



Blasting Maintenance at BP-Husky Refinery Completes at Half the Time and Cost



Job Overview

Project	Blasting of Tank
Location	Oregon, Ohio
Task	Extensive weldment repairs on the floor, including new floor patches. The existing coating on these new steel patches needed to be fully blasted and feathered into an existing 30 mils of sound coating
Area	14-meter (48 foot) diameter tank
Coating	30-40 mils coating

Challenge

Advanced Industrial Services (AIS) faced significant challenges with the costs of compliance, the risks posed by OSHA regulations, and extended project timelines. To address these concerns, AIS developed a cost-efficient blasting solution using GMA ToughBlast™ for an internal 14-meter (48-foot) diameter tank at the BP-Husky Toledo refinery in Oregon, Ohio. The tank required extensive weldment repairs on the floor, including new floor patches. The existing coating on these new steel patches needed to be fully blasted and feathered into an existing 30 mils of sound coating.

AIS estimated that they would require a truckload of slag - approximately eight to ten bulk bags, with at least a minimum of seven bags, and it would take up to four days to complete. However, BlastOne was confident that GMA ToughBlast™ garnet abrasives could get the job done faster with less abrasive consumption. This alternative abrasive from GMA was put to the test.

Surface & Structure

The underside of the tank roof comprised the flat section of the roof and panels. Both had a very thin coating with a significant amount of rust coming off in large sheets. The roof support beams were in sound condition, consisting of steel sectioned C-channels with a very thick 30 to 40 mil coating.

Using GMA ToughBlast™



REDUCED COSTS
Lower Consumption and labor cost resulting in reduced project costs



EFFICIENCY
37% faster blasting completed in 1½ days rather than the estimated 4 days



CONSUMPTION
more than 50% less abrasive used than the esimated slag amount



ENVIRONMENT
Reduced consumption reduces landfill and waste

Why is GMA Garnet™ the preferred blasting abrasive?

Achieve safe, effective blasting with minimized consumption and unmatched coating adhesion.



Surface quality

GMA: The proven choice for exceptional coating adhesion and reduced embedment, outperforming copper slag with embedment contamination levels of nearly 4.5 times higher.



High productivity

GMA maximizes productivity and can significantly reduce the cost of surface preparation jobs.



Reduced consumption

Lower your abrasive consumption by 30-50%, giving you savings in abrasive purchase costs, as well as transport, storage and disposal costs.



Workers safety

By using GMA Garnet it can significantly reduce the presence of heavy metals and silica which are mainly found in other slag and garnet abrasives, cutting ground and air toxins, protect both workers and the natural environment.



Low dust blasting

Independent tests show GMA Garnet™ cuts dust by up to 80%, boosting visibility and lowering contamination.



Sustainable resource

Our garnet recovery programs present a cost-effective and environmentally responsible solution for used garnet disposal, with GMA garnet capable of being reprocessed up to five times.

Trial Outcomes

During the blasting of the floor patches, blasters experienced a significant increase in speed and noted that the edges feathered much quicker. They were impressed by the minimal dust generated. When blasting the roof, the blasters were amazed at how quickly they could move the nozzle and remove the coating. The steel beams with sound coating were effectively cleaned without the need for complete re-blasting.

Result

The project was completed within one and a half days of actual blasting time, and over two bags of GMA ToughBlast™ were consumed. This was less than half the amount of slag originally estimated!

Key Project Outcomes

- **Reduced Costs:** Switching to GMA ToughBlast™ led to a significant reduction in project costs.
- **Improved Efficiency:** The blasting was completed in one and a half days, significantly faster than the estimated four days.
- **Environmental Benefits:** Reduced abrasive consumption helped the refinery reduce its green space (landfill) and remain in compliance with OSHA Beryllium regulations.

Summary

Switching to GMA ToughBlast™ abrasives not only saved time and money but also provided environmental benefits, making it a highly effective solution for the BP-Husky Toledo refinery project.

Disclaimer: GMA applies a uniform methodology to compare costs across various variables. However, discrepancies in costs may occur. It is crucial to consult with GMA and alternative suppliers to confirm the final associated costs and pricing before finalizing your choice of blast abrasive.

The information presented is intended for comparison purposes only and may not accurately reflect the specific prices and costs associated with your blasting project. GMA disclaims any liability for differences between these estimates and actual costs incurred.

Please be aware that the estimates provided are based on blasting bare steel sheets and are meant for general informational use. The calculated figure does not represent a formal offer, and any declarations made herein should not be considered definitive or legally binding. GMA is not accountable for any errors that may arise from rate changes or offers not reflected in this tool's results post-use.

We strongly recommend verifying the most current offers and prices with your chosen suppliers.

*Case study courtesy of BlastOne International