



ADHESIVE TAPE REPLACES SUCTION CUPS IN THIS CREATIVE PROJECT.

BACKGROUND

A paint shaker manufacturer supplies equipment to retailers across the country. One of the company's products features side-by-side shakers. This creates an oscillating motion that makes the equipment unsteady on its feet. The manufacturer had been using suction cups to mitigate the vibration, but these were failing in the field.

CHALLENGE

During the PGC discovery phase, we found that what we thought was a vibration challenge was actually an adhesion challenge. The suction cups did a good job of absorbing vibration, but on uneven floors, they struggled to maintain a good seal. It was time to consider if 3M™ VHB™ adhesive tape could provide a better solution.

PGC had to find a solution that:

- > Kept the shakers firmly in place on any floor surface.
- > Handled the effects of continued vibration and oscillation without separation.
- > Created a non-permanent connection with the floor.
- > Was low-cost.

3M™ VHB™ Tape & Paint Shakers

INDUSTRY:
Manufacturing

APPLICATION:
Paint Shakers

PRODUCT:
3M™ VHB™ Tape

SOLUTION

The PGC engineers experimented with different thicknesses of VHB™, sticking squares of the tape under the base of the shakers to see if the shakers stayed in place. Since VHB™ is very sticky but can also stretch and move, it did a great job absorbing vibration and keeping the shakers firmly on the ground. The customer conducted long-term cycling tests at their testing lab, leaving the shakers on for weeks to see if they would finally move. The VHB™ tape kept them securely in place. In the end, PGC replaced eight suction cups—and their fasteners—with four 3-inch by 3-inch squares of VHB™ tape.

RESULT

The manufacturer is thrilled with PGC’s solution. Our extensive testing eliminated the need for troubleshooting in the field, and we saved them tooling costs by eliminating the need for fasteners. The manufacturer was impressed with the product and is planning to test the product in other projects.

If you would like more technical information on this case study, or have questions you’d like to discuss with one of our engineers, contact us at: sales@pgc-solutions.com or call (952) 942-6711.



HEADQUARTERS

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