

UNITED

SURFACE SOLUTIONS

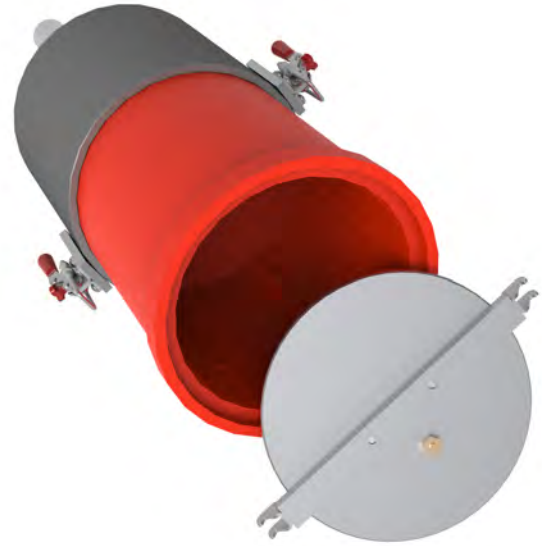
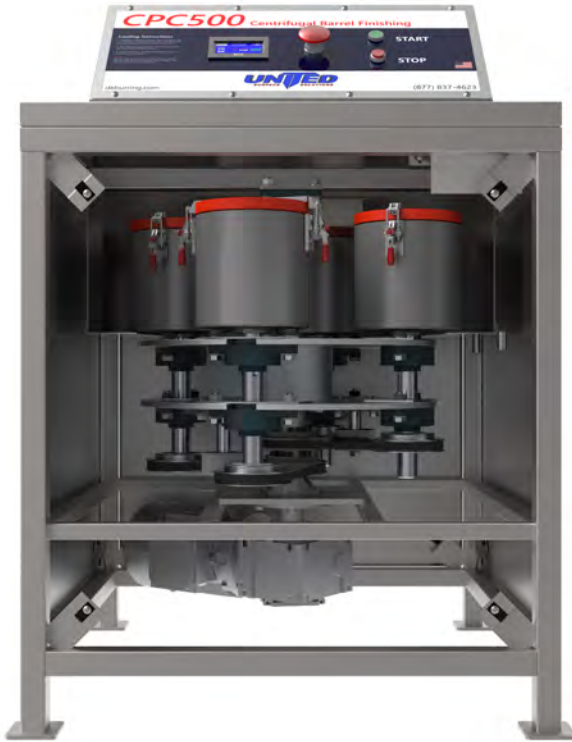
CENTRIFUGAL BARREL FINISHING



Centrifugal Barrel Finishing



The CPC250 & CPC500 are United's smallest deburring systems. They are upright centrifugal barrel deburring machines that spin along a vertical axis and each contain four barrels. They are faster, more powerful, and more consistent than vibratory machines and tumblers, while having a smaller footprint. Equipped with United's touchscreen controls, the CPC250 & CPC500 can be programmed quickly and easily. These units are perfect for small parts that require quick processes without sacrificing power. With up to 30Gs of force, these machines can handle all of your deburring and polishing needs.



The CPC250 & CPC500 are equipped with removable urethane barrels, making loading and unloading quick & easy.

Specifications

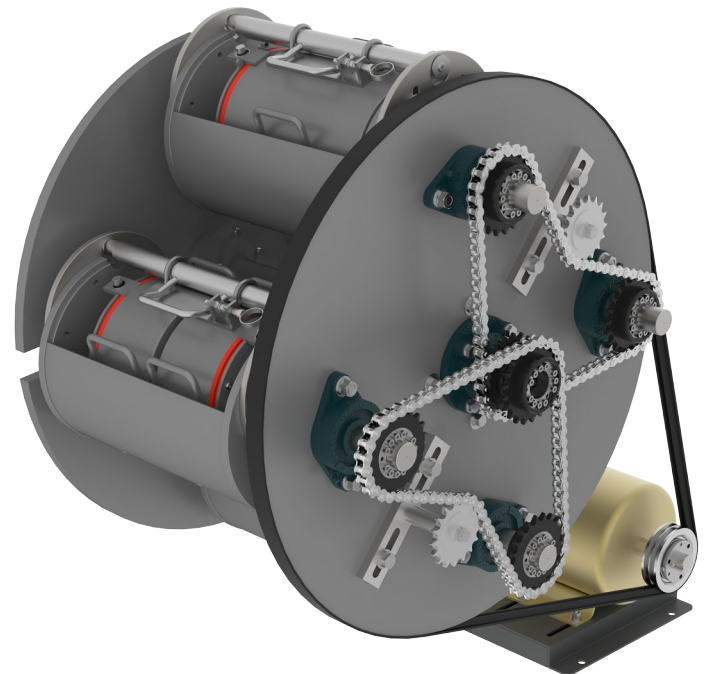
	CPC250 System	CPC500 System
Max Capacity	0.25 Cubic Feet (7.07 Liters)	0.5 Cubic Feet (14.16 Liters)
Barrel Capacity	0.0625 Cubic Feet (1.77 Liters)	0.125 Cubic Feet (3.54 Liters)
Barrel Dimensions	W 4.5" (11.4cm) x H 6" (15.2cm)	W 6" (15.25cm) x H 6.75" (17.15cm)
Machine Dimensions	27in D x 27in W x 57.5in H	32in D x 32in W x 55in H
User Interface	Touchscreen with Process Storage	Touchscreen with Process Storage
Main Drive/Motor	1HP, inverter controlled, single-phase	2HP, inverter controlled, single-phase
Turret Speed	0 - 300 RPM, fully adjustable	0 - 250 RPM, fully adjustable
Operating Volume	Under 70 decibels	Under 70 decibels
Construction	Machine: 304 Stainless Steel Barrels: Coated steel with urethane liner	Machine: 304 Stainless Steel Barrels: Coated steel with urethane liner
Power Requirements	208/230 (± 10%) VAC, 50/60Hz, 1Ø, 25A UL certified	208/230 (± 10%) VAC, 50/60Hz, 1Ø, 30A UL certified
Compressed Air	Not required.	Not required.
Dry Floor Compatible	Yes	Yes
Warranty	Up to 3 yrs, determined by component.	Up to 3 yrs, determined by component.
Options	Extra Barrel Liners	Extra Barrel Liners

Centrifugal Barrel Finishing



The CPC1000 is United's most economical deburring system available. Gone are the long process times of tumblers and vibratory finishers. The CPC1000 can reach speeds in excess of 250 RPM and can generate forces exceeding 30Gs, processing parts quickly and consistently. The system can deburr and finish parts up to 7" x 9.5". Equipped with United's exclusive PLC and touchscreen controls, precision finishes are at your fingertips. Processes can be stored and recalled for consistent results every time.

Although simpler than other machines, the CPC1000's turret design still features United's butterfly chain design and makes no sacrifices. The CPC1000 is powerful and modular. Because barrels are separate from the turret's cradles, various types of parts can be processed during the same run. Barrels are secured using United's cam system, but can be easily removed and taken to a workstation such as United's TC250 to complete processing.



Centrifugal Barrel Finishing

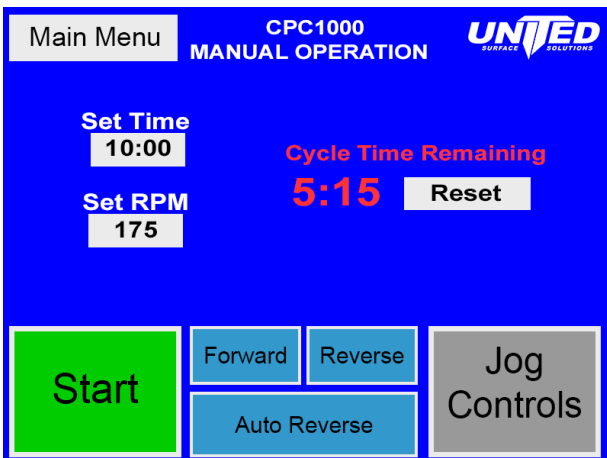


Barrels are locked with a simple lid and cam system, ensuring parts are secure. United's secure locking cam system doesn't require tools and is easy to use.

Barrels are available in 2 sizes, 1/4 cubic foot volume and 1/8 cubic foot volume.



The CPC1000 can process a wide variety of parts with high precision. Its modular barrel design allows for different parts to be processed at the same time, offering versatility and efficiency.



United's simple touchscreen controls give operators complete control over each process. Settings can be stored so processes can be started quickly and easily.

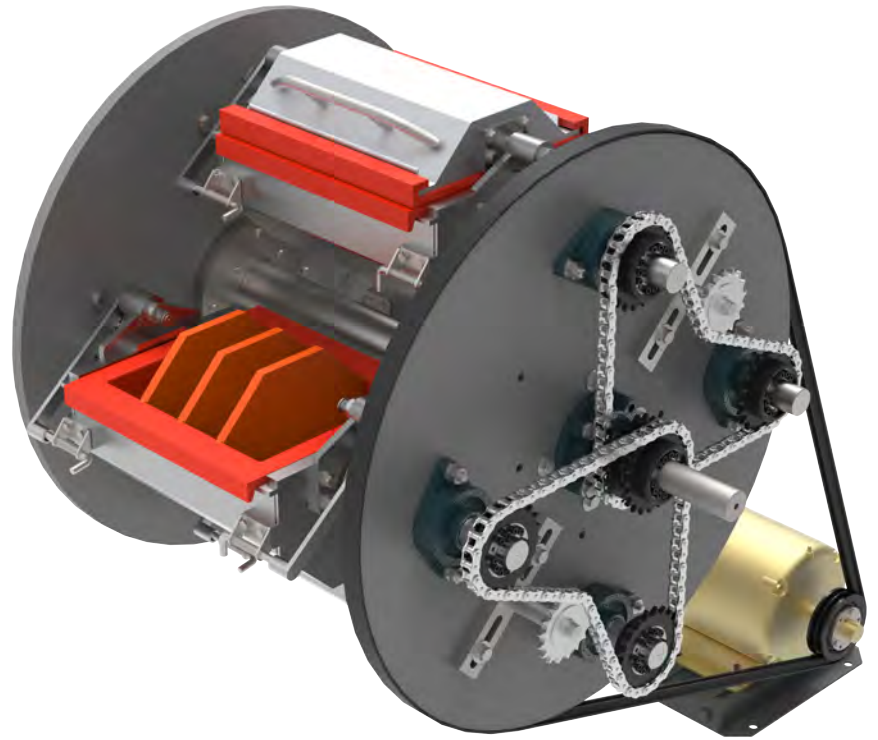
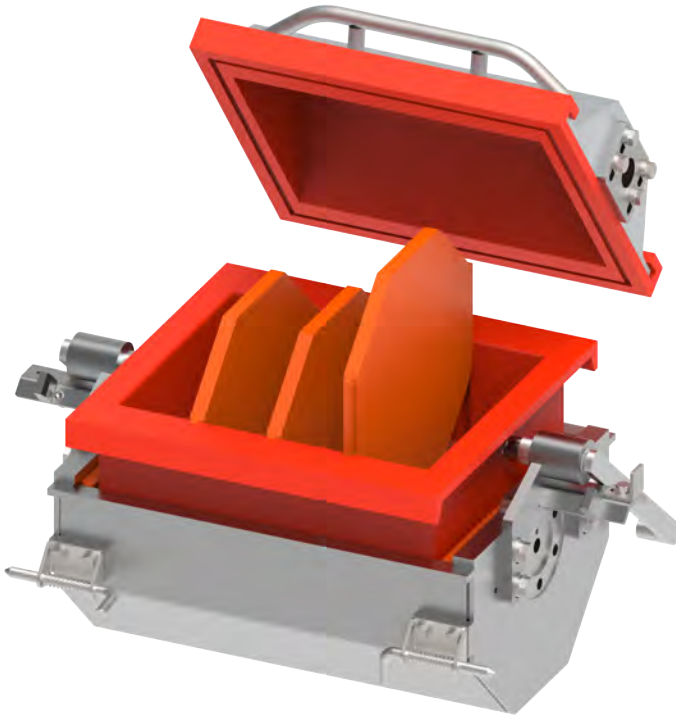
Specifications	
Max Capacity	1 Cubic Foot (28.3 Liters)
Barrel Capacity	0.25 Cubic Feet (7.07 Liters) up to 4 0.125 Cubic Feet (3.54 Liters) up to 8
Barrel Dimensions	0.25 Cu.Ft. 10" x 6.5" 0.125 Cu.Ft. 4" x 6.5"
Machine Dimensions	W 35.5" x H 46.25" x D 46"
User Interface	Touchscreen with Process Storage
Main Drive/Motor	3HP, inverter controlled, three-phase
Turret Speed	0 - 250* RPM, fully adjustable
Rotation Ratio	1:1 - Turret : Barrel
Construction	Machine: 304 Stainless Steel Barrels: Painted Steel
Power Requirements	208/230 VAC
Compressed Air	Not required.
Dry Floor Compatible	Yes
Warranty	Up to 3 yrs, determined by component.
Options	Extra Barrel Liners Stainless Steel Barrels Allen-Bradley Controls

* Max RPM dependent on process



The CPC1500 is United's newest deburring machine. It combines the power and compactness of the CPC1000 with the CPC250's ease of use. Its 1.5 cubic foot capacity combined with its removable urethane barrels allows quick and easy processing. This new barrel design enables faster loading and unloading, as well as preparing the next batch as the machine runs. Equipped with United's exclusive PLC and touchscreen control, precision finishes are at your fingertips. Processes can be stored and recalled for consistent results every time.

Centrifugal Barrel Finishing



The CPC1500HD is equipped with 4 removable urethane barrels and dividers for quick & easy loading and unloading.



The CPC1500HD's standard options include a touchscreen with process storage and automation features

Specifications

Max Capacity	1.5 Cubic Feet (42 Liters)
Barrel Capacity	0.375 Cubic Feet x 4 Barrels
Barrel Dimensions	D 8.75in x W 11in (internal)
Machine Dimensions	D 51.5in x W 43.5in x H 31.5in
Max Compartments	4 x 2 ³ / ₈ " Compartments per Barrel, 16 Total
User Interface	Touchscreen with Process Storage
Main Drive/Motor	5HP, inverter controlled, three-phase
Turret Speed	0 - 225 RPM, fully adjustable
Operating Volume	~80 decibels
Construction	304 Stainless Steel
Power Requirements	200VAC - 240VAC, 50/60Hz, 3Ø, 30A UL certified
Water	Required for fill hose.
Compressed Air	Not required.
Dry Floor Compatible	Yes
Warranty	Up to 3 yrs, determined by component.
Options	Extra Barrel Liners

Centrifugal Barrel Finishing



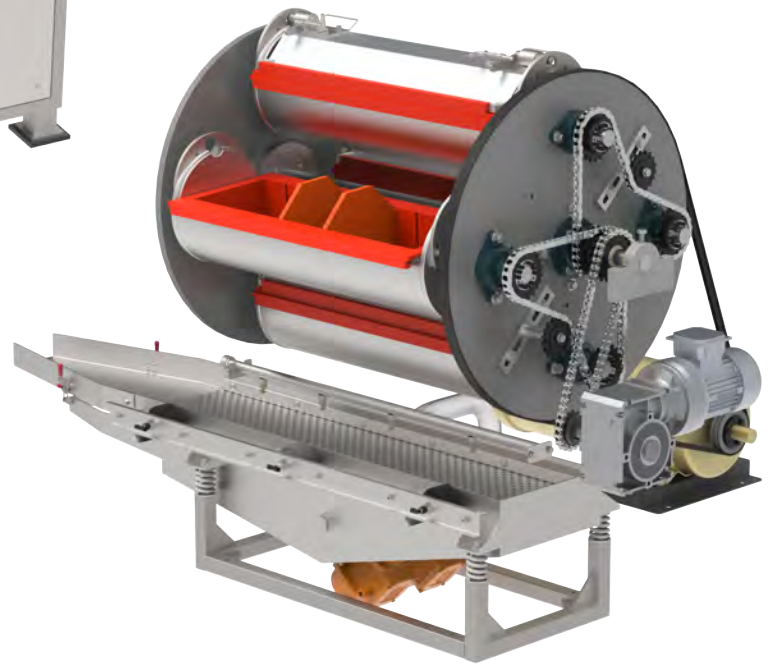
The CPC4000 Mass Finishing System is United's most versatile machine, available in semi-automated (CPC400HD) and fully-automated (CPC4000FA) configurations. The CPC4000 comes standard with a PLC, touchscreen controls, and an internal separation & rinse system. It can process parts up to 27.5" long and its urethane barrels can each be divided up into 10 separate compartments and can be adjusted to meet a myriad of deburring or mass finishing needs. The CPC4000HD and CPC4000FA offer the perfect balance between capacity and compactness.

Centrifugal Barrel Finishing

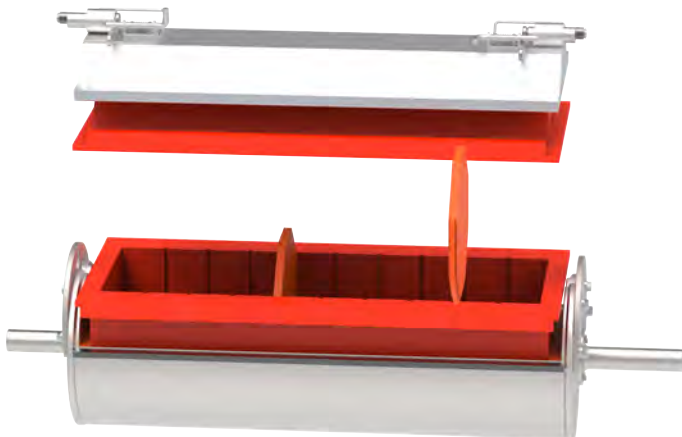


The CPC4000HD is the semi-automated variant of the CPC4000FA. It features an automatically opening and closing door, a lid assist system that improves ergonomics for operators, as well as a parts rinsing and separating system. If the need for more automation arises, the CPC4000HD can be upgraded to a CPC4000FA with the elevator and hopper add-on. The FA option can be added at any time.

As with all of United's machines, the CPC4000's drive system is powerful and capable. It provides a range of process types from heavy material removal to precise, delicate finishing.



Barrels are lined with removable high temperature urethane that can be divided into up to 10, 2 $\frac{1}{2}$ " wide compartments, offering the versatility to process parts both large and small. The urethane dividers can be moved with ease.



Centrifugal Barrel Finishing



The CPC4000FA is the fully automated variant of the CPC4000HD. Its media elevator and hopper system automates loading for the operator. The media, water, and compound metering systems make filling barrels easy and consistent. These systems reduce loading and unloading times, making room to run more processes throughout each shift.

The FA attachment is designed to be added at any time. All the connections, including water and electrical, come with quick connects for seamless and effortless connection by the customer.

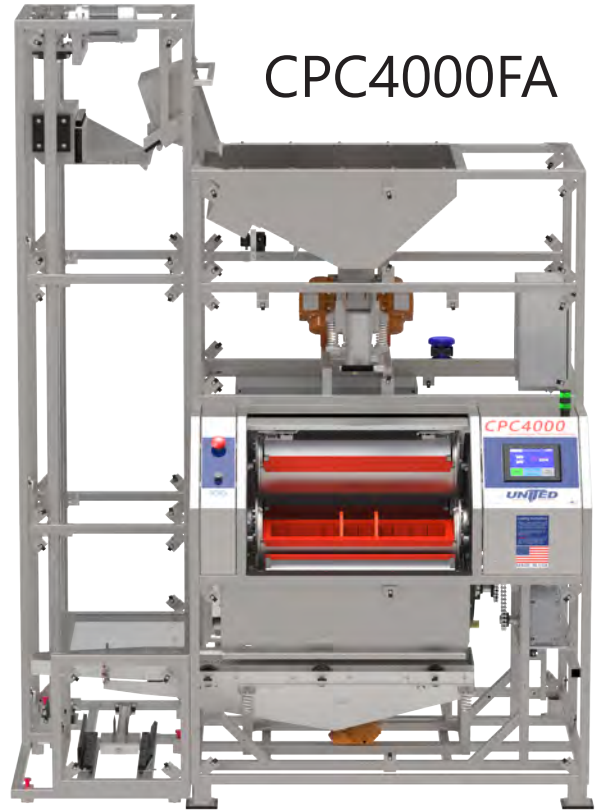


Centrifugal Barrel Finishing

CPC4000HD



CPC4000FA



Specifications

Max Capacity	4 Cubic Feet (112 Liters)
Barrel Capacity	1 Cubic Foot x 4 Barrels
Barrel Dimensions	D 8.5in x W 27.5in (internal)
Max Compartments	10 x 2 1/2" Compartments per Barrel, 40 Total
User Interface	Touchscreen with Process Storage
Main Drive/Motor	10HP, inverter controlled, three-phase
Turret Speed	0 - 200 RPM, fully adjustable
Operating Volume	~80 decibels
Construction	304 Stainless Steel
Power Requirements	380VAC - 480VAC, 50/60Hz, 3Ø, 30A UL certified
Water	Required for fill hose.
Compressed Air	80-100psi
Dry Floor Compatible	Yes
Warranty	Up to 3 yrs, determined by component.
Options	Extra Barrel Liners Separating Barrel Lid

Dimensions

	CPC4000HD	CPC4000FA
Depth	65 in.	65 in.
Width	88 in.	91 in.
Height	64 in.	122 in.
Weight	2200 lbs.	3600 lbs.



The CPC4000's standard options include touch screen controls with process storage and automation features.

Centrifugal Barrel Finishing



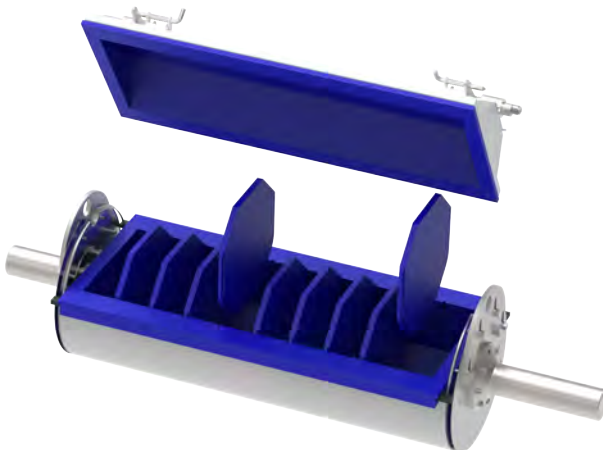
The CPC6000 Mass Finishing System is the larger counterpart of the CPC4000. With 50% more capacity and the ability to process parts as large as 10" x 30", this powerful machine can handle heavy parts. It is available in semi-automated (CPC6000) and fully-automated (CPC6000FA) configurations. The CPC6000 comes standard with a PLC, touchscreen controls, and an internal rinse & separation system. Each urethane barrel can be divided into up to 10 compartments and can be adjusted to meet a myriad of deburring and mass finishing needs. The CPC6000 & CPC6000FA are ideal for high volume and heavy duty processes.

Centrifugal Barrel Finishing



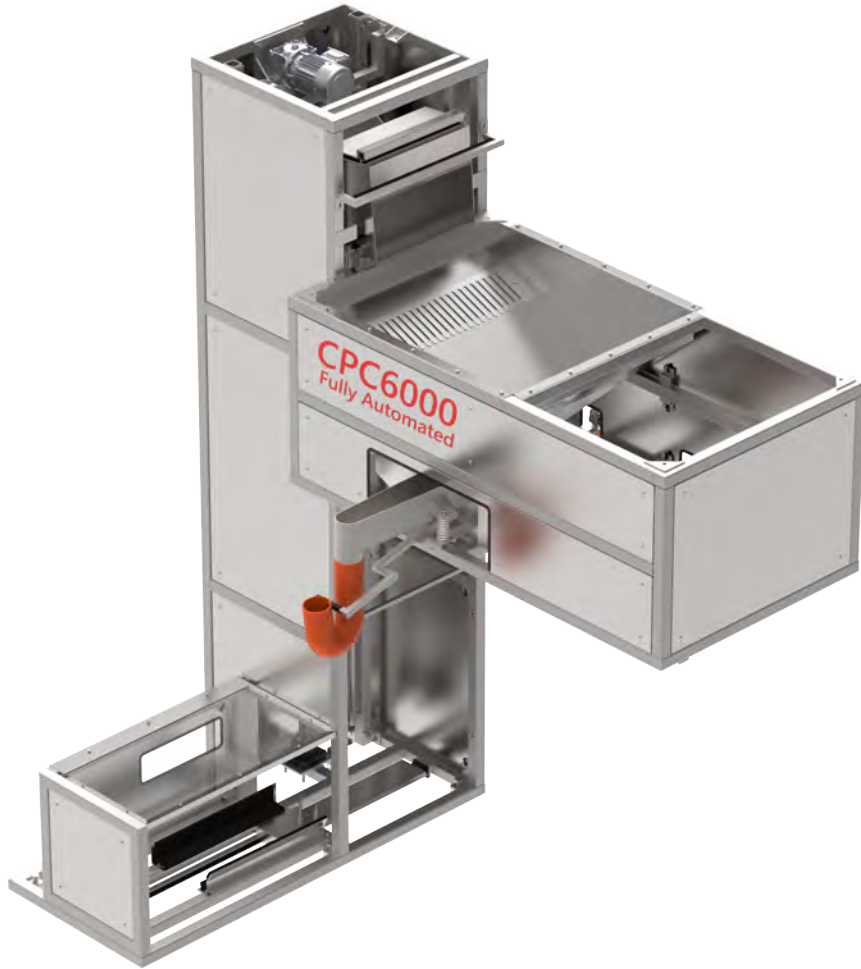
The CPC6000HD is the semi-automated variant of the CPC6000FA. It features an automatically opening and closing door, a lid assist system that improves ergonomics for operators, as well as a parts rinsing and separating system. If the need for more automation arises, the CPC6000 can be upgraded to a CPC6000FA with the elevator and hopper add-on. The FA option can be added at any time.

As with all of United's machines, the CPC6000's drive system is powerful and capable. It provides a range of process types from heavy material removal to precise, delicate finishing.



Barrels are lined with removable high temperature urethane that can be divided into up to 10, 10" x 2 $\frac{1}{2}$ " compartments, offering the versatility to process parts both large and small. The urethane dividers can be moved with ease.

Centrifugal Barrel Finishing



The FA attachment is designed to be added at any time. All the connections, including water and electrical, come with quick connects for seamless and effortless connection by the customer.

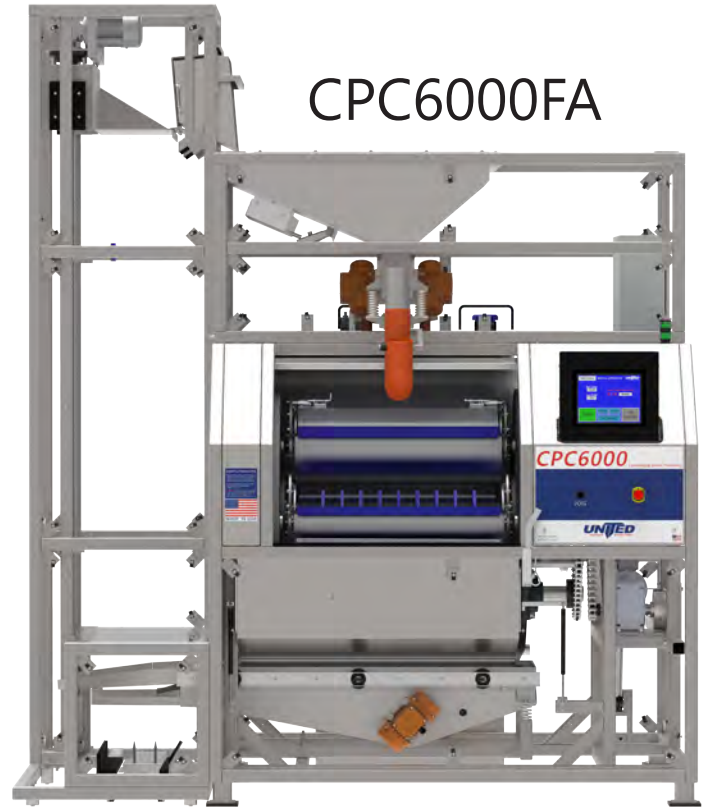
The CPC6000FA is the fully automated variant of the CPC6000. Its media elevator and hopper system automates loading for operators. The media, water, and compound metering systems make filling barrels easy and consistent. Together, these systems reduce loading and unloading times, making room to run more processes throughout each shift.



CPC6000



CPC6000FA

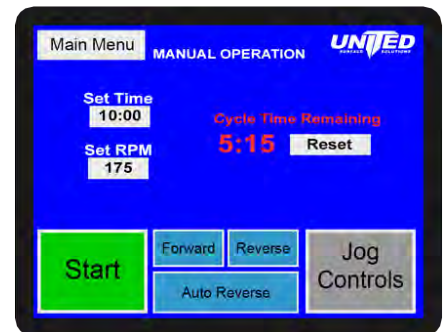


Specifications

Max Capacity	6 Cubic Feet (168 Liters)
Barrel Capacity	1.5 Cubic Feet x 4 Barrels
Barrel Dimensions	D 10in. x W 30in. (internal)
Max Compartments	10, 10" x 2 1/2" Compartments per Barrel, 40 Total
User Interface	Touchscreen with Process Storage
Main Drive/Motor	25HP, inverter controlled, three-phase
Turret Speed	0 - 175 RPM, fully adjustable
Operating Volume	~84 decibels
Construction	304 Stainless Steel
Power Requirements	380VAC - 480VAC, 50/60Hz, 3Ø, 60A UL certified
Water	Required for fill hose.
Compressed Air	80-100psi
Dry Floor Compatible	Yes
Warranty	Up to 3 yrs, determined by component.
Options	Extra Barrel Liners Separating Barrel Lid

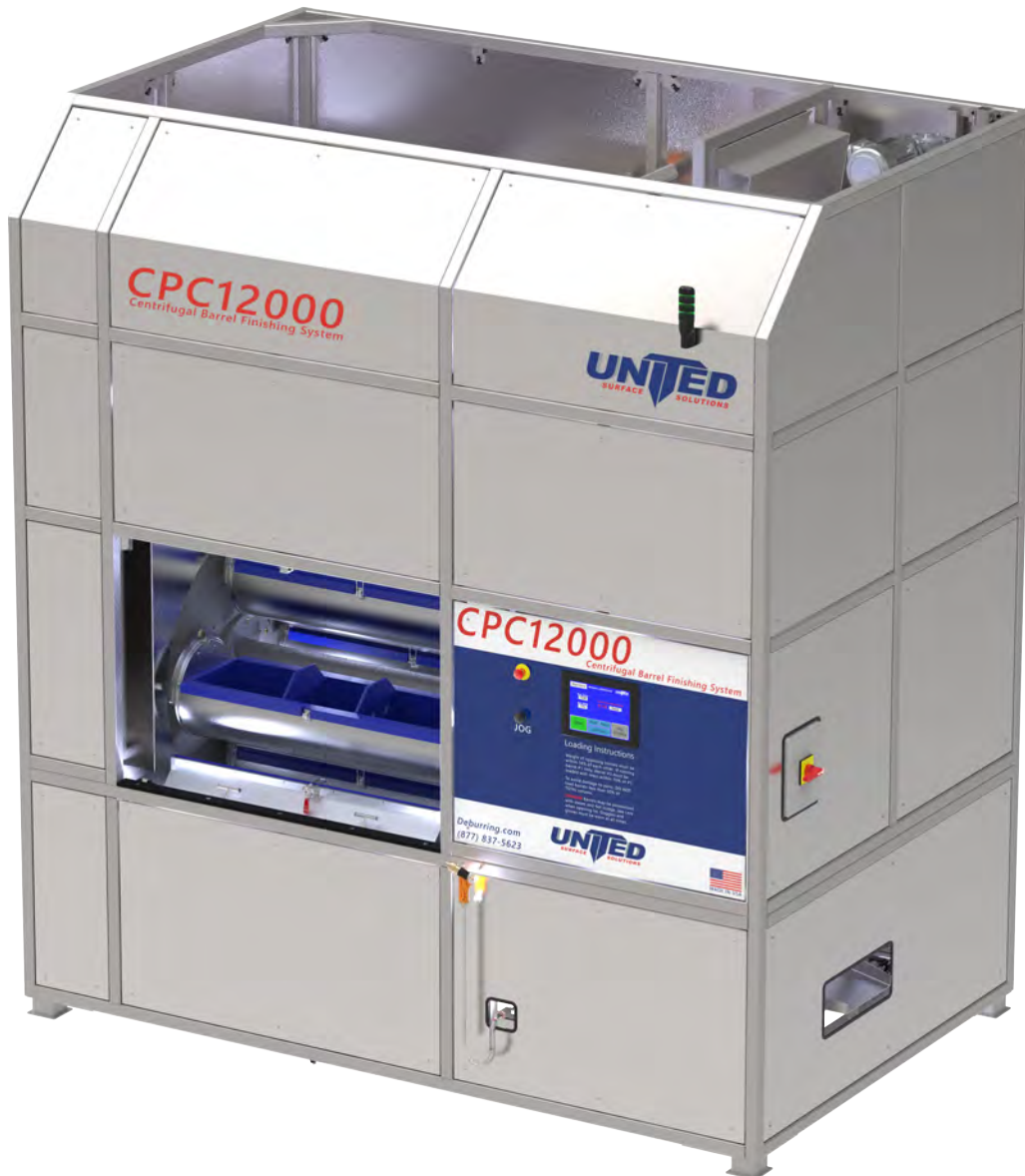
Dimensions

	CPC6000	CPC6000FA
Depth	75 in.	80 in.
Width	102 in.	108 in.
Height	76 in.	128 in.
Weight	4400 lbs.	6000 lbs.



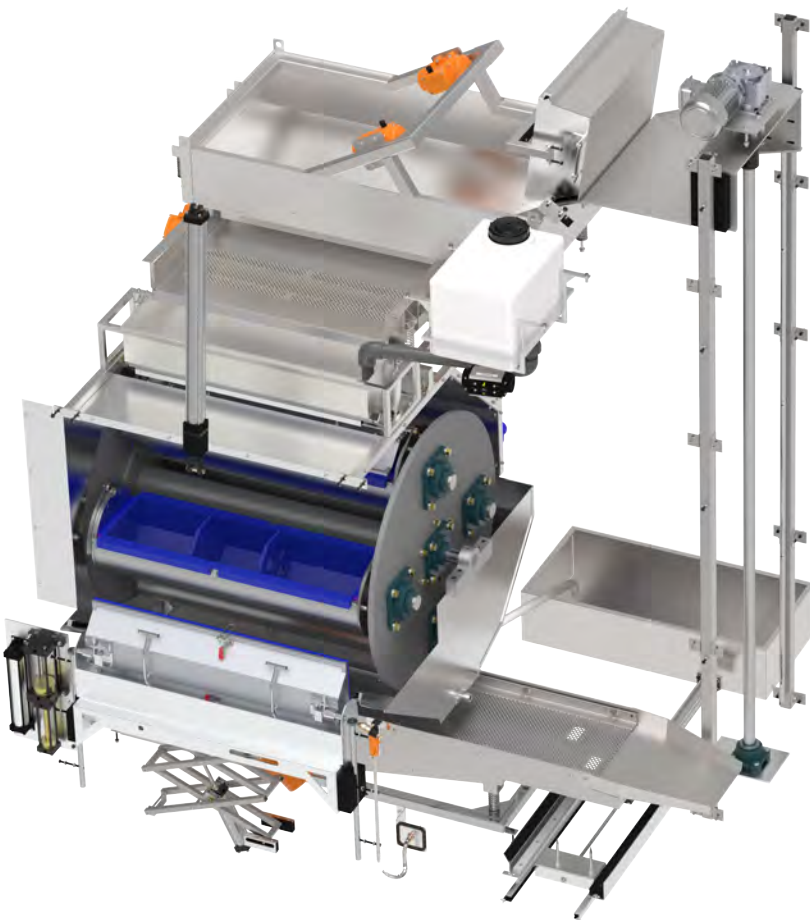
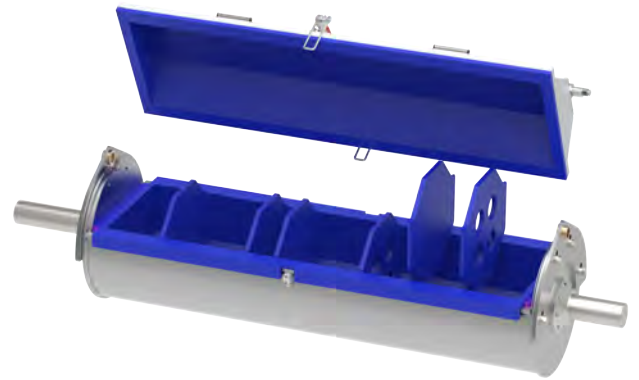
The CPC6000's standard options include touch screen controls with process storage and automation features.

Centrifugal Barrel Finishing



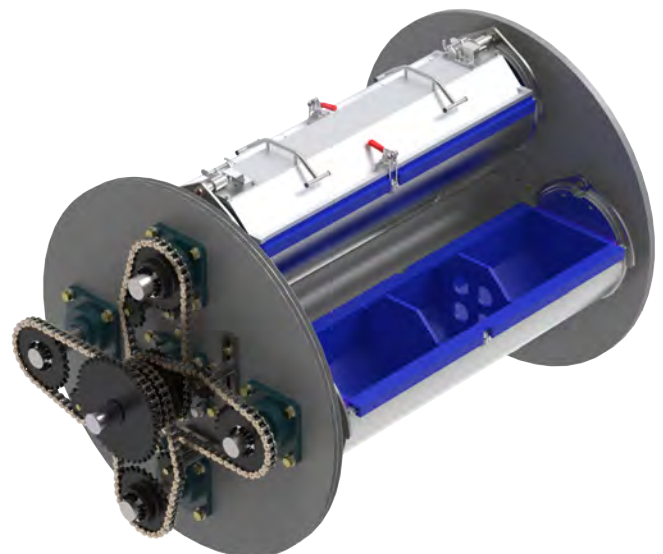
United's CPC12000 is the largest and the most automated centrifugal barrel system available on the market. With a volume of 12 cubic feet, it can process the most parts with the shortest process cycles. The CPC12000 is the pinnacle of precision automated deburring systems. Barrel positioning & filling, lid lifting, parts separation, and parts cleaning are all automated and controlled through the touchscreen. The CPC12000 is designed to process larger parts, up to 44½"W x 12½"D, or many smaller parts in the shortest and most cost effective method amongst all other deburring and mass finishing systems. Barrels can be separated into up to 24 compartments each to process individual parts without the possibility of part-on-part contact. The CPC12000 Automated Deburring System can be customized to meet every need.

Large barrels with dimensions of 44½" x 12½" can be divided into up to 24 compartments with easy to move dividers.



The automated media elevator system handles media from start to finish. After each process, it picks up used media from the separation system, lifts it up to the hopper, and unloads it, all without operator intervention.

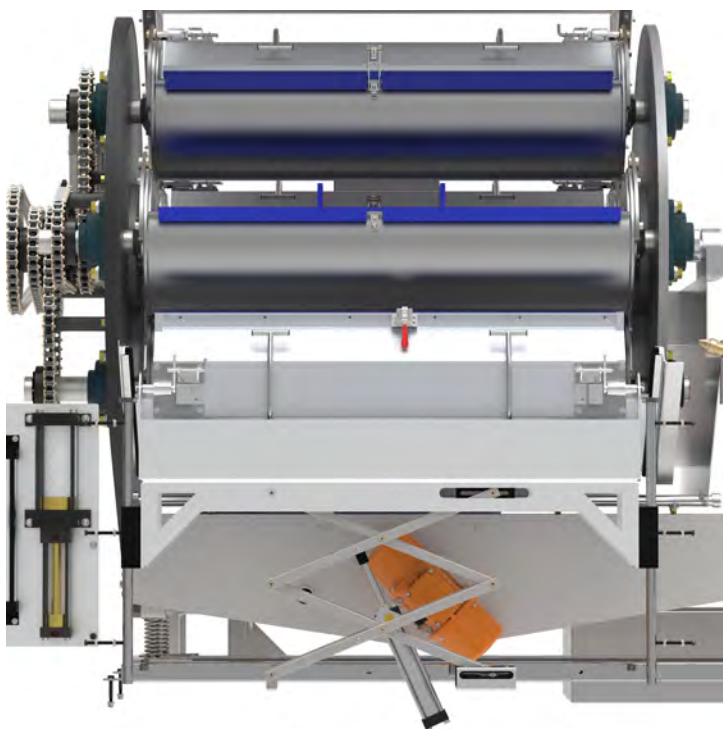
The CPC12000's heavy duty drive system is made with massive bearings, chains, and shafts. Its design makes it easy to handle large and heavy loads.



CPC12000

Centrifugal Barrel Finishing

After media is lifted and loaded into the hopper, it can be used to fill barrels for the next process. The hopper and fill system pre-ports the media in preparation for loading. Just before media is automatically loaded into a barrel, the correct amount of water and compound begins filling the barrel. This automated synchronized system ensures every process yields the same precise results.

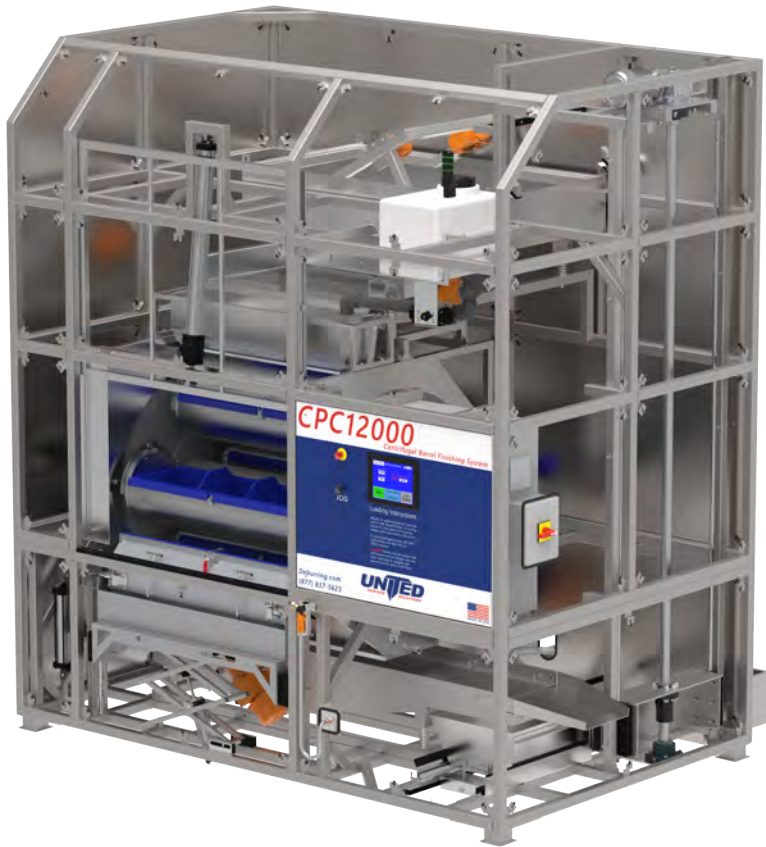


The CPC12000's automated lid assist system moves and stows the barrel lid out of the operators way as parts are loaded and unloaded.

The automated parts & media rinse and separation system neatly moves finished parts out of the machine and reusable media straight to the elevator system.

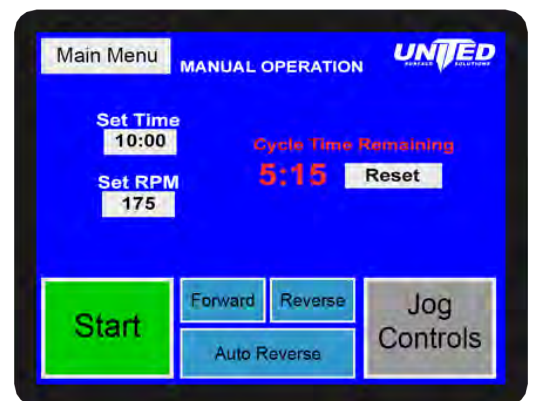


Centrifugal Barrel Finishing



Specifications

Max Capacity	12 Cubic Feet (338 Liters)
Barrel Capacity	3 Cubic Feet x 4 Barrels
Barrel Dimensions	D 12.5in x W 44.5in (internal)
Max Compartments	24 Compartments per Barrel, 96 Total
Machine Dimensions	D 81in. x W 124in. x H 138in.
Machine Weight	9000 lbs.
User Interface	Touchscreen with Process Storage
Main Drive/Motor	30HP, inverter controlled, three-phase
Turret Speed	0 - 175 RPM, fully adjustable
Construction	304 Stainless Steel
Power Requirements	440VAC - 480VAC, 50/60Hz, 3Ø, 60A UL certified
Water	Required
Compressed Air	100psi
Dry Floor Compatible	Yes
Warranty	Up to 3 yrs, determined by component.



The CPC12000's standard options include touchscreen controls with process storage and automation features.

Workstation & Water Recycling System

The Least Expensive
Water Recycling Solution



Removes 99.9% of suspended and dissolved solids from wastewater, returning it to its clear natural state.



The TC250 is United's exclusive automated recycling system. Its closed-loop system allows for efficient and clean water recycling. The automated recycling system can process 55 gallon batches multiple times per day. Through United's automated controls, wastewater batches can be processed and recycled in under 30 minutes with minimal operator involvement. The TC250 can also be configured without a sink/workstation. With the TC250, no special connections are required. It is a self-contained, closed-loop system. When the recycling process is complete, the clean water can be reused or dumped into the drain. No special permits are required in nearly all municipalities.

Workstation & Water Recycling System

The TC250 is constructed with stainless steel and features a large work station for quick parts washing and easy loading & unloading of barrels. It is fitted with a commercial grade faucet, measuring cups, and optional media & parts separators.



The TC250 comes with multiple pumps and an Ultraviolet unit to purify the water. All the pumps, mixers, and the automated compound feeder are all controlled with the internal automated PLC system.

Specifications

Max Capacity	55 Gallons (208 Liters)
Process Capacity	55 Gallons (208 Liters)
Machine Dimensions	D 45.5in x W 58.5in x H 85in
Controls	Buttons with Automatic Process Programming
Average Process Time	20-30 minutes
System Configuration	Closed-Loop
Sewer Connection	Not Required
Machine Construction	304 Stainless Steel
Power Requirements	230VAC - 240VAC, 50/60Hz, 1Ø, 20A UL certified
Compressed Air	80-100 psi
Water	Required for refill.
Warranty	Up to 3 yrs, determined by component.
Options	Extra Sludge Tray Media & Parts Separators