

Corken's Propane Miser™ saves Propane Railcar Terminals \$ Millions

Railcars have been a key mode of shipment for propane across the United States since the 1940's, and in the past 10 years, propane railcar shipments have increased dramatically due to constrained pipeline infrastructure and increasing demand for propane in North America. Specifically, the industry will continue to see **increased consumption** for heating as people stay home in the winter months, especially as the world recovers from the pandemic.

Rail terminals are a flexible alternative to gas pipelines. Strategically placed rail-supplied terminals help **stabilize prices** for local and regional propane providers by reducing the distance traveled to procure product needed in rural areas, including much of the U.S. North and Midwest, where agriculture and heating needs are often urgent and extreme. The Northeast alone receives about **75 percent of its propane supply from rail**, where that mode only provided approximately 15 percent of the region's supply a decade ago. As a result, in many cases, propane terminals are **unloading up to twice as many railcars** as five years before.



Propane railcar terminals are capacity-strained due to increased market demand for propane.

The most critical contributors to advanced railcar-supplied propane terminals lie in the efficiency of **rail switches** as well as the **compressors** to unload the propane railcars. When a rail terminal is built, there are many variables to consider related to the movement of track, the railcar storage capacity, and the potential need for railcar overflow sites. Railcar unloading efficiency **affects the entire operation** by determining the rate at which gas is unloaded and therefore, the number of railcars that can be unloaded in a given timeframe. Compressor size and unloading pressures are crucial in determining offloading rates and **vapor recovery** is a significant detail that must be accounted for to avoid losing potentially hundreds of thousands of gallons of propane per year.

In the quest to make railcar unloading more efficient, **Corken, Inc.**, trusted for their compressor and pump systems for nearly 100 years, met with propane terminal operators across the U.S. to develop a solution that would address their biggest concerns: unloading railcars faster, more effectively, and more safely.

One of Corken's close collaborators, who has requested anonymity for this article, was a large propane distributor in the Northeast US who has been in the propane business for over 85 years (we'll refer to them as "Pro-Terminal" for the sake of this article). Pro-Terminal's managers had grown accustomed to losing between **230-400 gallons** of propane from each railcar they unloaded and spent a considerable amount of time and money in search of a solution such as fine-tuning compressors, recalibrating meters, and running evacuations longer. Ultimately, these changes did not solve the problem. As their railcar unloading volume increased, so did their shrinkage and it was a significant ongoing financial concern.

Solutions beyond products...

CORKEN

**PROPANE
MISER**
LEAVE NO PROPANE BEHIND™

After 2 years of collaboration and development, Corken developed the **Propane Miser™**, a revolutionary turnkey railcar unloading solution that offloads propane up to **25% faster** and evacuates **100% of the propane** delivered from railcars.

“Pro-Terminal”, who was the first to install the Propane Miser solution in their Northeast US operation in August 2020, had a 1.3% inventory shrink problem. Since installing it, their shrink is now negligible, meaning they are **“right on the bubble of zero”**, according their Manager of Wholesale Operations.

“We put a few million gallons of propane a year through this plant at 1.3% shrink, which is a few hundred thousand gallons per year that got shipped back to the supplier in the form of vapors in the car”, according to the Manager. “After using the Propane Miser our shrink has gone to near 0, and we get to sell this additional propane for market price which is a few hundred thousand additional dollars per year directly to the bottom line. We get thousands of gallons of found product”, he added.



The Corken Propane Miser “Leaves no propane behind”.

But that isn’t the only advantage. The brain behind the Propane Miser optimizes the process to evacuate propane up to **25% faster**, which significantly improves throughput during the busy season allowing operators to evacuate more railcars in the same amount of time.

Pro-Terminal’s Manager went on to explain, “The Propane Miser is effective in getting us the additional propane without adding extra time. It essentially has the capacity of two and half Corken 691 compressors, thus, **I don’t need to buy 10 of these Propane Misers, I just need 4**. It’s easy to say the Propane Miser quickly pays for itself just based upon the increased recovery volumes that we can sell for pure margin, and the improved railcar throughput is a no brainer.”

“Two years ago when I was first asked if Corken could develop a solution for us to eliminate propane heels, how many units would I need? I said four, without even blinking. Today we’re getting ready to receive our next two Propane Misers”.

For more information on Corken’s Propane Miser, please contact saher@idexcorp.com

or visit: www.corken.com