

SHOT BLASTING INNOVATIONS

INNOVATION • SERVICE • COMMITMENT • TECHNOLOGY • QUALITY • FOCUS • SOLUTIONS • SAFETY • TEAMWORK

CAPABILITIES

BLAST CLEANING TECHNOLOGIES

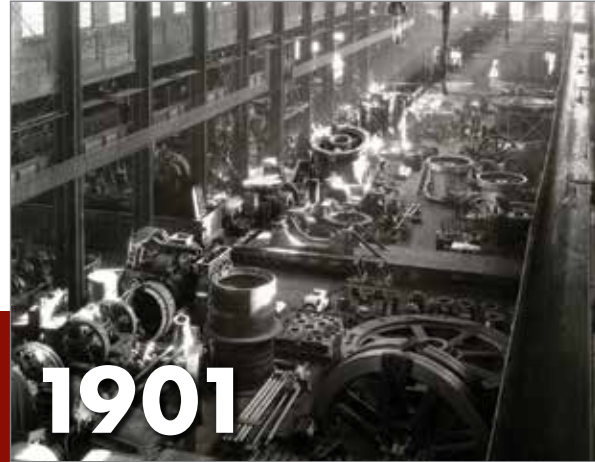
A SOLID FOUNDATION



Proudly made
in the USA.

1901

Allis-Chalmers Main Erection Shop
producing Rock crushers and turbines

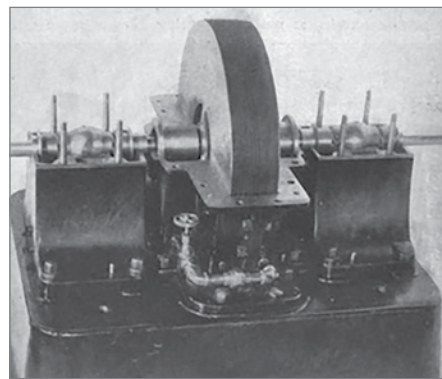


1901



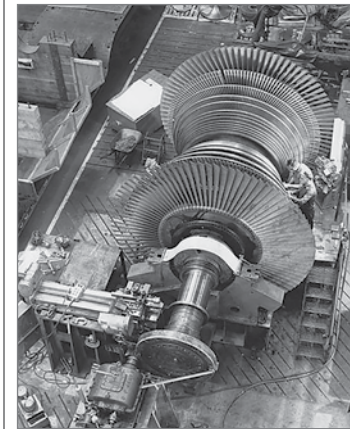
1922

Nikola Tesla is
perfecting his bladeless
turbine design



1923

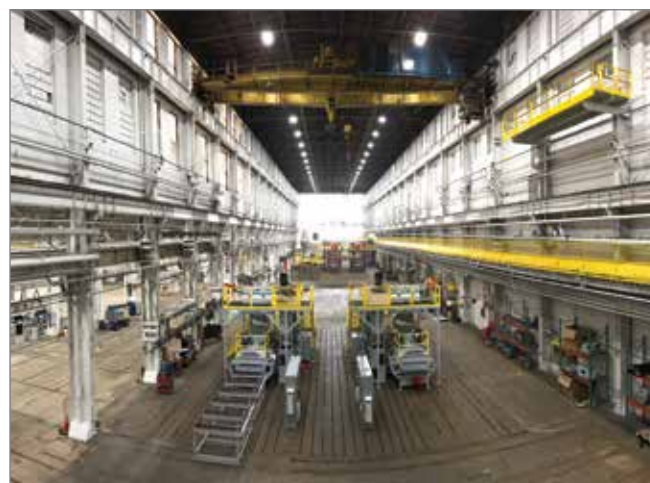
70,000 HP Turbine for
Niagara Falls were built
in this plant



Allis-Chalmers was a U.S. manufacturer of machinery for various industries. Its business lines included agricultural equipment, construction equipment, power generation and power transmission equipment, and machinery for use in industrial settings such as factories, flour mills, sawmills, textile mills, steel mills, refineries, mines, and ore mills. The first Allis-Chalmers Company was formed in 1901 as an amalgamation of the Edward P. Allis Company (steam engines and mill equipment), Fraser & Chalmers (mining and ore milling equipment), the Gates Iron Works (rock and cement milling equipment), and the industrial business line of the Dickson Manufacturing Company (engines and compressors). It was reorganized in 1912 as the Allis-Chalmers Manufacturing Company. During the next 70 years its industrial machinery filled countless mills, mines, and factories around the world, and its brand gained fame among consumers mostly from its farm equipment business's orange tractors and silver combine harvesters.

2018

BCT relocates to historic Allis Chalmers building and expands engineering and manufacturing capabilities to meet customer demands



Assembly

With multiple cranes and capacities up to 150 tons and over 50' of hook clearance there is no blast too big to build in our plant. It's all part of our investment and commitment to support our customers.

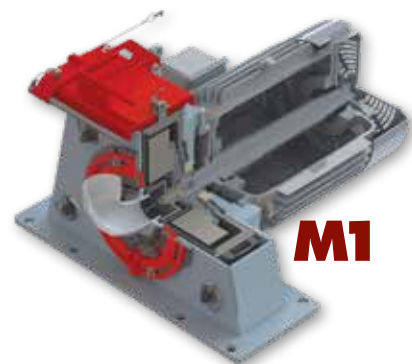


Manufacturing

Modern state-of-the-art equipment provides **BCT** with another edge of any competitor. We design it, we cut it, we bend and assemble it – and we do it all in house in the USA.



THE CLEAR LEADER IN SHOT BLAST INNOVATION



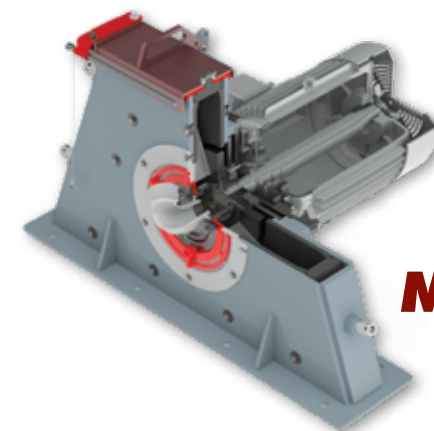
M1



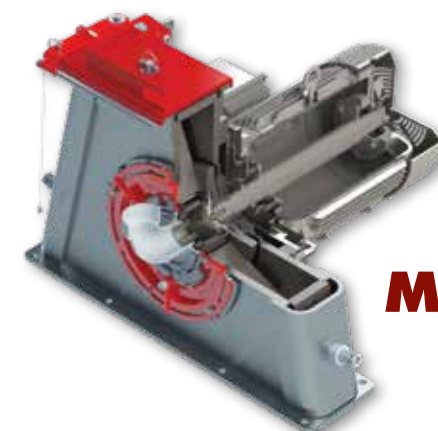
M2



M3



M4



M5



**Rail Car
Lance
Blast
Wheel**

The Next Evolution

The patented **e-Wheel™** is the next evolution in extreme duty blast wheel technology from BCT. Providing improved performance, lower maintenance costs, improved motor life and a few patented tools that simply make the e-wheel, the easiest wheel to maintain in the industry.

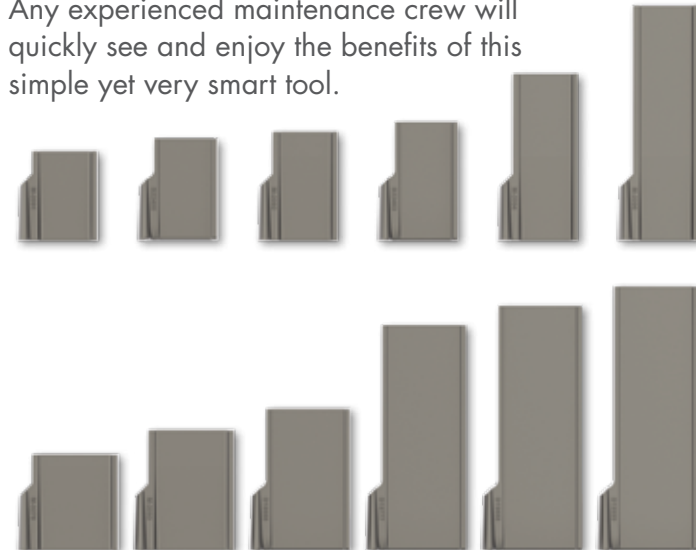
The e-Wheel is **robust**, designed for the absolute toughest applications, with **smart** design improvements that you can relate to. We offer a full range of wheel diameters, ranging from 13.5" to 26", with varying speeds and configurations.

e-Wheel™

The e-Wheel is cast from a high alloy case hardened steel for long life, even in the most difficult applications. Precision balancing and tapered elliptical slot provide for the smoothest running wheel available today.



The patented **NuckleSaver™** blade installation tool is designed to provide a quick and safe method of installing the blades without "breaking your knuckles". Any experienced maintenance crew will quickly see and enjoy the benefits of this simple yet very smart tool.



Tapered Ellipse Blade

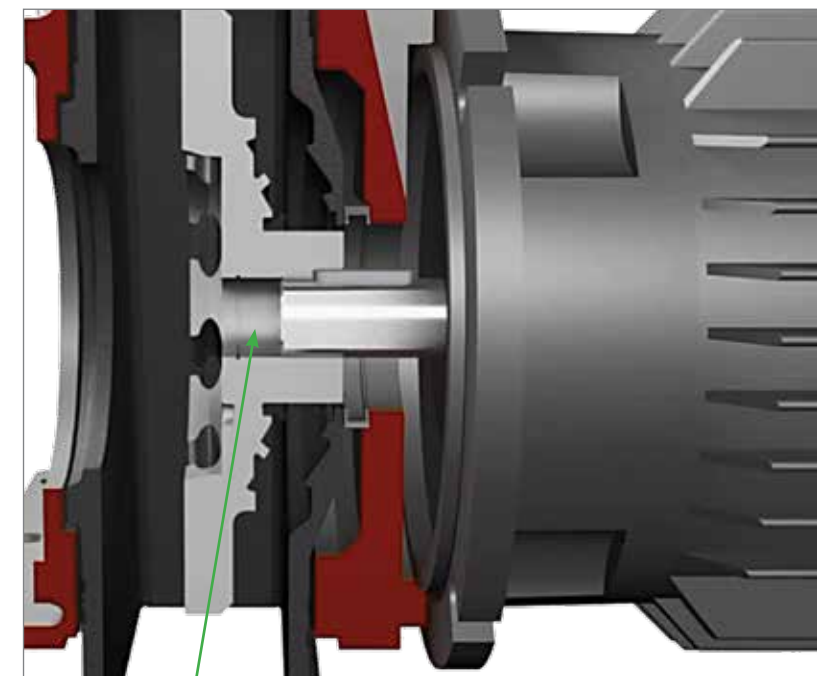
The patented e-blade is designed with a continually tapered ellipse blade lock requiring no mechanical means to hold the blade in position. The continual taper provides for easy installation and even more importantly, easy removal of each blade.



All e-Wheels include:

- Fully machined vented motor mounting adapter
- Premium cast chrome lining
- No taperlock design
- Machined heavy-duty impeller
- D-Flanged M-Series heavy-duty motors
- Wheel housings fabricated from abrasive resistant (AR) and manganese steel with machined tolerances
- AR flanges on wheel housing
- Pivoting lid locking without threads and lockout capability for added safety
- T-Nut flange adapters

All Machined Tolerances for a Perfect Fit. Every time.



Machined wheel bore eliminates taperlock



Pivoting lid with mounted top liner



Pivoting lid lock eliminates threads!

Join the growing number of leading companies in North America that have upgraded to one of our e-Wheel™ designs. Same day parts shipment available.

Welcome to the most advanced wheel technology in the shot blast industry.



BCT **TWISTLOK™**
e-WHEEL™ Technology

The Patent Pending **BCT TwistLOK™ e-Wheel™** design includes several major breakthroughs in shot blasting technology. All **TwistLOK** components are investment cast from a Super-Alloy Tool Steel providing unparalleled precision, toughness and wear life approaching 2-3 times that of traditional alloys used for blast parts.



The precision fit up of investment cast components provides a perfect seal, eliminating the typical seal issues of loose fitting plastic or rubber seals that misalign during installation.



A simple twist with a wrench to the **TwistLOK** ring, allows for easy removal of the precision investment cast feed spout and easy access to the control cage and impeller.

THE ELIMINATION OF HARDWARE MEANS NO MORE THREADS.



Blast pattern is always set in the proper location by lining up the numbers on the control cage and cage adapter.



To remove the **TwistLOK**, simply rotate the clamp face just a few degrees to allow the clamp to disengage from the cage adapter.



The **TwistLOK** ring is cast with “bubbles” which eliminates any potential interference from shot, dirt or fines during the clamping process. This allows the **TwistLOK** ring to work flawlessly, every time.



The M-LOK is a threadless spring-loaded pin that locks the **TwistLOK** ring in place. A simple 90-degree turn locks the M-LOK into place, which in turn locks the **TwistLOK** assembly. All of this completed without a single thread.



**TOMORROW'S
TECHNOLOGY
AVAILABLE
TODAY!**

Tougher

BCT has upgraded hundreds of engineered e-wheel upgrades to improve our customers’ existing blasting operation. We offer dozens of pre-engineered installation kits for virtually every other OEM, many of which allow for a simple bolt-on installation. We’ll provide you with installation drawings with on-site technical support or full turn key install – you name it, we can do it.



Wheelabrator® Wire Mesh



Pangborn® Spinner



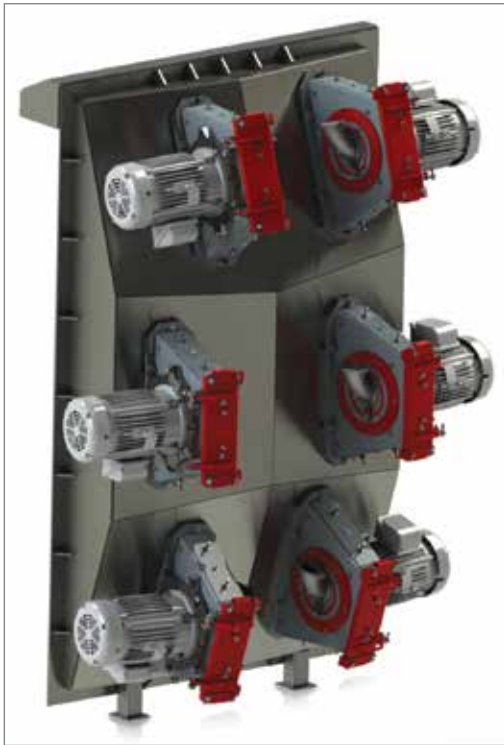
Wheelabrator® Spinner



Wheelabrator® Table



Wheelabrator® Spinner



Rosler® Spinner

Options:

- Abrasive control valves
- Feed lines
- Hardened feed lines
- Wheel pods
- Cabinet/Roof Plates
- Liner packages



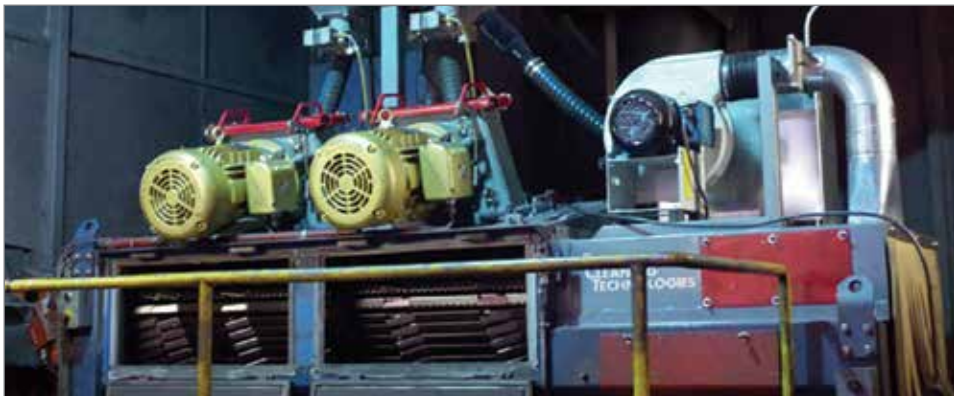
Jetwheel® Spinner



Pangborn® Spinner



Pangborn® Tumble



Rosler® Continuous

Performance Guarantee

We are so confident in the performance of our **TwistLOK™ e-Wheel™** that we offer a no questions asked return policy within the first 60 days. Don't like the color? It's too quiet? Parts last too long? Doesn't vibrate enough so your operators don't know it's running? Whatever the reason, you can send it back to us for full credit. Try our **TwistLOK™ e-wheel™** on your existing blast system – you will not be disappointed.



Pangborn® Roll Conveyor



Blastec® Plate



Blastec® Monorail

Extreme Duty

BCT Tumble Blasts have become the industry workhorse, replacing tired outdated machines with extreme-duty blasts that improve productivity and uptime. Available in 14, 22, 28, 34, 50 and 76 cubic ft. Our heavy duty tumble blast equipment is built tougher than any other blast machine on the market today, made to handle your production requirements.



Key Features Include:

- Improved machine safety with stairway access and fully guarded platforms
- Coupled mill drive
- High impact link design
- **TwistLOK™ e-Wheel™** with our latest wave blade design
- Floor mounted separation with easy access to our automated separation system
- Great access and platforms for wheel maintenance



Innovation

BCT Drum Blasts have become the most popular option for tumbling parts, in many cases replacing traditional flighted tumble blast equipment and offering substantially reduced maintenance costs, which equates to less downtime. Our Drum Blasts are available in 7, 10, 14, 21, 28, 34, 40 and 45 cubic foot units. The BCT Drum Blast is excellent for a variety of small parts and up to as much as 400 lbs.



Design Features Include:

- "Alternating Angle" Drum design that changes the angle of the drum during the blast cycle to improve how parts mix and tumble providing lower cycle times, while eliminating pinch points and parts damage.
- AR Cabinet and Drum made of manganese steel with fully welded design
- Loader features 2 stage hydraulics allowing a 60° maximum dump angle
- **TwistLOK™ e-Wheel™** with super-alloy tool steel components

BCT TWISTLOK™
e-WHEEL™ Technology



The New Standard

BCT has set the bar when it comes to our Monorail systems. We offer fresh designs with cabinet seals that provide maximum shot retention and reduce or eliminate problems with small parts hanging up in the seal area. We have included a fully enclosed Slot Seal arrangement that provides superior abrasive retention over any other blast system.



Safety

Every blast system requires maintenance. Your BCT system will be designed with safety in mind. Our base systems start with full stairway access to every machine component. Safe, easy access means your maintenance tech's will no longer need to climb a 25' ladder with a tool belt. We will design your system to eliminate confined spaces whenever possible and provide safety tie-off locations when needed.



Key Features Include:

- Fully enclosed slot seal that keeps the abrasive in the machine
- Easy no-tool change out finger seal arrangement
- Hanging cast chrome liner package inside the blast chamber
- Automated separation systems that provide continuous and effective cleaning of the abrasive
- Full machine monitoring and graphics, all done in-house
- Vibratory Reclaim conveyor upgrades in lieu of screw conveyors



Improved finger seals.



The BCT Advantage

All **BCT** Roll Conveyor systems feature our exclusive retractable vestibule design. This innovative design requires only minutes to engage and puts safety at the forefront of our roll conveyor systems. We understand the challenges of working in confined space and our retractable vestibule design simply eliminates it.



Key Features Include:

- Premium design slide in vestibule seal arrangement with easy change out
- Stairway access for safe, easy access to all machine components
- Exit vestibule and blow off enclosure
- Floor mounted separation system with automated full-curtain sensing system



Eliminate Confined Space

BCT's retractable vestibule shown above and below provides quick, safe and easy access into your main blast chamber – no more small access doors that leak, no more crawling over rollers. Simply pull the safety locks and roll the retractable front vestibule away. Safety – there is no compromise.



Premium MCAST™ hanging liners eliminate traditional studs and cap nuts.



Versatility

BCT offers a new approach to Wire Mesh Systems with greatly improved access, maintainability and even a new look at blast patterns and cleaning angles that increase the productivity of our systems.

Our innovative wire mesh belt systems include 4, 8, 16 and 24 wheel designs. All completely assembled and pre-wired in our facility prior to shipment.



Safe Access

This compact but very productive 4 wheel system utilizes a BCT exclusive swing out cabinet design for fast and safe access to the main blast chamber that again eliminates confined space. No longer will your maintenance personnel need to squeeze into small confined spaces thru small access doors for maintenance in the blast cabinet.



BCT Sets The Bar

BCT Spinner Hangers are highly engineered, well thought out customer solutions that solve a wide array of customer cleaning issues. Our systems are built to last, designed with key maintenance friendly features in mind. One of these being our innovative seal design, integrated into a powered trolley/hoist system that provides a full mechanical seal and eliminates your typical rubber and brush design.



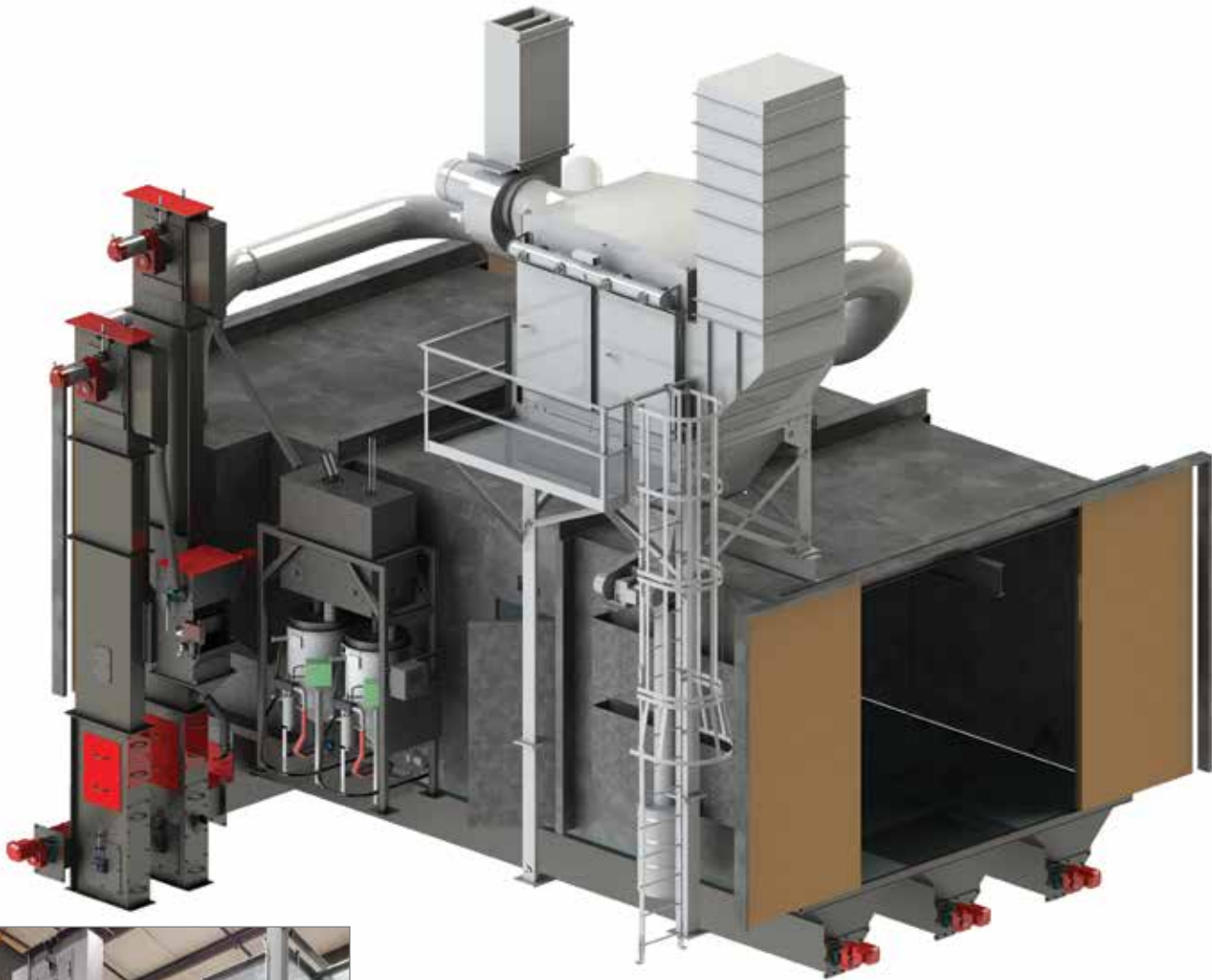
This 28 ft. diameter, 60,000 lb. capacity machine is one of our largest custom solutions in North America. This system with it's main blast zone constructed of 1/2" manganese steel showcases the typical BCT approach with stairway access, floor mounted separation and platforms allowing easy access to all blast wheels .



BCT 4 Wheel 40x60 Pass Through Spinner Blast

Not Your Typical Air Blast Room

BCT offers the heaviest duty Airblast systems available in the market today. Our heavy-duty reclaim and separation components are designed to provide longer life and better maintainability.



Our floor mounted separation system with automated separators ensures a consistent abrasive cleaning for dust-free blasting. BCT offers an option for vibratory shaker reclaim conveyors. If you're looking for a heavy duty airblast room, we've got you covered.



Car Cleaning Systems

BCT provides both wheel and airblast systems for preparing your rail cars for coating. Our wheel blast system utilizes our M5 e-Wheel™ TwistLOK™ wheel technology coupled with our floor-mounted separation system that provides easy access to our automated separation system. Extremely well built and designed for reduced maintenance costs, our rail blast system will be a serious improvement over your current system. Need a lance to clean hopper cars? BCT's e-Wheel™ TwistLOK™ lance system utilizes tool steel components for extreme toughness. Don't worry about our wheels coming apart like your current system, because ours won't.



Upgrade Your Current Blast

BCT has the experience and proven technology to improve your current blast, e-Wheel™ TwistLOK™ upgrades, automated separation systems that make a real difference, controls, hydraulics and full reclaim updates. We do, we've done and we can guarantee your performance.

Versatile

BCT provides custom options when it comes to our table blasts. We offer traditional swing table designs with a single or double door option, or if space is an issue, we have our space saving clam shell style machine. Available up to 12 ft. diameter and capacities up to 25 tons.

Car table systems designed with up to 75 ton capacity round out our table/car offering. All designed with the typical BCT approach, floor-mounted separation systems, innovative lining packages, heavy duty table and door designs that actually seal.



We've Got You Covered

If your current OEM doesn't have your back, no worries, BCT has you covered. We stock wheel tune-up kits, bare wheels, liners and more for most major OEM's. We understand the importance of quality and availability to your operation and we back it up with parts, on the shelf ready for shipment. We stock parts for Tumble blast equipment for almost every Wheelabrator® and Pangborn® machine including links and pins, sprockets, rollers, shafts, liners, bearings and more. Almost every part you need, there's a good chance that BCT has you covered.



BCT MCAST
Aftermarket Blast Parts



**FLIGHTS
LINKS
PINS
TRACTION WHEELS
SPROCKETS
DRIVE SHAFTS
SEALS
IDLER SHAFTS
TAKE UP SHAFTS**



**KICK PLATES
DOOR ASSEMBLIES
ROOF REPLACEMENT**



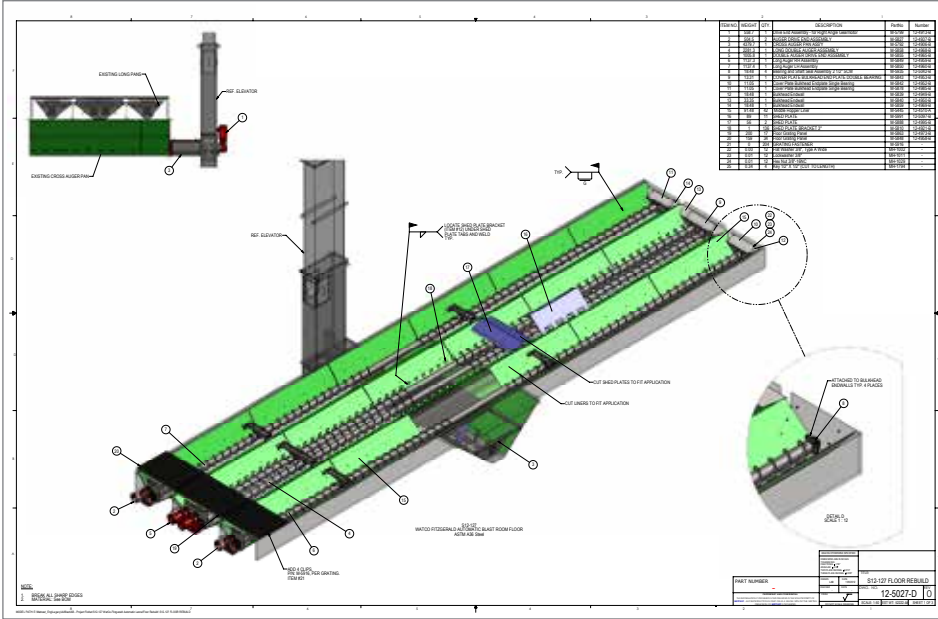
**BARRELHEADS
BACKING PLATES
BEARING ASSEMBLIES**

Engineered Upgrades

BCT can provide engineered solutions to improve your existing blast system and your operation. We offer dozens of proven, pre-engineered upgrades to Wheelabrator® and Pangborn® equipment utilizing our innovative e-wheels and technology. From simple abrasive control valve upgrades to comprehensive upgrades that improve virtually every component on your blast, we have the experience and technical support to do it right.



- **E-wheels**
- **Abrasive valves**
- **Load doors**
- **Cabinet doors**
- **Separation systems**
- **Elevator upgrades**
- **Liner packages**
- **Quick change seals**
- **Control / PLC upgrades**
- **Full rebuild services**
- **Safety upgrades**



Proven solutions for your existing equipment!

We've Got You Covered

At BCT we understand the importance of experienced technical support – our company was founded on it. With the largest Technical Service support team in the industry our ability to support your operation is unmatched. Comprehensive equipment inspections, troubleshooting, repair and installation services, BCT has the support team in place to meet your needs.

- OEM Certified Service Techs – experienced in all equipment types and manufacturers
- Perform comprehensive operation and equipment surveys designed specifically to your shot blast machines
- Provide comprehensive detailed system reports
- Reduce downtime, operating costs and parts usage
- Improve cleaning effectiveness, cycle times and production
- Improve the environment around the machine and your facility by keeping the collection and separation system operating at peak performance
- Safety evaluation of your shot blast equipment and operation

Timely, experienced technicians that know your equipment, know what to do and then do it. Unmatched technical support from the largest team in the USA.



We've Got You Covered

BCT customer support comes in many forms, technical support, customer service, innovative products and investment in new technology. The foundation of our support is our commitment to having over \$3M in parts available, in stock, when you need them.



In stock with same day shipment available.

THE CLEAR LEADER IN SHOT BLAST INNOVATION

BLAST CLEANING TECHNOLOGIES

- World Class Heavy Duty Equipment
- e-Wheel™ Upgrades
- Shotblast Parts
- Machine Upgrades
- All supported by one of North America's largest Service Teams



TECHNOLOGY. SERVICE. SOLUTIONS.

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