# Case Study – Heavy-Duty Trucks



# AT A GLANCE

**CUSTOMER** Olinger Heavy Hauling

**LOCATION** Kansas City, Missouri

# **CHALLENGE**

Several trucks from Olinger Heavy Hauling travel throughout Canada, experiencing harsh temperatures. Drivers noticed that the original two-speed fan drive was not performing as well as normal in frigid temperatures. Due to the colder weather, the two-speed was making it difficult for the engine to warm up completely.

#### **SOLUTION**

Olinger implemented the Horton RCV250 Variable-Speed Fan Drive, recognizing that having variable speed – which provides precision engine cooling in any environment – optimized engine performance.

## RESULTS

The RCV250 has variable-speed technology, with a low off-speed that allows the engine to reach optimal temperature in cold climates without the risk of over-cooling. Additionally, the maintenance-free RCV250 saves on fuel costs, decreases power usage, lowers cab noise, and is driver-friendly.

## **PRIMARY CHOICE FACTORS**

Efficiency in colder weather

Durability and zero fan drive maintenance

Horton's reputation for technical excellence and collaboration

Olinger Heavy Hauling Finds Perfect Match For Arctic Routes With Horton's RCV250 Variable-Speed Fan Drive



# Background

Olinger Heavy Hauling, located in Kansas City, Missouri, is an expert in machinery transport and rigging. Established in 1962, the family business has consistently been recognized as an industry leader in the areas of customer service, competitive rates and safety.

With a fleet of 18 trucks, four of which are extreme heavy hauling, operational efficiency and reliability are critical to the company. Olinger closely monitors and evaluates each working part on its trucks so drivers can focus on the road.

Engine problems can mean down time, which can lead to lost revenue. Therefore, Olinger consistently looks for ways to optimize maintenance to keep trucks on the road and out of the bay. Often times, this means finding the best product match, given environmental factors that can negatively impact truck performance.

The Olinger fleet regularly travels throughout Canada and often encounters severe weather conditions – including sub-zero temperatures – that test engine parts to their limits. After experiencing cold weather related issues, the company recognized they needed a fan drive with variable-speed technology. Additionally,

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as a result of heavy-duty hauling, Olinger's application experienced a higher number of full-speed fan engagements, resulting in an increased need to replace friction liners. Due to these challenges, they began investigating potential options to improve overall engine performance in harsh climates.

#### Challenges

Olinger was originally using a Horton Two-Speed fan drive, but was experiencing difficulty achieving optimal performance in severe cold weather conditions. The limitations of the two-speed system in the frigid Canadian temperatures also created challenges as the motor could not hold enough heat to effectively run all its DPF regeneration cycles, leading to a decrease in fuel efficiency.



#### Implementation

Recognizing the need for a cold weather solution, Olinger worked with its partners at Horton to switch from the two-speed fan drive to a more versatile product, the RCV250 Variable-Speed Fan Drive. Offering a wide range of fan speeds, the RCV250 is designed to provide a faster response time and lower off-speed, decreasing parasitic loss to preserve horsepower and provide effective cooling. Most importantly, the drive is effective in colder temperatures, increases fuel efficiency and is maintenance free.

Horton's Territory Representative, Stephen Dreier, worked with Olinger to have its first RCV250 installed by Cummins. Soon after, a second RCV250 was added and installed in-house.

### Solution

Olinger began to see immediate results with the RCV250 system in use on two of its extreme heavy-haul trucks. With a variety of speeds, increasing exponentially, the fan drive allows for precision cooling, meaning the fan only spins as fast as needed to properly cool the engine regardless of environment.

#### Results

Olinger saw a 15-percent increase in fuel savings on its T-800 extreme heavy-haul truck after installing the variable-speed RCV250. There was also savings in costs and downtime, with checkups typically only requiring blade and hub inspection as the fan drive is zero maintenance and does not require friction liner replacement.

Additionally, drivers experienced several benefits after installing the RCV250, including increased temperature consistency and smoother fan engagements. The speed variability also led to a major reduction of noise, so much so that



drivers called headquarters to ask if the fan was running because it was so quiet (the fan was indeed running).

Due to the positive results, Olinger plans to incorporate more RCV250s into its fleet in the future, with two conversions slated for later this year.

"There's just no noise to it. You don't feel it engage and you also don't hear it running as much when you're inside the cab. There's no notice behind the wheel at all."

Michael Hatt
Operations Manager



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