

CASE STUDY

A ceiling manufacturer gets a custom-designed vacuum solution



THE PROBLEM: A ceiling tile manufacturer needs a portable vacuum system capable of handling both hard and soft materials, which is difficult for conventional filter systems.

OUR SOLUTION: DuroVac designs a custom filter capable of picking up light, fluffy material as well as harder objects, creating a powerful portable system that can tackle any mess.



A manufacturer of ceiling tile specializes in high-performing ceilings capable of reducing noise, resisting fire, or preventing humidity and sagging. They manufacture many different types of ceiling in massive plants that can be well over a million square feet in area.

Tile cutting stirs up a lot of dust and creates hard, clunky debris as a by-product.

“Everywhere where you go in this plant, there is all kinds of dust,” says Scott Woodward, US Sales

Manager at DuroVac. “They were using shovels, brooms and compressed air, so basically they would just push the dirt down the line. Plants like these are typically very dirty.”

Designing a switch hitter

The client needed a portable, propane-powered vacuum system to move through different areas of the plant and vacuum in tighter spaces with the flip of a switch.

Most systems on the market are fueled by diesel, which is harder to fill and store than propane.

Propane is also often used to power forklifts, another advantage over diesel because the user only requires one fuel source for both.

DuroVac offers a portable system powered by propane, but there was a catch: due to the light, fluffy material it was intended to clean, the vacuum system had to be equipped with pulse-jet cleaning, which required compressed air delivered via a utility line.

“ They really liked the vacuums. They’re using them regularly and it’s noticeable in the plants — it’s definitely cleaner. ”

Scott Woodward, US Sales Manager at DuroVac

In other words, while this system would be effective in vacuuming the fibrous material, it would not be truly portable. DuroVac got to work on a custom solution.

A customized solution

To help the vacuum handle light material and maintain portability, DuroVac designed a new filter to meet the client's needs. The vacuum company's lead designer worked to develop a filter that could tackle the tricky mess without pulse-jet cleaning, allowing the portability that the manufacturer needed.

The filter was a huge success.

"We got an order for a unit with this new filtration that we custom-made for them and it worked really well," says Woodward. "They loved the machine. Then they immediately ordered two more units."

Thanks to these vacuum systems, the client has saved money on the vacuum trucks they typically call in to handle these messes. Since the unit is shipped to the site fully assembled, there was almost no installation required.

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After the success of the units at one of the manufacturer's plants, the client ordered five more units to be installed in two of their other plants. Four models were PLP-25s and four were PLP-40s, all custom-built with special filters and larger hoppers to accommodate a greater volume of material.