light cut surface conditioning
- · Often used in precision metals industry
- Use on soft metals, copper, brass, aluminum
- · Offers smooth finish but little shine
- 1/4" Pyramids
- Use with Raytech Compound B Solution

#41119R Light Cut Pyramids (5 lbs) #41125R Light Cut Pyramids (50 lbs)

Finishing Media









PORCELAIN BALLS

For use on very delicate parts

- Bright finish with less distortions/marks
- Porcelain Balls require break in period of 4-6 hours
- Produces very little wear on surfaces
- 1mm, 2mm, 3mm, 4mm & 6mm sizes
- Use with Raytech Compound D Solution

#41210R 1mm (5 lbs) #41222R 4mm (5 lbs) #41214R 2mm (5 lbs) #41226R 6mm (5 lbs) #41218R 3mm (5 lbs)

CERAMIC FINISHING MEDIA

Used for grinding and polishing of hard metal workpieces such as steel, stainless steel, cast iron, or titanium.

Ceramic is the heaviest media and is also the fastest finisher. It is made of a ceramic binder and an abrasive grit. Use for general purpose polishing, light & heavy deburring, faster deburring of a workpiece and aggressive removal of metal on a workpiece. It can also remove that orange peel look.

#41310R 5/16 x 7/8" Triangles (20 lbs) #41313R 5/16 x 7/8" Triangles (50 lbs) #41216P 2/8 x 7/8" Angle Cut Cylinders

#41316R 3/8 x 7/8" Angle Cut Cylinders (20 lbs) #41319R 3/8 x 7/8" Angle Cut Cylinders (50 lbs)

#41328R 3/8" Polyhedrons (20 lbs) #41331R 3/8" Polyhedrons (50 lbs)

CERAMALITE

Ceramic and Plastic Bond, Use on Heavy, Dense Pieces

- · Clean-running light media
- Made of ceramic & plastic bond
- · Use on heavy dense pieces
- Offers fast & bright finish
- V Cut or Angle Cut Cylinders
- Use with Raytech Compound B Solution

#41340R 5/8" V Cut Cylinders (20 lbs) #41343R 5/8" V Cut Cylinders (50 lbs)

#41346R 5/16 x 3/4" Angle Cut Cylinders (20 lbs) #41349R 5/16 x 3/4" Angle Cut Cylinders (50 lbs)

MANUAL SIFTING SCREENS

Screens are 14 ½ inches in diameter x 2 ½ inches deep

Useful for separating undersized media. Made of high impact polymer. One piece molding eliminates problems with parts and media sticking at the joints of two piece screens. Screens nest for easy storage.

#23205R 1/4" Screen #23207R 3/8" Screen #23209R 1/2" Screen #23211R 3/4" Screen #23213R 1" Screen #23224R Container Only

#23222R Set of 5 Screens with Container

Finishing Compounds









DRI-SHINE III

Dry polish for brass, silver, copper, titanium, SS

Corn cob based media treated with polishing compound, serves as a burnishing media offering slight polishing. Universal fast acting dry polish for brass, silver, copper, titanium, stainless steel, etc. Corn Cob is a biodegradable tumbling grit and is used as both a tumbling and vibratory media to absorb dirt and oils and dry parts, without affecting the surface of the parts. Corn Cob base has pointed irregular particles.

- Eliminates rouge stains
- Treated with polishing compound

#41266R Dri-Shine III (15 lbs) #41277R Dri-Shine III (30 lbs)

#41245R Dri-Shine III (55 Gallon Drum)

DRI-SHINE VII

Nut based media for polishing aluminum, brass, bronze

A nut based media that can be used as a final polish in most applications. Cycle times run from 20 to 45 minutes depending on your application. DRI-SHINE VII can be used for 4-6 cycles then it needs to be reactivated. Treated walnut shell media is the same product as untreated except a polishing compound has been added to the media by the manufacturer. Using treated walnut shell polishing media will save time in brass preparation. Not only does the walnut shell clean the residue and tarnish off the brass it also polishes the brass in the same step.

 Designed specifically for use with Raytech CMF 410 / CMF610 Dry bowl

#41290R Dri-Shine VII (5 lbs)

TUMBLE SOAP

Fine finishing/burnishing precious metals, brass, bronze

Mildly alkaline soap-based burnishing compound to be used in a soapy bath mix which will significantly improve the luster of your polished parts. Used for brightening copper, brass and steel. It may also be used for tin, zinc and aluminum with shorter burnishing cycles. Provides excellent lubricity between the materials being burnished and the media being used. Use approximately 1 teaspoon per pint of water. Use at room temperature.

- Mildly alkaline soap particles
- Used to burnish & improve luster of parts
- Brightens copper,brass,steel,tin,zinc,alum
- Fine finishing of precious metals

#41011R Tumble Soap (1 lbs) #41013R Tumble Soap (50 lbs)









Finishing Compounds

COMPOUND B

Use with Ceramic or Plastic media

A liquid flo-thru concentrate, uniquely formulated for all metals and plastics. As a non-foaming compound, soils that can load the media and darken parts are quickly flushed from the processing channel, resulting in faster cycle times and cleaner parts. Mix 2% dilution for flo-thru.

Liquid deburring solution for use in vibratory tumblers

#41008R 1 Gallon Bottle

COMPOUND D

Use with most medias including Ceramic, Porcelain, Steel, Stainless Steel

Uniquely formulated liquid burnishing compound for use with steel shot. Also can be used as storage compound due to rust inhibitors in the formulation. Dilute 2% to water

Liquid burnishing/descaling solution for use in vibratory tumblers

#41004R 1 Gallon Bottle

COMPOUND M

Use with Stainless Steel Magnetic Pins

A versatile liquid burnishing solution, ideal for use in Raytech Centrifugal Magnetic Finishers. Compound M allows for cleaner, more effective finishing in burnishing operations. Formulated with special cleaners and rust inhibitors for optimal finishing results while burnishing with steel, stainless steel, and porcelain medias. Compound M is diluted in water to create a solution of 2% compound to 98% water.

- Liquid burnishing solution for use in Magnetic Finishers
- Can be used as a storage compound due to its rust-inhibiting properties

#41005R 1 Gallon Bottle

TURBO® BRITE™

For use with DRI-SHINE III or VII to enhance polishing of metal parts

Use this additive with all treated or untreated Dri-Shine products and hardwoods to enhance polishing of metal. Works best on nonferrous metals. Directions on package.

· Works best on non ferrous metals

#7631358 Turbo Brite (5 oz.) #7631361 Turbo Brite (20 oz.)

Finishing Media



BASIC GUIDELINES FOR SUCCESSFUL FINISHING

- 1. Acceptable media to part ratio is approximately 70% media to 30% parts.
- When running conventional medias that require a wet process, be sure to have the correct amount of water and compound. Too much water will hamper the vibratory action thus giving less than desired results, as well as long cycle times.
- 3. The media and compound should just barely be wet with no standing water. It is recommended to use Raytech's compound rinsing system to ensure proper dispensing of water and compound.

Table 1. Media Processing Characteristics By Shape

| | | Surface | Media Shape | Surface | Process Time | |
|-----------------|----------|--------------|-------------|------------|------------------|-------------------|
| Media Shape | Mobility | Contact Area | Retention | Refinement | 1=long, 5= short | Total Versatility |
| V-Cut Cylinder | 4 | 5 | 5 | 5 | 5 | 24 |
| Cylinder | 4 | 2 | 4 | 5 | 3 | 18 |
| Cone | 5 | 2 | 5 | 5 | 3 | 20 |
| Polyhedron | 4 | 5 | 4 | 5 | 5 | 23 |
| Triangle | 3 | 5 | 4 | 5 | 5 | 21 |
| Pyramid | 4 | 5 | 3 | 5 | 4 | 21 |
| Porcelain Balls | 5 | 1 | 5 | 5 | 5 | 21 |

Numerical Scoring: 1=low, 5=high. Efficiency is not rated by a high accumulated score. The total score is an indication of the media's all around versatility.

Table 2. Media Application Characteristics By Material

| Material | Cast | Fabricated | Light Stamping | Small Machining |
|---|------------|------------|----------------|-----------------|
| Stainless Steel & Ferrous MetalsA, B, D | A, B, D | A, B, C, D | A, B, D | |
| Non-Ferrous | A, B, C, D | B, C, D | B, C, D | A, B, C, D |
| Composites or Plastics | С | B, C | B, C | B, C |

 $A{=}Ceramic,\ B{=}Ceramalite,\ C{=}Plastic,\ D{=}Porcelain\ Balls$

HOW MUCH MEDIA DO I USE?

To determine media capacities, multiply the media density (found with each individual media above) by the cubic foot capacity of the tumbler (found in each individual tumbler listing). Examples are listed below. Note this is total media capacity only and actual media amounts will vary in direct proportion to the amount of parts being tumbled. (See Basic Guidelines For Successful Finishing above.)

| • Ceramic (90 lbs/cu ft) in a TV-10 (.10 cu ft) | 90 x .10 = 9 pounds of media |
|---|------------------------------|
|---|------------------------------|

| Stainless Steel Balls (3) | 300 lbs/cu ft) in an A' | V-25SS (| (.22 cu ft). 300 x . | 22 = 66 pounds of media |
|---|-------------------------|----------|-----------------------|-------------------------|
|---|-------------------------|----------|-----------------------|-------------------------|

Magnetic Finishers

WHAT IS A CENTRIFUGAL MAGNETIC FINISHER?

The machine is a direct drive, fan cooled design. Its magnetic disk is made up of many powerful magnets that are precisely placed in a cast disk. The alternating polarity is constantly changing, thereby allowing the media to move freely in a liquid solution that constantly changes its makeup. This, combined with centrifugal force, allows for super quiet and fast time cycles.

Magnetic Finishing presents itself as the pinnacle of methods to efficiently burnish and polish small non-ferrous metals. With stainless steel pins as small as .010 in diameter and .250 in length, they are able to work in areas such as undercuts, recesses, slots, etc, where no previous method has been found suitable. Centrifugal magnetic finishing is quiet by comparison to many other forms of finishing. On soft non-ferrous metals, the finishing cycle can be as low as 30 minutes. This alone assures faster turnaround time on parts when compared to any other method. Centrifugal magnetic tumbling as an automated process addresses the most intricate and detailed parts imaginable in finishes where others fail. It should be noted that on large, smooth or flat surfaces the finish will appear frosted and a slight buffing or a dry finish is recommended.

RAYTECH FLEX-SYSTEM

Only with Raytech's Flex-System can you utilize 3 types of medias. Raytech models 410, and 610 utilize three types of media. (Models 300, 400, 900 and 1200 use wet burnishing pins only.)

Wet Burnishing Pins:

- 1) Heat treat scale removal
- 2) High luster burnishing
- 3) Edge smoothing/light radiusing

Abrasive (wet): CBW bowls required

- 1) Surface refinement
- 2) Edge radiusing
- 3) Uniform surface quality

Dry Processing: CBW bowls required

- 1) Bright finish
- 2) Bright, refined and uniform buff-like, high luster quality Change and rinse as frequently as required to keep the process clean.



RAYTECH FLEX-SYSTEM

Interchangeable bowls utilizing 3 types of media:

- Wet Burnishing Pins
 - Abrasive (wet)
 - Dry Processing

Magnetic Finishers



REPLACEMENT PART NUMBERS - MAGNETIC FINISHERS

115 Volt Machines

| Description | 300 | 400/410 | 610 | 900 | 1200 |
|---------------------|-------|---------|--------|--------|--------|
| Bowl & Lid | 23063 | 23-064 | 23-057 | 23-068 | 23-072 |
| Brushes (Motor) | NA | 08-456 | 08-463 | 08-487 | 08-499 |
| Cooling Fan | 08519 | 08-451 | 08-467 | 08-510 | 08-510 |
| Fuse | 5 Amp | NA | 5 Amp | 10 Amp | 10 Amp |
| Magnetic Cast Disc | NA | 08-516 | 08-472 | 08-489 | 08-500 |
| Main Control Module | NA | NA | 08-474 | 08-474 | 08-474 |
| Motor | 08515 | 08-452 | 08-464 | 08-482 | 08-494 |
| Motor Control Board | 08520 | NA | 08-473 | 08-473 | 08-473 |
| On/Off Switch | 08524 | 08-450 | 08-475 | 08-475 | 08-512 |
| Push Button Switch | NA | NA | 08-476 | 08-476 | 08-513 |
| Speed Control | NA | NA | 08-502 | 08-502 | 08-502 |
| Timer | 08517 | 08-454 | NA | NA | NA |
| Timer Knob | 08521 | 08-455 | NA | NA | NA |
| Plate | 08518 | 08-501 | 08-470 | 08-488 | 08-496 |

230 Volt Machines

| Description | 300 | 400/410 | 610 | 900 | 1200 |
|---------------------|-------|---------|--------|--------|--------|
| Bowl & Lid | 23063 | 23-064 | 23-057 | 23-068 | 23-072 |
| Brushes (Motor) | NA | 08-456 | 08-463 | 08-487 | 08-499 |
| Cooling Fan | 08519 | 08-451 | 08-467 | 08-511 | 08-511 |
| Fuse | 3 Amp | 2 Amp | 5 Amp | 10 Amp | 10 Amp |
| Magnetic Cast Disc | NA | 08-516 | 08-472 | 08-489 | 08-500 |
| Main ControlModule | NA | NA | 08-474 | 08-474 | 08-474 |
| Motor | 08526 | 08-453 | 08-465 | 08-483 | 08-495 |
| Motor Control Board | 08520 | NA | 08-485 | 08-485 | 08-485 |
| On/Off Switch | 08524 | 08-450 | 08-475 | 08-475 | 08-512 |
| Push Button Switch | NA | NA | 08-476 | 08-476 | 08-513 |
| Speed Control | NA | NA | 08-502 | 08-502 | 08-502 |
| Timer | 08517 | 08-454 | NA | NA | NA |
| Timer Knob | 08524 | 08-455 | NA | NA | NA |
| Plate | 08518 | 08-501 | 08-470 | 08-488 | 08-496 |

Vibratory Tumblers

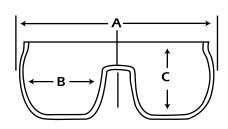
REPLACEMENT PART NUMBERS - VIBRATORY TUMBLERS

| Part # | Model | Description |
|---------|-------------------|-------------------------------------|
| 30251R | TV-5 | Base w/motor (115V) |
| 23005R | TV-5 | Bowl & Cover |
| 8094230 | TV-5/Dri Polisher | Main Post Shaft |
| 03238R | TV-5/Dri Polisher | Washer for main post shaft |
| 23004R | TV-5/Dri Polisher | Rubber Well Nuts for Bowl & Lid (2) |
| 30252R | TV-10 | Base w/motor (115V) |
| 30291R | TV-10 | Base w/motor (230V) |
| 23010R | TV-10 | Bowl & Cover with drain |
| 8033450 | TV-10 | Wing Nut for Lid |
| 8033900 | TV-10 | Hex Nut on bowl |
| 8077300 | TV-10 | Washer on bowl |
| 03243R | TV-10 & AV-75 | Washer on Lid |
| 23036R | AV-18/AV-25 | Bowl with drain |
| 30253R | AV-18/AV-25 | Motor (115V) |
| 30292R | AV-18/AV-25 | Motor (230V) |
| 23017R | AV-25 | Bowl & Cover |
| 07325R | AV-25 | Spring, Qty: 1 (requires 4) |
| 07358R | AV-25 | Lid hold down nut |
| 07362R | AV-25 | Motor Plate Pad for AV-25 |
| 07737R | AV-25 | Shaft 3/8-16 X 9" |
| 23032R | AV-40/TD-40 | Bowl and Lid |
| 30255R | AV-40/AV-75 | Motor (115V) |

| Part # | Top Level Part | Description |
|--------|----------------|--------------------------------------|
| 30293R | AV-40/AV-75 | Motor (230V) |
| 07967R | AV-40 | Shaft Assembly |
| 23045R | AV-40SS | Bowl & Lid |
| 07972R | AV-75 | Counter Weight Assembly |
| 07773R | AV-75 | Motor Plate |
| 07779R | AV-75 | Rubber Pad, Qty: 1 (requires 5) |
| 07823R | AV-75 | T Handle Plug Assy |
| 07824R | AV-75 | T-Handle Assembly |
| 07941R | AV-75 | Compression Springs |
| 07965R | AV-75 | Shaft Assemby |
| 23046R | AV-75/TD-75 | Bowl & Lid |
| 23047R | AV-75/TD-75 | 75DC Bowl & Lid |
| 08377R | TD-40 | Tilting Plate |
| 07933R | TD-75 | Tilting Plate |
| 07966R | TD-75 | Shaft Assemby |
| 07342R | Many models | Rubber Foot, Qty: 1 (requires 3) |
| 07361R | Many models | 10" Motor Plate only |
| 07816R | Many models | T-Handle /Plug Assy BS20/33 |
| 07909R | Many models | Strainer Insert Assy |
| 07942R | Many models | Spring Grommet, Qty: 1 (requires 12) |
| 07943R | Many models | Lid hold down nut |
| 23114R | Many models | Strainer Assembly |

Spare Bowl Replacement Chart

| alida ta alida than a ta a antan | Barrel barrela |
|--|----------------|
| side to side thru to center Part # Description center of the bowl shaft assemb | • |
| A B | C |
| 23001 TV-5 8" 4" | 3.75" |
| <u>23090 TV-5 Starter Kit</u> 8" 4" | 3.75" |
| <u>23124 Twin Tumbler 2500 12" 4"</u> | 4.25" |
| <u>23007 Twin Tumbler 1200 8" 4"</u> | 3.75" |
| 23012 Dri Polisher 10 " 5" | 5" |
| 23009 TV-10 10 " 5" | 5" |
| 23024 AV-18 12" 4" | 4.25" |
| 23016 AV-25 14" 4" | 5" |
| 23019 AV-25SS 14" 4" | 5" |
| 23026 AV-40 17" 4.25" | 7" |
| 23027 AV-40SS 17" 4.25" | 7" |
| 23040 AV-75 21" 7" | 9.5" |
| 23038 AV-75DC 21" 7" | 9.5" |
| 23031 TD-40 17" 4.25" | 7" |
| 23044 TD-75 21" 7" | 9.5" |
| 23042 TD-75DC 21" 7" | 9.5" |



RAYTECH

The Leader in Small Mass Finishing

RAYTECH INDUSTRIES

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