Graco Helps NILES Industrial Coatings Reduce Dust Exposure for Employees



SUCCESS STORY

Application

The use of silica product in abrasive blasting has increasingly become more of a safety risk for construction workers. Exposure to too much respirable crystalline silica causes serious health problems such as lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease. As a result, we have seen new regulation in the industry with the OSHA Silica Rule, which limits the permissible exposure limit (PEL) to silica.

One way companies are protecting their workers is by making a switch from dry blasting to wet or 'vapor abrasive' blasting. Vapor abrasive blasting is similar to dry blasting except the blast media is moistened prior to impacting the surface, resulting in a significant reduction in dust exposure. NILES Industrial Coatings, in search of a solution for reducing its employees' exposure to silica, found recent success with Graco's EcoQuip.

Solution

NILES uses the EcoQuip vapor abrasive blasting equipment for a variety of applications across several industries including oil terminals, dams, automotive facility maintenance, petrochemical, power, structural steel, and tank linings. They also work with large farm and construction equipment companies. Their clients often look to them for best practices in the latest technology and many of them have been pleased with the results they've seen from EcoQuip.

Reduced Air Containment Problems

A key advantage that NILES discovered while using vapor abrasive blasting was less air containment issues. Firstly, there is less of a need to require the use of full fresh air supplied suits for the blasters when the majority of airborne dust is suppressed. Secondly, it is far easier to contain dust with vapor abrasive blasting since the water/media mixture stays nearby and falls to the ground more easily. Thirdly, job cleanup is also reduced and simplified.



Standard sand blasting produces an excessive amount of dust and harmful particulates.



Vapor Abrasive Blasting reduces the amount of dust by up to 92%.



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Less Maintenance

NILES also discovered there is less maintenance on vapor abrasive equipment versus dry blasting machinery. The controls and valves on dry blasters wear out more quickly because hot air from the compressor is flowing through all the control points and dry media easily abrades the media control valve, whereas vapor abrasive blasting machines only rely on air for the blast power and blast on/off control. Blast hoses can typically last twice as long when using vapor abrasive blasters because the wet media is cooler and reduces friction in the hose compared to dry blasters.

Easier Mobilization of Equipment

When using EcoQuip on the jobsite, NILES employees can mobilize and demobilize their equipment a lot more efficiently since the machine uses a 2-ply hose, which is lighter and easier to maneuver than the larger 4-ply hose typically used with their dry blast equipment. This is a big advantage for their employees operating at heights, such as working off scaffolding.

Mobilization is also easier because of the reduced need to set up containment before each project. Large air dryers are also not needed when using vapor abrasive blast equipment because the media is already wet in the pot.

Results

As a result of using six EcoQuip units regularly, NILES has seen a successful reduction in water and media usage, fewer air containment issues, and significantly lower cleanup costs. They also cite fewer delays due to weather, when compared with the dry blasting process, because of the ability to blast in wet or rainy conditions.

"When we switched over to EcoQuip we found our media usage reduced by 50 percent," said Craig Brooks, Key Accounts Operations Manager, NILES Industrial Coatings. "Another big advantage is the amount of water we save since we're no longer using a more traditional halo nozzle. We typically use half the water we'd regularly use when using a halo nozzle. On average our overall containment costs with EcoQuip are reduced by 90 percent, and our cleanup costs are reduced by 30 to 40 percent."



Mobilize equipment more efficiently using a lighter more maneuverable hose.



Blasting in less than ideal weather conditions or environmentally risky situations means more blast uptime.

Graco EcoQuip Vapor Abrasive[®] Blasting – continued



SUCCESS STORY





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Containment Spend less time assembling, disassembling and moving containment systems for increased efficiency.

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Vapor abrasive blasting uses less than a quart of water per minute. Much less than WIN and Halo nozzles.

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Thanks to the addition of water, there is far less friction on parts resulting in less maintenance.

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Less weight over long hose lengths makes them ideal for workers operating at high elevations.



Health Risks Protect your employees from dangerous health risks by reducing the exposure to airborne dust that could contain silica.

"When we switched over to EcoQuip we found our media usage reduced by 50 percent."

> - Craig Brooks **NILES Industrial Coatings**



SPECIFICATIONS

CONTRACTOR

NILES Industrial Coatings

INDUSTRY

Surface Preparation, Blast Cleaning, Facility Cleanup

APPLICATION

Industrial Painting, Coatings, Blasting, Lead Abatement, Fireproofing

ABRASIVE MEDIA

Garnet, Recycled Glass

GRACO EQUIPMENT

EcoQuip



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