

## CASE STUDY



# 140% Faster Blasting & 8.6 Tonnes Less Waste Per Day! SOCIBER's Sustainability Success with GMA Garnet™



## Job Overview

<b>Project</b>	Surface-preparation and coating removal on external hull structures of a 40-year-old drydock.
<b>Location</b>	Valparaíso, Chile — SOCIBER Shipyard.
<b>Customer</b>	SOCIBER, a leading Chilean shipyard specialising in vessel repair and maintenance.
<b>Distribution Partner</b>	C&D Group Chile

## The Challenge

SOCIBER needed to blast and repaint their drydock as part of a major 40-year refurbishment.

### The project involved:

- Removing thick coatings up to 1,300 microns
- Treating significant corrosion
- Reducing dust levels in a confined shipyard environment
- Improving operator safety
- Addressing growing environmental pressure in Chile to move away from copper slag, which produces heavy dust and large waste volumes.

### Copper slag posed multiple issues:

- Slow productivity
- High abrasive consumption
- Large disposal volumes
- Environmental concerns around dust and contaminants.

SOCIBER required a cleaner, safer, and more efficient blasting solution.

## Using GMA Garnet™



### PRODUCTIVITY

**140% faster blasting**  
+70m² per day faster



### TOTAL DAILY PROJECT COST

**Nearly 28% savings**  
per day



### ABRASIVE CONSUMPTION

**89% less abrasive**  
8.6 Tonnes Less Waste\*

\*For the same 120 m² section

## 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.

**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.

## Test Details

GMA technical specialists and C&D Group Chile conducted an onsite abrasive trial at SOCIBER's facilities to evaluate:

- Productivity under real working conditions
- Abrasive consumption
- Dust behaviour and visibility
- Operator safety
- Environmental alignment.

The team worked closely with SOCIBER supervisors and operators to adjust equipment, nozzles, and blasting setup for optimal performance.

## Solution

Once the correct setup was established, GMA Garnet™ delivered:

- Higher productivity
- Significantly reduced abrasive consumption
- Lower waste volumes
- Cleaner, safer blasting conditions.

The combination of proper setup and high-performance abrasive allowed the SOCIBER crew to meet their surface-preparation requirements while improving safety and environmental outcomes.

## Cleaner, Safer Working Environment

SOCIBER Operators reported:

- Improved visibility
- Reduced exposure risks
- A more controlled blast process.

*"Dust pollution is almost zero"*

## Environmental Alignment

With Chile actively encouraging shipyards to reduce reliance on copper slag due to dust and contamination concerns, the trial demonstrated a clear pathway toward more sustainable operations.

*"Garnet has been an ecological solution and has led to excellent results. The drydock is 40 years old, and the product achieved an excellent cleaning standard. Dust pollution is almost zero, and the most important thing is caring for our personnel."*

— SOCIBER Representative

## Summary

Working closely with C&D Group Chile, GMA supported SOCIBER in achieving:

- Faster project completion
- Dramatically reduced abrasive waste
- Cleaner, safer onsite conditions
- Improved alignment with environmental guidelines
- A successful refurbishment of their 40-year-old drydock

GMA Garnet™ helped SOCIBER move toward a more sustainable surface-preparation approach while maintaining high operational performance.