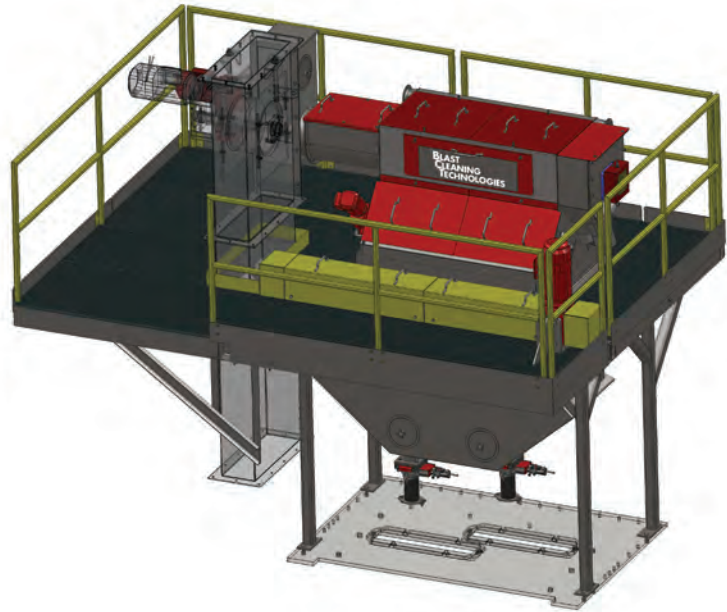


## Metalcaster Revamps Shotblasting Operation, Improves Efficiency

In early 2013, Rochester Metal Products Corp., Rochester, Ind., identified its shotblasting operation as a source for possible improvements. The existing machine had a magnetic separation system, but it was outdated and performance continued to fall short of expectations. Rather than install an entire new machine, Rochester Metal Products requested quotes for rebuilding and upgrading its current 34-cu.-ft. tumble blast unit. Eventually, the ductile and gray iron metalcaster chose Blast Cleaning Technologies (BCT), New Berlin, Wis., a division of Metcast, to service its operation.

While Rochester Metal Products was shut down during the 2013's Fourth of July holiday weekend, BCT installed new blast wheels and added improved magnetic separation capabilities to the existing equipment. BCT was able to complete the project in three days, meaning the machine was back up and running when production resumed. Though installation proved to be a logistical challenge thanks to spatial constraints, Rochester Metals experienced immediate benefits.

"Although the footprint was a challenge, and the delivery was pushed, we upgraded to dual e-wheels and magnet-



Shown is the modified upper structure and magnetic separation system assembly.

ic separation," said Marc Avila, design engineer, Rochester Metal Products. "[We have] reduced cycle time by up to 40%, increased uptime with less wheel maintenance and basically eliminated the need for re-cleaning."

In addition to increased efficiency, the tumble blast machine's existing double-lip airwash separators were replaced with Metcast High Effi-

ciency Magnetic Separators.

This installation included a dual drum system, with primary and secondary magnetic drums. The HE series Magnetic Separation System is designed to handle heavy sand loadings and extend the life of blade and wheel parts. Following the replacement, Rochester Metal Products increased the wear life of its parts, while simultaneously reducing shot consumption.

"The Blast Cleaning Technologies design is a major improvement and saves the life of the magnetic drum. It saves on abrasive consumption, while significantly decreasing the cost of maintenance," said Avila. "This enhancement to our machine not only has improved production, but the service platforms engineered into the existing equipment design have improved safety and access to the machine."

"A complex project like this requires a lot of communication and project planning," said Craig Wisner, BCT sales manager. "In this case, Rochester Metals, BCT and the installation contractor worked together to make it a successful installation. The turnkey project was a coordinated, well-planned effort that increased efficiency and decreased downtime." **MC**



Rochester Metal Products wanted improved performance from its 34-cu.-ft. tumble blast unit.