



# GMA SpeedBlast™ Revolutionizes Blasting Operations on San Diego Bridge



San Diego-Coronado Bridge  
Photo credit: Frank McKenna

## Job Overview

<b>Project</b>	Blasting of Bridge
<b>Location</b>	San Diego, California
<b>Task</b>	Blast trial on bridge in San Diego to remove coating from structural steel and beams
<b>Challenge</b>	Low productivity, high dust levels, and achieving surface cleanliness with previous abrasive (10X Abrasive, Oxide Mineral)
<b>Surface Area</b>	25,000 ft <sup>2</sup> (2,323 m <sup>2</sup> )
<b>Coating &amp; Structure</b>	Removal of previous 10 mils coating from structural steel and beams, targeting a 2-4 mils (50-100µm) profile

## Result

The trial of GMA SpeedBlast™ on the San Diego Bridge project demonstrated its advantage over 10X 30/60 Mesh abrasive. Despite a higher per-tonne cost and increased consumption, GMA SpeedBlast™ led to a remarkable improvement in productivity and a significant reduction in overall project costs by 49.2%. Moreover, the project benefited from enhanced safety due to lower dust emissions and cleaner surfaces, facilitating quicker inspection approvals and coating processes. The transition to GMA SpeedBlast™ garnet thus marked a significant advancement in operational efficiency, setting a new standard for similar future projects.

## Trial Outcomes

In determining the solution, some assumptions were developed to provide a comparative but thorough investigation of the total project cost through GMA's TruCost Calculator. The data entered into the calculator was, as follows:

Product Costs Summary	Estimate Costs
Transport Costs	\$125/tonne
Equipment Costs	\$100/hr
Cleanup Tonnes/hr	5 hours
Labor Cost	3 blasters, 2 helpers (\$75/hr, working 9 hrs per shift)
Disposal Costs \$Mt	\$45/tonne

\* Please note this is generic information; for increased accuracy and detailed guidance, consult with GMA for more information.

## Using GMA SpeedBlast™

<p><b>PRODUCTIVITY</b> 150% or 72ft<sup>2</sup> per hour more efficient</p>	<p><b>TOTAL PROJECT COSTS</b> \$79,112 or 49.2% savings</p>	<p><b>CONSUMPTION</b> 20% or 5 tonnes more abrasive</p>	<p><b>LABOR</b> 670 hours less labor</p> <p><b>15 days savings</b></p>
---	---	---	--

## Why is GMA Garnet™ the preferred blasting abrasive?

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



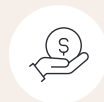
### Surface quality

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

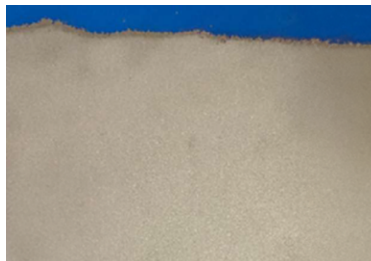
Our garnet recovery programs present a cost-effective and environmentally responsible solution for used garnet disposal, with GMA garnet capable of being reprocessed up to five times.



## Trial of GMA SpeedBlast™

A comparative trial was conducted between GMA SpeedBlast™ and 10X 30/60 Mesh to evaluate performance. Following were the test results:

Product	Abrasive Used (lbs)	Area (ft <sup>2</sup> )	Time (mins)	Avg. ft <sup>2</sup> /hr	Consumption (lbs/ft <sup>2</sup> )
GMA SpeedBlast™	33	12	6	120	2.75
10X 30/60 Mesh	55	24	28	48	2.3



Blasted Surface - GMA SpeedBlast™



Blasted Surface - 10X 30/60 Mesh

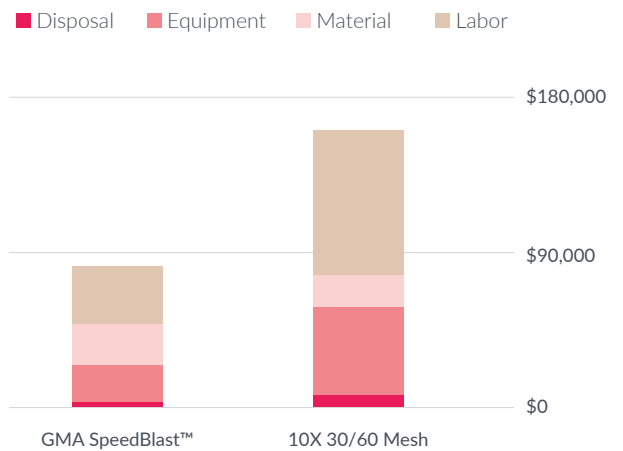




## Project Costs

Product Costs Summary	GMA SpeedBlast™	10X 30/60 Mesh
Labor Cost	\$33,482	\$83,705
Material Costs	\$23,650	\$18,170
Equipment Costs	\$20,833	\$52,083
Disposal Costs	\$3,635	\$6,754
<b>Total Costs</b>	<b>\$81,601</b>	<b>\$160,713</b>
<b>Costs per day</b>	<b>\$8,225</b>	<b>\$6,480</b>

## Costs Summary

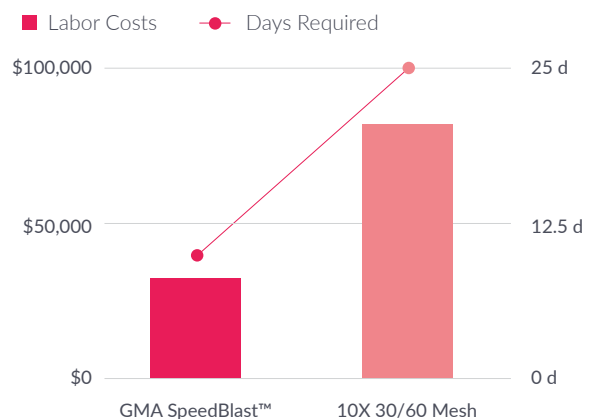


## Project Resources

Product Resources Summary	GMA SpeedBlast™	10X 30/60 Mesh
Total Blasting Area	25,000ft <sup>2</sup>	25,000ft <sup>2</sup>
Total Blasting Hours	208 hr	521 hr
Total Labour Hours	446 hr	1,116 hr
Productivity	120 ft <sup>2</sup> /hr	48 ft <sup>2</sup> /hr
Consumption	2.8 lbs/ft <sup>2</sup>	2.3 lbs/ft <sup>2</sup>
Days On Site	9.9 days	24.8 days
Abrasive Materials Consumed	31.18 Tonnes	26.08 Tonnes
Total Project Cost Per ft <sup>2</sup>	\$3.26	\$6.43

## Labor Costs/Days Required

Using GMA SpeedBlast on this job would potentially save \$50,223 when compared to 10X 30/60 Mesh and take 9.9 days, which is 60% or a 14.9 day labor saving.



**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.