

Cornell Forge Company Chooses Blast Cleaning Technologies for Heavy-Duty Drum Blast Equipment

CORNELL FORGE CASE STUDY

PROJECT SCOPE

Cornell Forge purchased a 28 cu. ft. drum blast to replace traditional-style tumblast equipment. The new equipment has improved productivity, reduced maintenance downtime and significantly decreased scrap and damaged parts.

LOCATION

Chicago, Illinois

METALS FORGED

Carbon Alloy Steel – Up to 100 lb

Stainless Steel – Up to 30 lb

Titanium – Up to 10 lb

VALUE-ADDED SERVICES

Heat Treat, Magnuflux, Inspection, Sawing, Plating and Painting, Hardness Testing, Machining, Shotblast Cleaning, Assembly

INDUSTRIES SERVED

A broad range of industries including:

- Agriculture
- Off-Highway
- Hand Tools
- Medical Tools
- Sports
- Marine
- Oil
- Recreation
- Rail

PRIMARY FORGINGS

Press Forgings (1300 tons through 4000 tons)

Hammer Forgings (1500# through 6000#)



Cornell Forge, a 80-year-old forging company, began this process by gathering competitive quotes from shot blasting companies that could improve efficiency, and throughput, and reduce cycle time and maintenance downtime.

The Cornell Forge team visited and toured three shot blasting manufacturers that designed and manufactured drum blast style shot blasting equipment. “While some things were similar with all manufacturers, several things stood out about Blast Cleaning Technologies,” said Ray Raddatz, Shipping and Finishing Supervisor at Cornell Forge.

“Being a Midwest company that manufactures heavy-duty equipment in the U.S was a big plus, as well as the tremendous knowledge of the entire team in shotblasting, maintenance, safety and understanding the issues that Cornell Forge was trying to address in the finishing department. However, the thing that really astounded the team during our tour of the facility was the level of spare parts inventory and the care taken to handle and balance the quality of the tune up kits and blade sets,” added Raddatz.

The Durability of M-28 and Blast Wheel

“The strength, durability and overall aesthetics of the M-28 have been well received by our maintenance team. The “cartridge style” drives on the elevators were very well engineered and





thought out with maintenance in mind. This is a big plus for us as we see this saving a tremendous amount of time in the future for elevator repairs. Cornell Forge has experience with running and maintaining all types and models of blast wheels and the easy access to the shot blast wheel is great. The e-Wheel™ has saved in maintenance downtime and cycle times of 40 minutes have been improved by 50%," said Raddatz.



Improved Performance and Tremendous Savings

This project began with a mission to get away from the traditional steel flighted tumblast machines. Cornell Forge has many small parts that were constantly pinching in the tumblast and Cornell Forge was determined to find a better blast solution. The single 28-D drum blast replaced two 22 cu. ft. old style tumblast machines. "The increase in productivity has been two fold with the 28-D drum blast and in one year, we have saved \$75k in maintenance downtime," said Raddatz. "We've also saved on shot consumption and our scrap rate is less with significantly fewer forgings being pinched and damaged," said Raddatz.

This was a turnkey project including installation and startup of the equipment. "Service after the sale is extremely important and 14 months later, we are constantly surprised by the level of consistent service we've experienced and the way the BCT team has stood behind the sale," said Raddatz. The footprint and the location of the machine were modified from the original plan. Cornell Forge and BCT worked together and the outcome could not have been better. "The machine fits like a glove," Raddatz added. ●

e-Wheel™ is a trademark of Metcast Service Tech Resources Inc.

INDUSTRY NEWS

Tim McMillin Hired as Sales Director at Blast Cleaning Technologies (BCT)

Blast Cleaning Technologies is very pleased to announce that Tim McMillin has joined the BCT team as Sales Director. Tim McMillin has more than 25 years of industrial business experience in metal casting, engineering software, and oil and gas exploration and production. He has been very active with industrial organizations including SME, North American Die Casting Association and as a past National President of the American Foundry Society (2011-2012). Tim will be responsible for leading the company in developing the Mexico market, managing the OEM replacement product line and working closely with certain key accounts to further their relationship with BCT.

"Tim brings years of industrial experience and his energy and dedication will be a tremendous asset in expanding our sales organization and managing customer relationships. His leadership and knowledge will support our efforts as we continue to expand our customer base," stated Carl Panzenhagen, President and CEO. ●

