

Reducing Operating Costs of Surface Preparation in the Coatings Industry: Shipyards

Overview

Efficient surface preparation is a major cost driver in shipyard coating and lining projects. Duramax abrasives provide a proven solution to improve efficiency, enhance safety, reduce dust, and reduce costs. Made from durable calcium iron silicate, Duramax meets SSPC AB1, CARB, and ISO 11126 and 11127 standards, as well as other international equivalents. Duramax also has low aquatic toxicity achieving zero mortality in LC50 saltwater and freshwater tests.

Duramax can be used for wet and dry blasting, it outperforms coal, copper, and nickel slags with greater durability, faster cleaning, and lower dust emissions, reducing material consumption and improving workplace safety. With 2 to 5 reuse cycles¹, it also cuts costs significantly.

Field data from a Canadian shipyard² shows:

- ✓ Average 38% reduction in abrasive consumption
- ✓ 29% 42% savings in total operating costs

Savings come from abrasive reuse and fast project completion.

In Summary

Duramax abrasives offer a cost-effective, high-performance solution for shipyard surface preparation, reducing material costs, enhancing safety, and minimizing environmental impact. With proven success in Canadian projects, Duramax delivers measurable efficiency gains.

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- ¹ Reusability is based on customer feedback and ranges from 2 to 5 cycles, depending on the sandblasting process, air pressure, and substrate condition.
- ² Reduction percentages are based on operations at a Canadian shipyard.
- ³ Exact values may vary depending on material, substrate, and client blasting parameters.



Meet Sam. Sam uses Duramax.

- $20 \text{ kg/m}^2 \times 70 \text{ m}^2 = 1,400 \text{ kg}$
- 70 m² ÷ (13–17 m²/hr) \approx 4.7 hrs

Sam buys 1,400 kg of Duramax taking ~4.7hrs to blast, nearly no dust is produced, so no waiting is required! The next morning, Sam cleans and recycles 74% (1036 kg) of Duramax for his next job with Ecomaterials' recycling solution. Sam starts his second job that afternoon!



Meet Eli. Eli uses another abrasive.

- $24 \text{ kg/m}^2 \times 70 \text{ m}^2 = 1,680 \text{ kg}$
- 70 m² ÷ $(9-12 \text{ m}^2/\text{hr}) \approx 6.8 \text{ hrs}$

Eli buys 1,680 kg of the other abrasive, taking ~6.8 hours to blast - and another 3.5 hours waiting for dust to settle. That takes two days! Then he has to toss out 1,680 kg of waste. Two days later, Eli is back, buying 1,680 kg to start his next job.















