

WORLD PIPELINES®

Volume 19 Number 10 - October 2019



DECKHAND—
From Rail Car to
the Right-Of-Way

DECKHAND® Pipe Handling System

By  LaValley Industries



CRC-EVANS®

CO-ORDINATION AND CONTROL IN CANADA

Cassandra Sundvall, LaValley Industries, USA, describes the introduction of a pipe handling attachment to securely grip pipe during lifting operations.

In 1984, Les Schultz founded Premay Pipeline Hauling, L.P. (Premay) in Edmonton, Alberta (Canada) as a pipe hauling company focused on stockpile work in pipe yards and transporting pipe to the right-of-way during stringing operations. With an estimated 840 000 km of transmission, gathering and distribution pipelines within Canada, Premay has been at the forefront of many of Canada's most successful pipeline construction projects over the past 35 years. When Paul Schultz took over from his father as Senior Vice President in 2003, he hoped to carry Premay's success into a new era by committing to a plan of continual operational improvement, while remaining true to the four core values that his father had woven into Premay's DNA: operational excellence, integrity, people focus, and safety.

Back to the start

For a good portion of Premay's early years, its crews handled pipe using cranes or side booms equipped with straps, chains, and end-hooks. Paul had been thinking about this pipe handling process for years with an eye towards making it more efficient and safer. "Deploying cranes for this work was always challenging because of the time and money involved in mobilising the equipment, not to mention the training and hiring of skilled operators. Also, working in Canada's harsh winter conditions made this a less than ideal way to do things," stated Schultz. With the goal of improving the process, Paul decided to introduce excavator-mounted vacuum lifts to his jobsites during the summer of 2006. Originally designed in 1999, vacuum lifts were designed to use a diesel motor powering a suction



Figure 1. Loading 48 in. pipe in Edson, Alberta



Figure 2. DECKHAND® unloading rail cars.



Figure 3. Wear pads protect coated pipe.

pump to create a seal between the attachment and the pipe, thereby allowing an operator to move pipe using an excavator. “Moving away from cranes and side booms to an excavator-mounted attachment was an important step for our company as it made the deployment of equipment and the training of operators much easier,” says Schultz. “However, I found that vacuum lifts just did not work very well for us in the winter. Our guys still needed to tarp the pipe or remove snow and ice by hand prior to lifting, and the diesel motors weren’t always wanting to start in the cold. The labour needed to perform these tasks was too much for what it was worth.” Because of these drawbacks, Premay would continue to use side booms and cranes during the winter months and then switch back to vacuum lifts during the summer.

A change in direction

This all changed for Schultz in 2010, when he first became aware of a new pipe handling attachment, DECKHAND® by LaValley Industries. DECKHAND is an attachment that is powered by an excavator’s auxiliary hydraulic circuit and uses a variety of interchangeable arms to securely grip the pipe during lifting operations. “When I first saw Deckhand, I thought it could really work well for us. Because it is a mechanical design that is powered by the excavator’s hydraulics, it didn’t appear to have any of the winter drawbacks of the vacuum lift. However, I wanted to see it in action for myself,” said Schultz. Schultz was able to arrange for a demonstration on a Premay jobsite on a cold, blustery, snowy day during the winter of 2010. Schultz was impressed with Deckhand’s ability to pick up and move snow-covered pipe. Furthermore, the design of the Deckhand gave his operator total control of the load without the need for taglines, whilst its load holding safety systems removed the possibility of accidentally dropping a pipe. “During the demonstration, I kept thinking that using Deckhand could lead to higher productivity with less manpower and improved safety, so I decided to rent my first Deckhands shortly afterwards,” says Schultz. Premay would continue using Deckhand during the winter on all their jobsites from 2010 - 2012. At the end of 2012, Schultz made the decision to switch from renting to purchasing, and acquired his first four Deckhands. “My rental experiences had made me a believer. Deckhand saved labour and prevented incidents. Fewer workers also meant fewer challenges. Instead of splitting time between vacuum lifts in the summer and cranes in the winter, along came Deckhand which was viable not only during the winter months but 365 days a year.”

An important part of Premay’s business is the loading and unloading of rail cars. Using cranes and side booms for this task had been challenging for Schultz, given the complexity of the process and the need for highly skilled operators. Deckhand alleviated this challenge by removing the need for cranes and end-hooks. The equipment’s total control design and camera system allow operators to confidently perform this task. “Even with Deckhand, loading and unloading rail cars requires careful attention to detail and a skilled operator. Out of my 25 operators, I have five who specialise and have been trained for this type of work,” states Schultz.

Schultz believes that Premay now benefits by being able to bring new operators on board with greater ease. Schultz credits LaValley Industries for being there from day one to assist Premay in training their operators on Deckhand. LaValley Industries’ Deckhand training and train-the-trainer programmes ensure that operators are

using the Deckhand properly and to its potential. “In the beginning, LaValley Founder and CEO, Jason LaValley was up here personally helping train our operators on Deckhand and working with our operators as they became confident in running the machine,” reveals Schultz. Premay now has four of the most experienced Deckhand operators in the world, who have gone on to be certified Deckhand trainers themselves. “Shad Clisby, Brad MacKay, and two others, who have been employed since 2011, are my evaluators/trainers and they tell me whether or not someone can properly run the machines. Brad MacKay was the first Premay team member to ever run the Deckhand. Now, we have probably successfully trained an additional 25 people through Premay to run Deckhands from British Columbia to Ontario,” said Schultz. Premay continues to ensure its operators have the most current operating training, and as of 6 May 2019 two of the top Premay trainers have been attending a Deckhand training course hosted by the International Union of Operating Engineers to continue their education, with the goal of keeping Premay’s operators and trainers at the forefront.

Taking Canada by storm

Beginning in 2010, Premay has pioneered the use of Deckhand in Canada and has in turn introduced it to other contractors and energy companies alike. Premay spent a large portion of 2013 working on the Inter Pipeline, Ltd (IPL) pipeline project which begins

north of Fort McMurray and runs down to the Heartland Petroleum Chemical complex in Strathcona County, Alberta. Premay used Deckhand exclusively to help complete 2700 km stockpiling and stringing 36 - 42 in. pipe, while introducing the equipment to Kiewit Construction Services, which had been awarded the general contract of the project. Premay also introduced Deckhand to TC Energy (formerly TransCanada) for use on its Keystone XL project. The proposed route for the 36 in. pipeline begins in Hardisty, Alberta and extends south into Steel City, Nebraska. Since 2010, the Canadian portion of the Keystone XL project has been under construction, with Premay performing pipe hauling duties using Deckhand. Stockpiling work continues, with 2019 activity having begun in May where six Deckhands were present to continue the job. In 2017, Schultz worked with LaValley Industries to introduce Deckhand to EVRAZ, where Premay operators demonstrated the Deckhand’s capabilities while loading and unloading rail cars. “In the beginning, many people did not understand the new Deckhand technology and were sceptical. In fact, every now and then I still have people ask me if it squishes pipe?” said Schultz. “Our introduction of Deckhand into the Canadian market has educated people, dispelled myths, and made it a necessity for many,” he continued. Premay lives by the motto: ‘If we say it, we do it,’ and the Deckhand has played an important part in helping the company keep its word.

The full fleet

The Deckhand model Schultz was originally introduced to was the DH4, which can handle pipe up to 24 in. in diameter. Premay has since grown its fleet to include the Deckhand L (DHL) and Deckhand XL (DHXL), which can handle pipe up to 56 in. In fact, Premay was the launch customer for the DHL, taking delivery of the initial four units in 2012. Premay currently owns 15 Deckhands, with 12 of them being the DHL model. “From 2015 through 2018 I have had at times as many as 17 - 20 Deckhands working on projects simultaneously,” observes Schultz. “LaValley Industries, along with its distributor CRC-Evans, has always been there with service and parts as needed.” Schultz remains impressed with how Steve Savard, a Deckhand Product Sales Specialist, has been one of his service contacts since the beginning. “If I have issues or problems, I contact Steve: he is my guy! He still comes up here and deals with us on a one-on-one basis.”

The Deckhand moves into 2019 as an ever-expanding product line. Deckhands are now used to move road mats, handle drill rod, perform tie-ins, and lift utility poles into position, amongst a variety of other uses. In early 2019, LaValley Industries unveiled its newest member of the Deckhand family – DHXS – targeted for use with smaller excavators with a lifting capacity of 10 000 lbs. Additionally, LaValley Industries’ TONGHAND® product has altered how HDD exit side work is performed, while garnering awards for best new product from the International Pipe Line & Offshore Contractors Association (IPLOCA), North American Society for Trenchless Technology (NASTT), and the Pipeline Industries Guild (PIG). “Premay and Paul Schultz have played a prominent role in the success of LaValley Industries. Paul Schultz’s early belief in the Deckhand and his use of our tool has paved the way for many others to use Deckhand in Canada. We are proud of the relationship we have built with Premay and look forward to the future,” states LaValley Industries CEO, Jason LaValley. 



Figure 4. Total control means no tag-lines.