

The Best Abrasive Blasting Solution in the Shipbuilding Industry

Over the last few years, Profilium has been used by the shipbuilding industry's top players and has proven to be the best abrasive blasting solution for major companies such as South Korea's "big three" shipbuilders Hyundai Heavy Industries, Samsung Heavy Industries and Daewoo Shipbuilding & Marine Engineering.

Specific needs of the shipbuilding industry

This booming market faces many challenges such as volatile raw material prices and high labour costs and is subject to the rigorous specifications of the International Maritime Organization (IMO), which looks to increase vessel safety and life cycle by preventing corrosion.

The new regulations (PSPC) concerning surface treatment and coating application adopted in July 2008 need to be taken into consideration by all departments involved in vessel production, especially by blasting and coating units. Surface preparation, which involves the removal of rust, salt, mill scale, weld spatter and in some cases old paint, and rounding of sharp edges, is critical in achieving optimum





coating performance. This labour-intensive process represents a significant part of the total costs of the coating process.

As the leading manufacturer of metallic abrasives, Winoa is well aware of the challenges faced by the marine industry and determined to offer better performance and serious cost savings.

Premium Solution for Surface Preparation in the Shipbuilding Industry

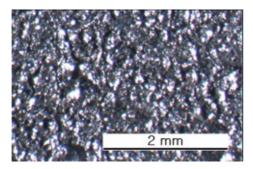
Profilium was developed and tested by top players in the marine industry: it proved to perform well above the expected levels in terms of blast efficiency, surface roughness and paint consumption.

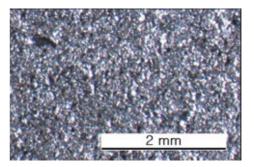
1. Blasting Quality and Efficiency

One of the key Profilium users, a leader in ship construction, had difficulties with the removal of rust from sharp corners. After blasting, a great amount of rust remained between welding lines, which required extra work and resulted in lost time due to rejected work. The optimized size distribution, shape and hardness of Profilium enabled rust to be removed from between welding lines.









Profile blasted by grit in use

Profile blasted by Profilium

The customer achieved +35% to + 45% efficiency (in blasted m²/hr) for same cleanliness level of Sa2.5 by using Profilium.

2. Roughness

Another key player in the marine industry needed to improve the surface roughness obtained. After trials, this customer noted that the surface profiles achieved with Profilium were finer and much more homogenous. The results of blasting confirmed that the roughness obtained is in conformity with PSPC specifications.

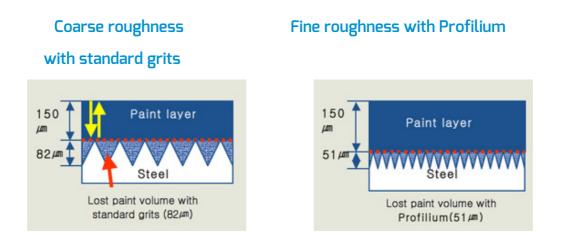
IMO SPECS 30-75 μm Grit in use 75-85 μm Profilium 45-55 μm

3. Paint Consumption

After test trials, this customer measured a considerable difference in terms of paint consumption between Profilium and the grit they were using. The finer roughness obtained by Profilium significantly reduced the amount of lost paint. At the end of the year, the customer documented a total saving of 3% in paint consumption, which exceeded their expected levels.







The top players in the shipbuilding industry documented an improvement of -8.7% in their total blasting costs along with a total saving of 10% in terms of labour cost and electricity. One of them could even save on a major investment by cancelling a project for new air blast rooms to increase production thanks to the high blast efficiency achieved by Profilium.

The success achieved with Profilium is the result of the Premium Approach:

A full service given to you at every step of the process:

1- Presentation and training seminar to introduce Profilium

2- Complete evaluation of your blasting process through calculation and simulation of air-blasting costs

3- Test launch and full technical assistance (on-site tests, on-site training, airblasting process monitoring, etc.)

4- Evaluation of the results after the trial period

winoa



With a dedication to customer value creation, the Premium Approach takes a step forward from the traditional abrasive supply and offers exclusive products and services, specially designed for the needs of each customer from a wide range of industries. By offering higher productivity and peak efficiency, Profilium not only contributes to the overall improvement of the blasting process but also achieves complete customer satisfaction.





