



Odfjell discovers the benefits of Graco's EcoQuip 2

Frustrated with the drawbacks of dry blasting their ships, Odfjell SE looked for a cleaner and more productive surface preparation solution ... and found it.

Norwegian ship owning company Odfjell SE offers complete in-house ship management services including crewing, QHSSE, technology support, digital innovation, new-builds, energy efficiency solutions, and overall fleet management. But when it came to onboard maintenance work, they weren't too happy about the efficiency of their surface treatment methods.

TIME-CONSUMING AND UNHEALTHY

For onboard maintenance, Odfjell was using a combination of dry blasting and mechanical tools. On-the-spot repair with mechanical tools was taking time and effort, and was unhealthy and unpleasant for the crew due to the heavy vibrations of the tools. Moreover, dry blasting was requiring a massive amount of grit, and the dust was having a negative impact on the crew, the ship and the surrounding environment. To overcome these problems, Odfjell decided to look for alternative methods for their onboard maintenance work.

They were already aware of abrasive media and their usefulness to prepare surfaces. But Odfjell not only needed good surface preparation, they also wanted a technique that was easy to use and not dangerous for the crew.

Client:	ODFJELL SE
Country:	NORWAY
Graco Distributor:	J.S. COCK
Equipment:	ECOQUIP 2
Industry:	MARINE
Application:	SURFACE PREPARATION

CLEANER, LIGHTER AND MORE PORTABLE

Discussions with Odfjell's local Graco distributor led to the solution. J.S. Cock recommended the Graco EcoQuip 2 Eqp vapour abrasive blast equipment and installed it on Odfjell's ship Bow Atlantic. They also upgraded the unit with a 1" hose for incoming air. An extra compressor wasn't necessary as the Atlantic Bow already had a large 55 kW compressor capable of providing sufficient air.

One obvious advantage of the Eqp is that it's small and easy to move around a ship. To reach all parts of the ship, a total of 30 meters of hoses is used. Odfjell uses quartz sand with a thickness of 0.3 mm as abrasive media, at a rate of 60-70 kg/hour.

**Eqp is small and easy
to move around a ship**

INCREASED PRODUCTIVITY

With the EcoQuip 2 EQp, Odfjell were pleased to see that their surface preparation was as good as with dry blasting. The benefit of using the EQp over dry blasting is an incremental reduction of used grit and generated dust. EQp also desalts the surface, so it's immediately ready to be painted, eliminating the need to clean it first. The feathered edges around the prepared area are smooth so no rust will occur around the prepared area.

"We are using 75% less grit volume compared to dry blasting," says Torleif Solheim, Senior Technical Superintendent at Odfjell. "When blasting, we fill two bags which last for 35-40 minutes before we have to refill again. And that's not the only benefit, the maintenance crew find the EQp very easy to handle and operate."

Dan Törnqvist, Business Development Specialist HPCF at Graco, adds a bit of advice. "If you want to use the 1" inch blasting hose, you need a 1" hose for incoming air. Keep in mind that your compressor has to be at least 30-37 kW. For smaller compressors, the EQp should be used with a ½" blasting hose and incoming air hose."

LESS BLAST MEDIA, LESS DUST

Graco's EcoQuip vapour abrasive blast equipment provides a performance equivalent to sandblasting but with 92% less dust, thus minimizing the need for PPE, tenting and containment, and decreasing environmental impact. It uses up to 75% less blast media and far less water than wet blasting, and creates little run-off, thus there is no large slurry mess to clean-up and dispose. It's effective in rain and high humidity, and efficiently removes coatings without damaging the sub-surface. The bottom line is that EcoQuip reduces project costs while increasing the speed, efficiency and productivity of blasting.

EcoQuip 2 Portable (EQp) is lightweight (99 kg) and therefore easy to take from one surface preparation job to another. It still packs the necessary power for any small to medium sized job. It can blast up to 10.5 bar and can handle most of what a 10.5 m³/min compressor delivers. It's also optimized to work well with a 5.2 m³/min compressor and blasts for up to 90 minutes between refills.

- **Portability:** weighs only 99.8 kg and is easily transported on a cart with lift handles
- **Low water usage** (only 0.5 - 1 l/min) means less mess
- **Works with coarse, fine or non-destructive media**
- **Fast removal rates** compared to other cleaning methods: blast pressures up 10.5 bar
- **Blasts for up to 90 minutes** between refills and holds approximately (4) 25 kg bags of media

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