Success Story

Engineered Vibration Helps Trucking Firm Improve Efficiency and Safety

Brian Humphries Haulage is cutting its tipping time in half by using a high-performance 24V truck vibrator to more efficiently empty dump beds.

[West Midlands, UK] – An innovative UK haulage company is cutting its tipping time in half by using a high-performance Cougar® 24V truck vibrator to more efficiently empty dump beds. Brian Humphries Haulage reports faster turnarounds and an ability to make more runs per day, while improving safety by avoiding the need for manual cleanout. Company officials have also cited reduced stress on truck brakes and body mounts among the benefits, as drivers no longer need sudden stop/starts to break loose stubborn loads.

Owner Brian Humphries describes the company as a general hauler, with its early years spent serving the farm industry by transporting animal feeds, grain and sugar beets. Much of the firm's current work involves hauling green waste compost for a recycling company that has contracted with local municipalities to collect household waste. The company also hauls for a plastic recycling company, carrying agricultural crop cover from farms to a recycling facility.

Asked what prompted him to investigate industrial vibration for his business, Brian Humphries explained, "The green waste compost is a very sticky material and it has a

tendency to stay in the dump body, even when the lift is fully extended." Like most drivers, Humphries sometimes used sudden stop/starts to try and dislodge the material, with limited success.

"We were finding that there would be 1,000 kg or more of compost clinging to the dump body," he continued. "Sudden stops would help loosen the load some, but with the trailer body so high in the air, there's always the risk of tipping over the truck or shearing the body mounting brackets. We ended up shoveling most of it out by hand," he said.

After doing some research on the Internet, Brian Humphries contacted Martin Engineering. He explained to UK Sales Manager Dave Harasym that they were running Scania R480 3-axle trucks, with Schmitz 3-axle dump trailers. The setup gives Brian Humphries Haulage 70 cubic yards of capacity, with a gross vehicle weight of around 44,000 kg.

"Incomplete emptying is a common problem with dump trucks of all sizes," Harasym observed. "Even fairly dry materials can be affected by weather and other conditions, making them extremely difficult to evacuate completely. A short vibration cycle can be a very effective way to break the surface tension and allow the load to slide out," he said.

Harasym recommended the Cougar® DC-3200, an electric design that delivers 4,000 vibration cycles per minute (VPM) with 3,200 pounds of force, while drawing just 62 amps from the 24V version.

"We had to experiment a little bit to find the optimum location for mounting the vibrator," Humphries continued. "Once we settled on the best configuration, we found that we were able to cut about 30 minutes per load from our dumping time."

Case In Point

To further quantify the results, Humphries relayed a brief example of the vibrator's effectiveness. "I was moving compost, along with another driver from a competing company. He was traveling just 8 miles to his tipping station, while I had more than twice that far to go to my destination.

"But because he would have to shovel out the remnants of each load, I was able to make the turnaround much faster, and I carried five loads that day to his four. Despite the difference in distance, the Cougar vibrator allowed me to make an extra load per day."

Humphries said that the safety aspect of using a vibrator is a significant benefit, avoiding the need to rock the truck or shovel out any part of a stubborn load by hand. "It just helps keep drivers out of harm's way," he added.