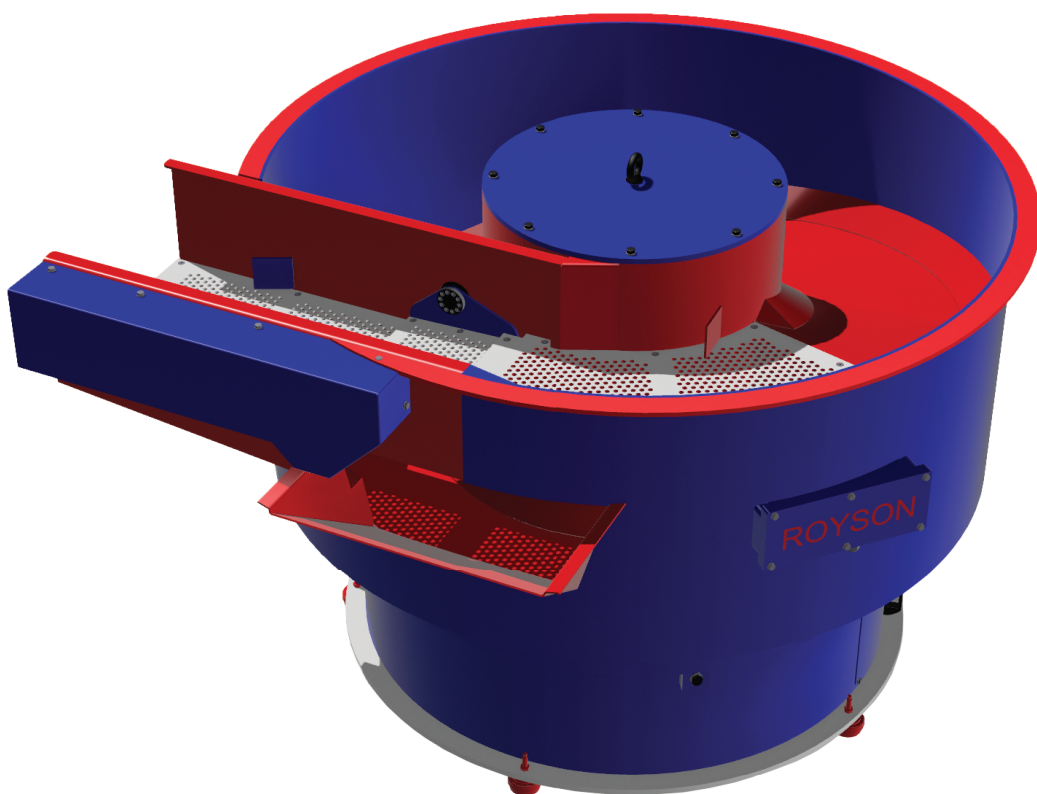


ROYSON

Mass Finishing Equipment, Systems & Solutions



Catalog

- 03 **Tub Finishers**
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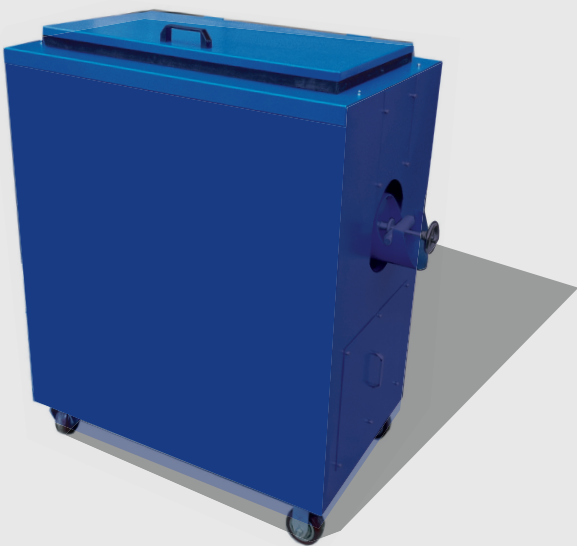
Tub Finishers

Royson's **3C** and **6C Tub Finishers** are compact, portable, and easy-to-install machines, perfect for work cell deburring and finishing that requires a complete system.

The **3C Tub Finisher** offers an economical solution for deburring and finishing parts. Featuring a variable speed drive, and optional RC-500 pump and bucket.

Looking for more capacity?

Consider **Royson's 6C Tub Finisher**, offering twice the finishing space, and an optional control panel with variable speed drive and 10' power cord.



Control consoles, compound pumps, and wastewater collection are just some of the features that can be built into a C Tub Finisher system.

To protect expensive parts from contact, consider our **optional polyurethane tub dividers**.

3C AND 6C TUB FEATURES

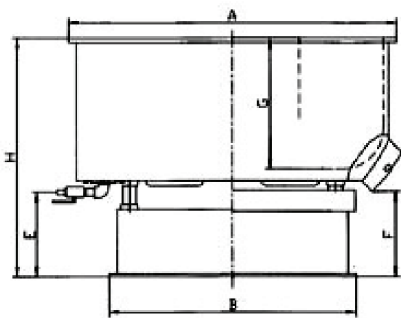
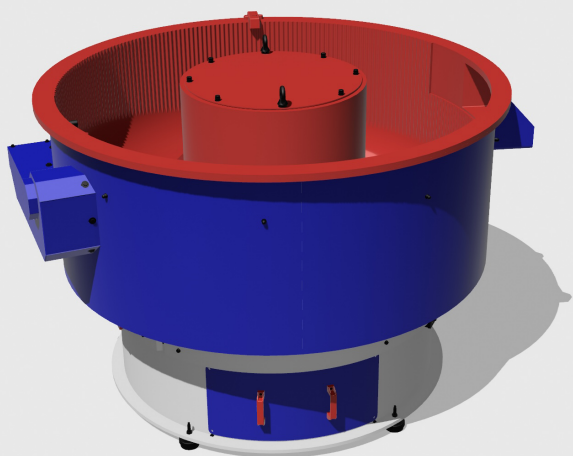
- Heavy Duty Stel Construction
- Casters for easy mobility
- Variable Speed Drive
- Polyurethane Tub Liner
- Media Unload Door
- Steel Sound Hood for quiet operation
- Valve Plumbed to Back of Machine, connected spray fitted to tub
- Machine drain
- 1HP Drive Motor
- 120V 208V 230V 460V Operation

Model #	3C	6C
Capacity (Cubic Feet)	3	6
Inside Tub Dimensions	15" x 15" x 30"	17.7" x 18.5" x 43"
HP	1	2.5
Voltage	120 / 208 230 / 460	120 / 208 230 / 460
Tub Shape	U	U
Overall Machine Dimension	41" x 25" x 40"	53" x 25" x 44"

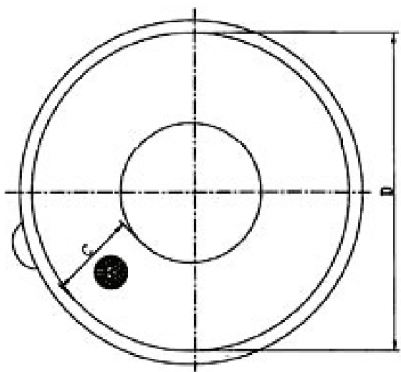


Vibratory Bowl Finishers: CTV

Vibratory Bowl Finishers are well suited for processing a variety of parts with high production efficiency. An unload ramp and screen deck allow for quick and automatic removal of parts from the work bowl at the end of the process cycle. These machines use an innovative carousel divider system to prevent part-to-part contact during finishing. Larger models have wide chambers, perfect for tumbling heavy materials like stone and marble.



CTV bowl finishers are well-suited for deburring, smoothing, polishing, and cleaning small to large metal parts. Choose the right finishing fit for your parts from one of our 8 bowl sizes.

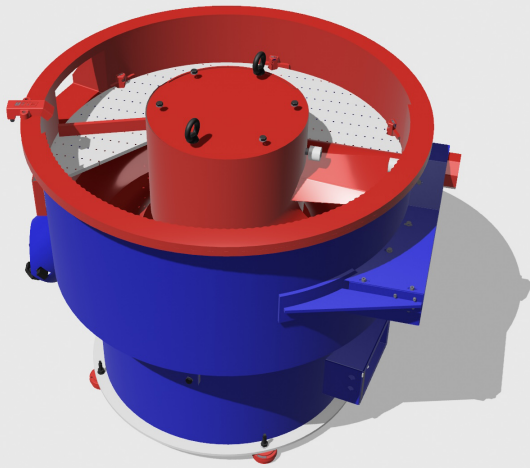


Model #	CTV 2.5	CTV 5	CTV 10	CTV 15	CTV 20	CTV 30	CTV 45	CTV 60
Capacity (Cubic Feet)	2.5	5	10	15	20	30	45	60
Motor Power (HP)	1.4	2	4	5.3	7.3	14.7	20	20
Voltage	230/460	230/460	230/460	230/460	230/460	230/460	230/460	230/460
Motor Speed (RPM)	900-1800	900-1801	900-1802	900-1803	900-1804	900-1805	900-1806	900-1807
Motor Frequency (HZ)	60	60	60	60	60	60	60	60
Weight (LBS)	575	950	1400	2200	2800	4850	6280	7050
Overall Diameter (IN)	33	43.6	52.4	60	68.5	78.7	94	97
Overall Height (IN)	33	34	37	40.3	45.2	48.8	54.3	55.1

Vibratory Bowl Finishers: CTV-IS

The **CTV-IS Round Bowl Finisher** has all the features of a CTV finisher, with the addition of a polyurethane unloading ramp reinforced by a steel core, and a plastic single-holed screen, diameter on request. Unlike the CTV, the CTV-IS offers internal separation of parts.

These machines are well-suited for deburring, smoothing, polishing and cleaning small to medium-sized parts.



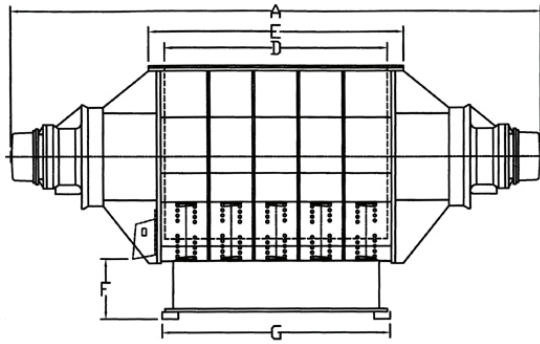
CTV and CTV-IS FEATURES

- Electro-welded steel structure
- Reduced work cycles
- Versatile applications
- Around the clock operation and reliability
- Adjustable amplitude settings with removable weights, and an electronic variable speed drive
- Bowl lined with oil proof anti-abrasive 95 durometer polyurethane.
- Drain Plug for water discharge
- Electric control panel mounted on a floor stand in compliance with CE regulations
- Media unload door
- Dual spray bar for discharging compound and fresh water into the work chamber
- Specify timed work cycle requirements
- Compound dosing pump
- Optional Pneumatic acoustic lid on 2.5, 5, 8, 20, 30, 45, and 60
- Optional pneumatic media unload door

Model #	CTV-IS 3	CTV-IS 5	CTV-IS 8	CTV-IS 15	CTV-IS 20	CTV-IS 45
Capacity (Cubic Feet)	2	4	7	12	16	40
Motor Power (HP)	1.4	2	4	5.3	7.3	14.75
Voltage	208/230/460	208/230/461	208/230/462	208/230/463	208/230/464	208/240/460/3/60
Motor Speed (RPM)	900-1800	900-1801	900-1802	900-1803	900-1804	1800
Motor Frequency (HZ)	60	60	60	60	60	60
Weight (LBS)	800	1075	1475	2425	3220	6725
Overall Diameter (IN)	41	47	55	63	69	92.5
Overall Height (IN)	35	37.4	42	46	47.5	32.6



Rectangular Tub Finishers



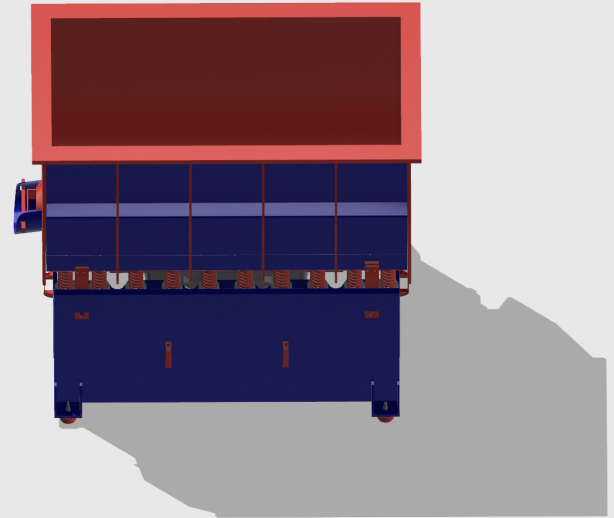
FEATURES

Tub: carbon steel and polyurethane lining, with coil springs and thermal stress relief

Supporting base: consists of a heavy electrowelded steel structure

Electric control panel

Pneumatic sound hood (optional)



CTT Tub Finishers are heavy duty machines capable of three shift a day operation. Easily polish ceramic coated headers, exhaust pipes, or large, heavy parts with these machines. Parts can also be fixtured in the work chamber for certain applications.

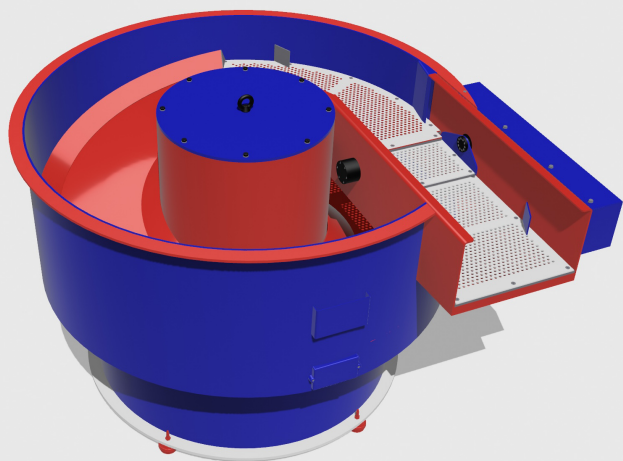
Removable tub dividers for compartmentalizing the work chamber upon request.

Model #	CTT-6	CTT-12	CTT-15	CTT-24	CTT-35	CTT- 2200
Capacity (Cubic Feet)	6	9	12	24	35	581
Motor Power (HP)	2.68	5.4	7.4	2 x 7.4	2 x 14.8	2 x 15
Voltage	208/240/460	208/240/461	208/240/462	208/240/463	208/240/464	400
Motor Speed (RPM)	900-1800	900-1801	900-1802	900-1803	900-1804	1400
Motor Frequency (HZ)	50/60	50/61	50/62	50/63	50/64	400/50
Weight (LBS)	1650	2850	3204	6100	7500	9259
Overall Dimensions (IN)	55 x 29 x 41	60 x 36 x 46	66 x 27 x 47	133 x 52 x 45	145 x 50 x 45	165 x 66 x 59

Heated Cob Dryers

CDT Cob Dryer Machines work seamlessly with CTV-IS bowl finishers, using heated crushed corn cob to dry wet parts.

Parts are loaded directly from the bowl finisher, and a thermostat-controlled heater ensures efficient, continuous drying.



FEATURES

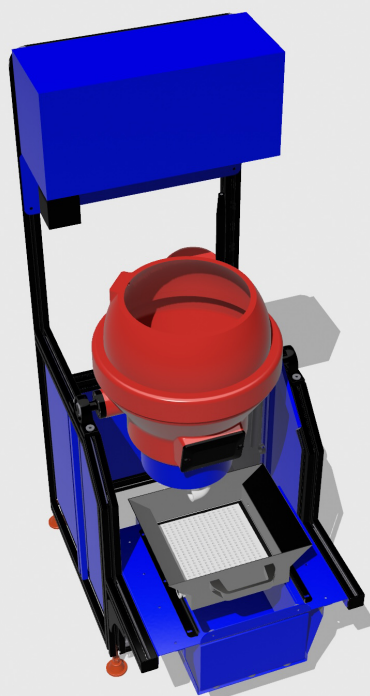
- Durable Construction:** Bowl made of carbon steel with 6mm thick polyurethane lining. Heavy elecrowelded, stress-relieved steel structure.
- Efficient Drying & Separation:** Rising channel for complete part discharge and quick separation. Heated drying for fast, residue-free results. Quick-change screens for continuous or batch operation.
- User-Friendly Controls:** Electric control panel with CE-compliant components. Adjustable amplitude settings with variable speed drive. Work cycle timer and heater thermostat control.
- Maintenance & Operation:** Easy-to-maintain direct drive motor with grease lubrication. Around-the-clock reliability with minimal upkeep. Media unload door for fast cleaning.
- Optional Features:** Steel dust cover for environments with dust concerns. Thermostat control for heat regulation with dust covers.
- Electrical System:** 24V control circuits with IEC components. Hour-meter, start/stop buttons, and emergency stop functionality.

Model #	2.5 CDT-IS	5 CDT-IS	8 CDT-IS	15 CDT-IS	20 CDT-IS	30 CDT-IS
Capacity (Cubic Feet)	2.5	5	8	15	20	30
Heater (Watts)	1500	1800	2400	3600	5400	5400
Motor Power (HP)	1.5	2	4	5.3	7.3	10
Motor Speed (RPM)	900-1800	900-1800	900-1800	900-1800	900-1800	900-1800
Frequency (HZ)	60	60	60	60	60	60
Weight (LBS)	740	925	1345	2270	2650	3860
Overall Diameter (IN)	43	51	60	66	77	90
Overall Height (IN)	33.8	37	41	45	47	31.5



Disk Finishers

CDT Cob Dryer Machines are designed for fast deburring, smoothing, polishing, and cleaning. Their high centrifugal force reduces work cycles while providing superior finishing quality. Choose from our 5 size options.



FEATURES

Durable Construction: Bowl and spinning disc lined with durable, oil-proof polyurethane. Heavy welded steel base structure for stability and reliability

User-Friendly Operation: Adjustable speed with an electronic variable speed drive. Timed work cycle settings for precision. Easy tilting mechanisms (manual or motorized) for unloading media and parts

Versatile Applications: Wet or dry processing, with options for compound dosing pumps. Available in various models to handle small to large batch sizes

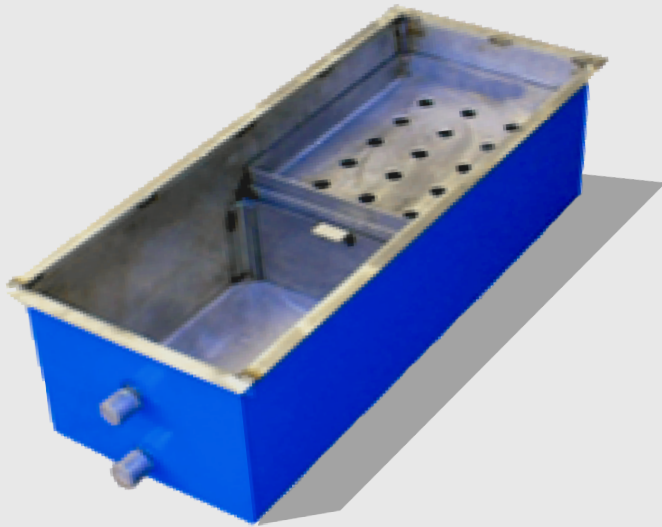
Convenient Maintenance: Grease-lubricated drive motor and gear reducer. Dual spray fittings for easy water/compound management

Safe and Compliant: Electric control panel meets CE standards. Equipped with emergency stop, start/stop buttons, and hour-meter for safety and monitoring

Customizable Options: Pneumatic tilting available for certain models. Models labeled “D” or “W” to designate dry or wet processing

Model #	CDF-20	CDF-60	CDF-120	CDF-200	CDF-450
Capacity (Cubic Feet)	0.3	1.2	2.2	4	6
Disk Speed (RPM)	0-400	0-300	0-180	0-180	0-150
Motor Power (HP)	2	4	5	10	25
Voltage	208/230/460	208/230/460	208/230/460	208/230/460	208/230/460
Frequency (HZ)	60	60	60	60	60
Weight (LBS)	385	1035	1495	2865	4895

Settling Tanks & RC500 Pump



STANDARD FEATURES

- Tanks are supplied with one roll of filter paper
- Removeable paper tray in one chamber
- Tanks Have two removable dams
- Tank comes with (2) 1.5" NPT fittings, one for running water out of the tank at maximum water level, the other for emptying

OPTIONAL FEATURES

- Special width, height, and length tanks
- Tank lids
- Discharge pumps and pump platforms
- Additional paper trays and dams
- Floor layout drawings
- Oil skimmers
- Immersion heaters
- Filter paper: 16" 18" 26" AND 32" 25" yards

Settling Tanks are essential for most wet processing mass finishing systems, collecting spent process solutions from the machine drain. They can recirculate solutions using a Royson RC500 pump, or send out for further treatment with a submersible pump. Rinsing tanks are also available for cleaning parts after finishing.

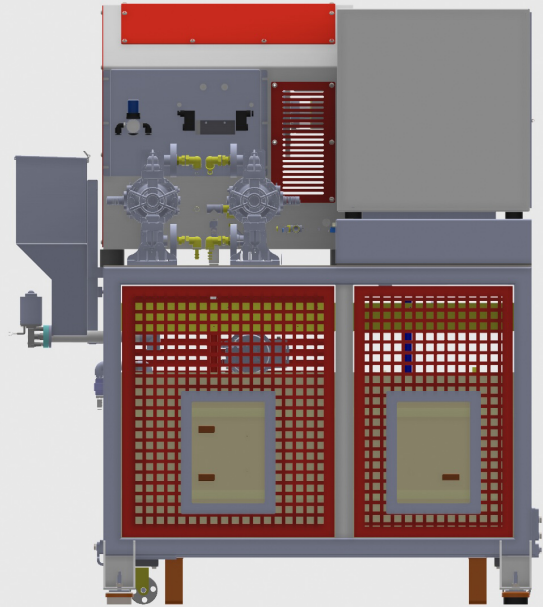
Model #	20	25	28	40	68	91
Gallons	20	25	28	40	68	91
Dimensions (IN)	12 x 16 x 40	12 x 15 x 56	14 x 18 x 40	14 x 26 x 40	16 x 32 x 45	16 x 32 x 60
Max. Water Level (IN)	7	7	9	9	11	11
Material & Thickness	304 SS & 0.12	304 SS & 0.12	304 SS & 0.12	304 SS & 0.12	304 SS & 0.12	304 SS & 0.12
Chambers	2	3	3	3	3	3
Dams	1	2	2	2	2	2
Filter Paper Tray	STD	STD	STD	STD	STD	STD



WasteWater Treatment Systems

FP Water Treatment Systems efficiently remove solids from mass finishing wastewater using flocculation and a filter press.

They recirculate cleaned water, enabling reuse across multiple machines, cutting water consumption, and lowering operating costs.



Model #	FP-500	FP-1000	CN6
Mixing Tank Capacity (Gal)	90	220	
Mixer Speed (RPM)	180	180	3000
Holding Tanks (Gal)	220	360	
Flocculant Tank Capacity (Lbs)	10	60	
Sludge Tank Capacity (Gal)	25	75	
Filter Press Sludge Capacity (CU/FT)	0.5	3	
Motor Power (HP)	1	1	5.2
Voltage	208/240/460/3/60	208/240/460/3/60	230/460
Weight (LBS)	1100	3000	1235
Dimensions (IN)	84 x 40 x 30	100 x 66 x 199	61 x 39 x 48

Screen Separators

Screen Separators are a classifying machine that can be used for media size classification, parts media separation, parts flash separation, parts transferring and rinsing, and more.

Specialized features can be built into your system to meet tyour unique application needs.

Model #	RT1	RT2
Motor Power (HP)	0.5	2 x 0.5
Motor Speed (RPM)	900-1800	900-1800
Dimensions (IN)	46 x 17.1 x 21.8	61 x 21 x 26.7
Voltage	120	120
Weight (LBS)	315	475

STANDARD FEATURES

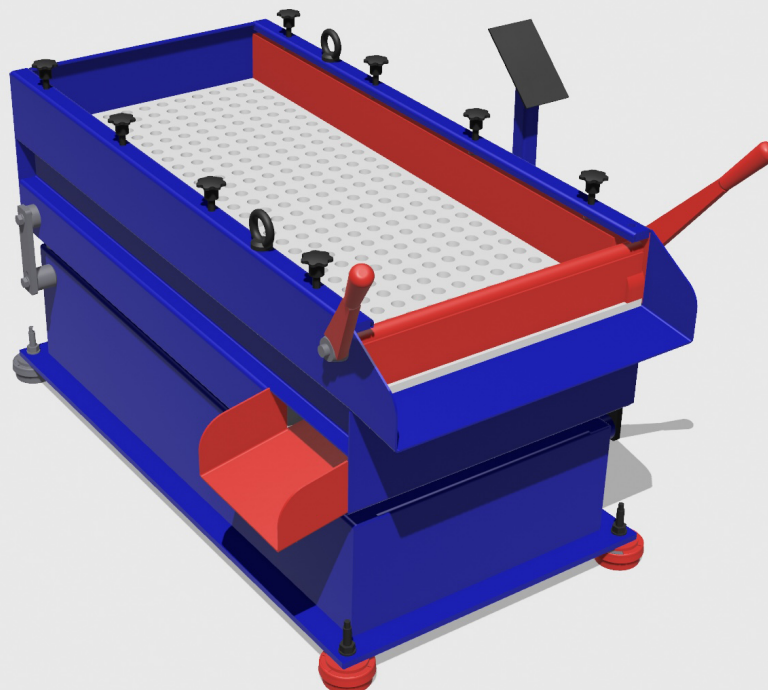
- Removeable Plastic Screens
- Heavy Steel Construction
- ON/OFF Control box
- Adjustable reatiner wall at end of screen
- Side discharge chute
- Optional casters

RT-1

- RT-1 ½ HP Vibration Motor
- 120 Volt single phase power

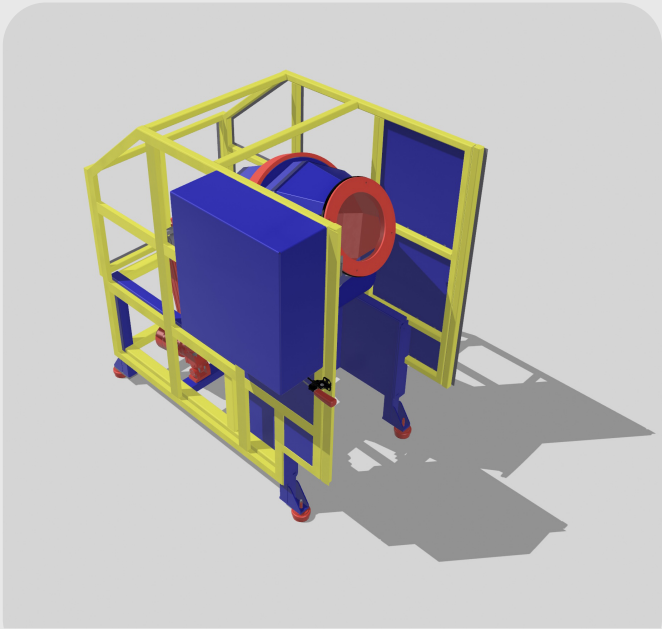
RT-2

- RT-2 2X ½ HP Vibration Motor
- Single or three phase power



Tumbling Barrels

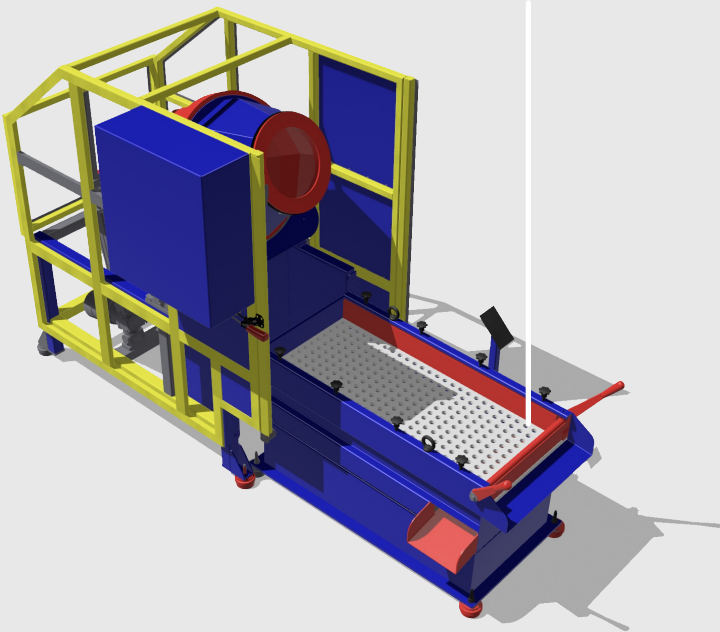
Royson TB Tumbling Machines are rotary barrel parts tumblers that come with a variety of features: customizable speed, water rinsing while processing, polyurethane lining, and an excellent machine safety guarding system.



STANDARD FEATURES

- 2 HP
- 208/240/460 3 Phase Control Console with timer
- Heavy duty gear reducer
- Electronic variable speed, 0-35 RPM
- Digital barrel speed display
- Automatic tilting for processing and dumping
- Abrasion resistant Polyurethane lined barrel
- Fully guarded with movable front guard
- Optional lid for continual water feed and discharge

Attach a screen separator for seamless post-tumbling part separation



MODEL	TB-220
Motor Speed (RPM)	0-35
Capacity (Cubic Feet)	3
Motor Power (HP)	2
Voltage	208/240/460
Weight (LBS)	1050
Dimensions (IN)	76 x 43 x 64

Compounds

Compounds are used in a variety of ways throughout the mass finishing process - to lubricate, clean, emulsify, suspend, cushion, brighten, and protect your parts and media.

At Royson, we know the perfect finish takes more than just the right machine and media. That's why we offer a wide range of tumbling, vibratory, liquid, and dry compounds.



PRODUCT

DESCRIPTION

ROYSON 53-NF

Liquid alkaline burnishing compound for non-ferrous metals. Formulated for removing soils and providing the lubrication necessary for burnishing. Compatible with all types of media.

ROYSON 53-F

Liquid alkaline cleaning compound for ferrous metals. Built in corrosion inhibitors to protect steel parts from rusting and aluminium parts from oxidizing. Compatible with all types of media. Good choice for part washers.

ROYSON 60

Liquid rust inhibitor compound which mixes readily with water. Used in vibratory finishers for in process rust protection. Can be used for dip rinsing parts when parts are removed from vibratory finisher.

ROYSON 55

Liquid brightening compound used in vibratory finishers. Mildly acidic compound is effective in brightening, polishing, and oxide and scale removal on non-ferrous parts

ROYSON 51

Powdered alkaline burnishing compound leaves part with a high gloss. Works well in a vibratory finisher with ceramic balls for polishing headers and exhaust pipes that have been ceramic coated.

ROYSON 79

Concentrated powder alkaline cleaning compound used for removing oily residue, grease and dirt on all metal parts. Can be used for cleaning and restoring tumbling media. Free rinsing in nature. Can be used on all metals.



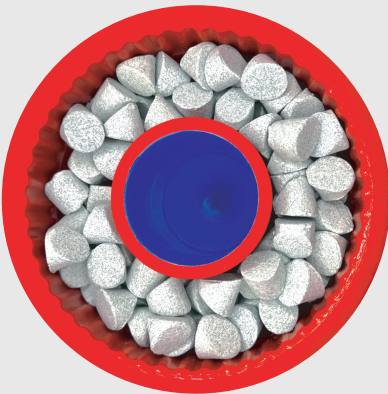
Ceramic Media

Royson’s premium **Ceramic Tumbling Media** includes tumbling stones, ceramic chips, deburring media, polishing balls and more. Not sure what media is right for yotur part and machine? Talk with our experts to get the type you need to finish strong. Small or large orders accepted. High density ceramic media available upon request.

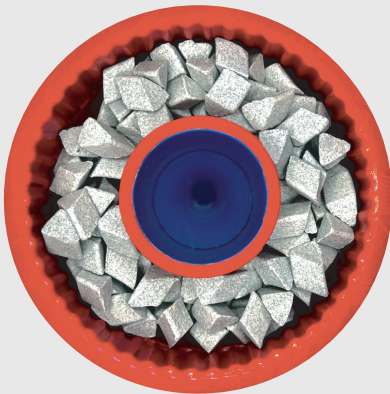
View our ceramic media shape, size, and formulation options below.



ANGLE CUT
CYLINDER

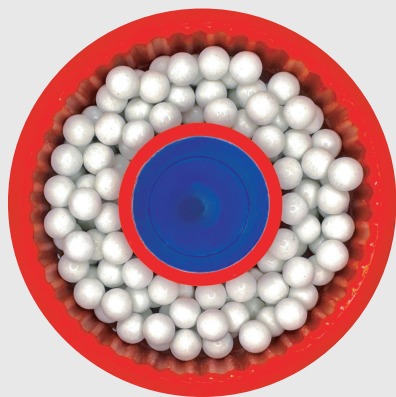


CYLINDRICAL
WEDGE



ANGLE CUT
TRIANGLE

PRODUCT	SIZES															
CYLINDRICAL WEDGE (CW)	3/8"		1/2"		5/8"		3/4"		1"		1-1/8"		1-1/2"		2"	
ANGLE CUT CYLINDER (ACC)	3/16 x 3/8		1/4 x 5/8		5/16 x 5/8		3/8 x 5/8		1/2 x 7/8		5/8 x 1-1/2		7/8 x 1 3/4		5/8 x 3/4	
ANGLE CUT TRIANGLE (ACT)	1/4 x 1/4	1/4 x 3/8	3/8 x 3/8	5/8 x 1/4	5/8 x 5/8	7/8 x 5/16	7/8 x 7/8	1-1/8 x 3/8	1-1/8 x 1-1/8	1-3/8 x 1/2	1-7/8 x 5/8	2 x 1		2 x 2		
SPHERE (Ball)	2mm		3mm		4mm		5mm		6mm		8mm		10mm		20mm	
ANGLE CUT TRI STAR (ACTS)	3/8 x 1/4		5/8 x 1/4		7/16 x 5/16		1-1/8 x 3/8		1-3/8 x 7/16		1-7/8 x 5/8					



SPHERE



ANGLE CUT TRI-STAR

PRODUCT	DESCRIPTION
ROYSON FC	Aggressive cutting tumbling media. Performs well on all metals. Quick burr removal of large burrs on ferrous and stainless steel. Fast cutting with a good wear rate. 90 Lbs per cubic foot.
ROYSON MC	Medium cutting tumbling media. Performs well on all metals. Good cutting action and a long wear life. Leaves part with clean matte finish. 90 lbs. per cubic feet.
ROYSON MFC	Good cutting action and long wear life, works well in a variety of deburring, deflashing, and radiusing applications. Can be used for burnishing parts. 90 lbs. per cubic foot.
ROYSON LC	Light cutting action and very long wear life. Removes sharp edges and corner points. Leaves part with a clean bright finish. Excellent of burnishing parts. 90 lbs per cubic foot.
ROYSON P	Non abrasive media with a porcelain body. Excellent for burnishing. Leaves part with a clen bright finish. For burnishing, polishing, eliminates sharp edges 90 lbs per cubic foot.
ROYSON LW	Light weight ceramic media used when the higher density of regular ceramic media will bend or warp a part. Good cutting action. Leaves part with a good finish. 65 lbs per cubic foot.
ROYSON SC	A silicon carbide based formulation containing no aluminium oxide. Good cutting action with a long life. Recommended for parts that can not have any aluminium oxide impregnation. 95 lbs per cubic foot. “
ROYSON HDP	A non abrasive, high density formulation used for burnishing and brightening parts. Very long lasting. Requires a break in period for best finishes. Used for microsurfacing. 120 lbs. per cubic foot.
ROYSON HDC	A high density formulation used for burr removal and improvement of surface finish. Good wear rate. Leaves the part with smooth bright surface. 130 lbs. per cubic foot.



Plastic Media

Plastic Media is supplied in two basic types: synthetic/urea, and polyester.

Both types are offered in several formulations that offer different cutting, polishing, pre-plate finishing and deburring characteristics. Different sizes and shapes available upon request.

View our plastic media shape, size, and formulation options below.



CONE



TETRAHEDRON



PYRAMID



WEDGE



TRI-STAR



CYLINDRICAL WEDGE

PRODUCT

SIZES

CONE

10mm Cone R07

20mm Cone R03

30mm Cone R03

40mm Cone R03

TETRAHEDRON

10mm TET R07

30mm TET R03

PYRAMID

(custom order)

WEDGE

(custom order)

TRI-STAR

(custom order)

CYLINDRICAL WEDGE

(custom order)

FORMULATION

DESCRIPTION

ROYSON R-06 POLYESTER

Excellent media for preplate finishing. Leaves a smooth clean finish. 65 lbs. per cubic foot.

ROYSON R-07 POLYESTER

General purpose media for deburring parts. 65 lbs per cubic foot.

ROYSON R-08 POLYESTER

Fast cutting media for deburring soft metal parts with larger burrs. 65 lbs per cubic foot.

ROYSON R-02 UREA

Excellent media for preplate finishing. Leaves a smooth clean finish. 65 lbs per cubic foot.

ROYSON R-03 UREA

General purpose media for deburring parts. 65 lbs. per cubic foot.

ROYSON R-04 UREA

Fast cutting media for deburring soft metal parts with larger burrs. 65 lbs. peer cubic foot.

Royson Engineering: Custom Solutions

Need to upgrade machinery, or create a new automated finishing system from scratch?

Royson Mass Finishing Systems are tailor-made to your production setup and processes. Multiple machines, different mass finishing processes, sophisticated electrical controls, and strict adherence to customer system and part requirements are all achieved by our dedicated team of engineers.

3D Printing

Looking for special fixtures to secure your parts or machines? Our team will design and create any small parts to enhance your finishing process, efficiency and quality.

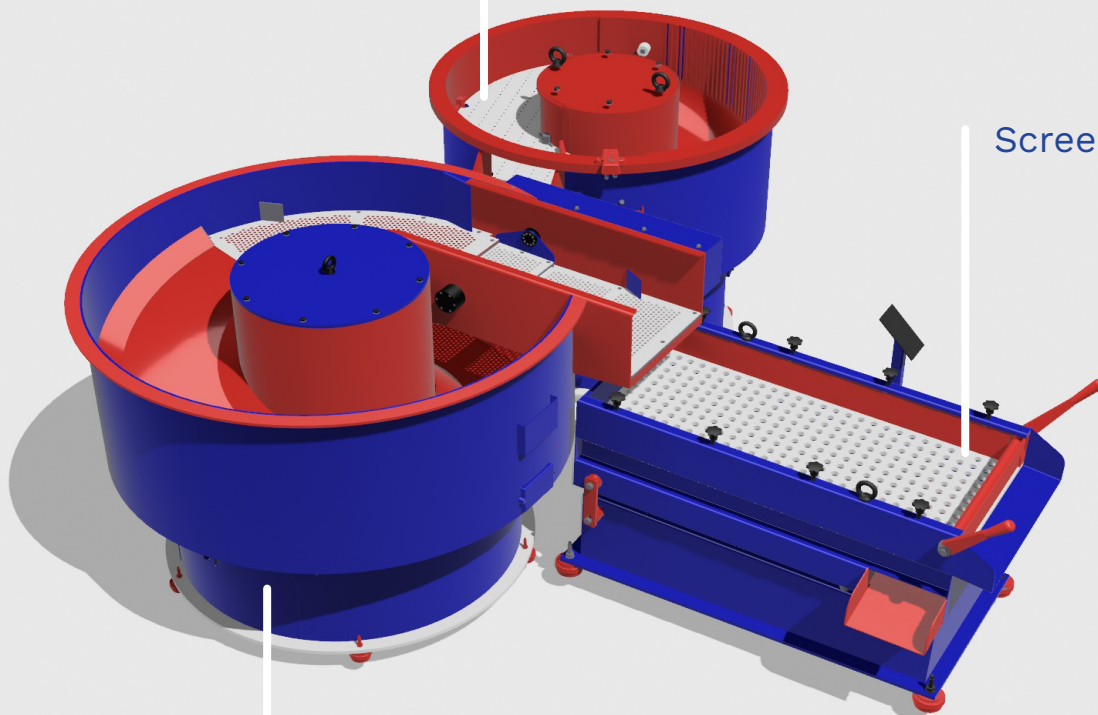
PLC Upgrades

Need a fully automated solution that's easy to program and operate? Upgrade your system's control panels to a PLC touchscreen panel, harnessing i/o logic to control machine functions automatically.

Vibratory Bowl Finisher

Screen Separator

Heated Cob Dryer





ROYSON

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