



Vacuworx RC Series Innovation

The Global Leader in Innovative Lifting Solutions

Since 1999, Vacuworx has been engineering and manufacturing the highest quality heavy-duty lifting equipment for the pipeline industry.

We have built a reputation of trust, respect, and commitment by consistently providing top quality, innovative solutions to the unique needs of our customers.

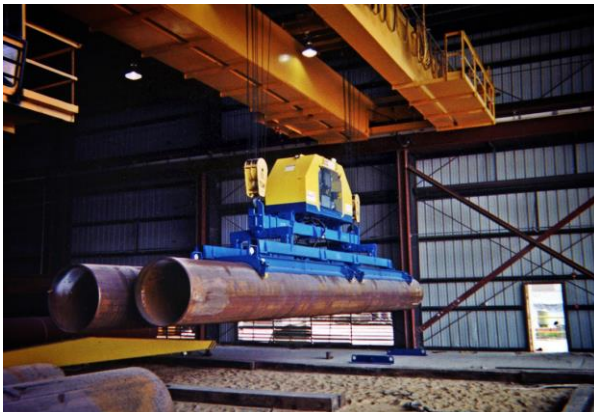
Vacuworx Lifting Systems can be customized for a wide range of applications and materials lifting 77,000 pounds. Standard models for field deployment have lift capacities up to 55,000 pounds.



Business Profile

The Global Leader in Innovative Lifting Solutions

As our customers diversify, we work with them to create new products, improved products and incorporate new technologies and new manufacturing methods to address the needs identified.



Inspired by a Passion for Safety

“For years we used cranes, front-end loaders. We have found that vacuum lifting is the safest and most efficient way to do it. It brings safety to the forefront. Vacuworx is synonymous with moving pipe. It is the best way to move pipe.” - Peter Thompson, owner of P.I.T Pipe

- Eliminates the need for unsafe and time-consuming lifting mechanisms such as hooks, slings or chains
- Less downtime between lifts
- No need for employees to climb on trailers to attach slings or chains
- Can lift material without displacing adjacent pieces
- Creates a powerful positive engagement with the load
- Reduces or eliminates the need for tag line operators on the ground
- Eliminates the need for costly cribbing or spacers for pipe and plate
- Visual and audio alarms indicate unsafe lifting environment

“

WE ARE IN THE BUSINESS
OF PROTECTING PEOPLE...
GETTING PEOPLE OUT
OF HARM'S WAY,
OUT OF PLACES THEY
SHOULDN'T BE.

– Bill Solomon

”

What do our Customers want?

We talked with key pipeline contractors and manufactures to find out what they wanted in the “next generation” of Vacuworx systems.

Our market-driven approach to product development places a high value on understanding the most important points of our customers.

Key Considerations

- Safe and versatile
- Faster and easier installation to host equipment
- Lighter components
- Longer lifespans
- Minimal maintenance requirements
- Quality working relationships with the manufactures of the equipment/Customer Service

"Given that productivity can suffer every time work has to unexpectedly pause or stop, the ability to steer clear of damage cannot be overstated."

– Barry Tindoll, P.I.T. Pipe

In 2020, Vacuworx engineered significant updates to its flagship RC Series Vacuum Lifting Systems. All changes are designed to maximize safety while minimizing downtime. In addition, innovative improvements make our lifters “smarter” than ever before by incorporating a Controller Area Network (CAN bus) system to provide real-time diagnostics and enhanced safety features.



CAN bus System

- Allows internal devices to communicate with each other without a host computer
- Digital dashboard gauge provides operation and diagnostic information such as error codes, oil and fuel levels, vacuum pressure level, number of lifts and engine hours
- Central logic controller increases safety by monitoring for faults and quickly diagnosing specific problems



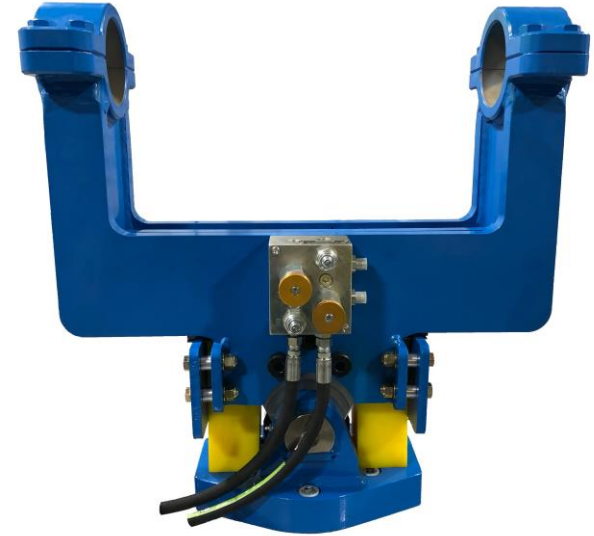
Virtual Circuitry

- Simplified wiring to electronic control unit with fewer components and no mechanical switches
- All circuits can be monitored and diagnosed
- No fuses to repair or replace (faults are reset electronically)
- Can identify incorrect repairs or environmental damage



Adapter

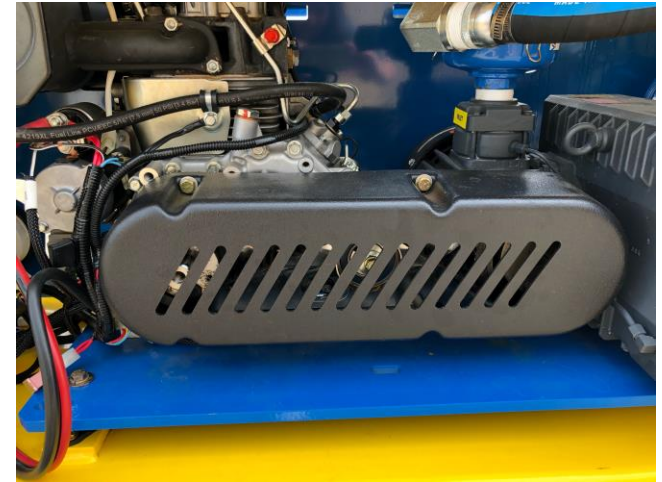
- Removeable top caps for faster and easier installation
- Flow control block for more accessible adjustment of hydraulics
- The part of the adapter that connects to the base plate on the lifter, referred to as the “tombstone,” is now replaceable rather than being welded on to minimize down time and cost of repairs



"There used to be a split coupler on top of the yoke. We used to have to line it all up and push the pin through from the side. On the ROW, that could be a lot of work, especially in steep mountains. Now all we have to do is pull the caps. That is where the improvements become especially advantageous, on steep ground or in mountainous terrain." — P.I.T. Pipe

Belt Drive

- Replaced traditional gear box
- Minimizes down time with longer service life and low/no maintenance required
- Environmentally friendly with no oil to replace
- Keeps engine bay temperatures cooler



“We tested out the belt drive in one of our load out positions to rail cars, one of our workhorse options. It removes love joy coupling failures and gear box failures, and we had no issues in the testing stage.” — Welspun

Additional Features

- Lifting system is altitude adjustable
- Green light on lifter indicates adequate vacuum pressure to the pad
- Wireless remote control with remote start
- Integrated legs for storage

“We are one of Vacuworx’s higher-use customers. We have met with field technicians, and the service manager and service technician came out to listen to what improvements we think they can make in their systems. Vacuworx has incorporated some of the suggestions we had made, and we can put so many hours on these machines in a short amount of time. That’s where it starts. We have built a better relationship.” — Welspun

Stats on Innovation Improvements

CAN bus Controller: with virtual circuitry

Time

- Minimum reduction of 4 labor hours per week
- Saves time in troubleshooting diagnoses itself to a degree and displays error codes

Maintenance

- Proper maintenance saves minimum of \$1,000 per month in unneeded repairs

Safety

- Higher safety factor and more efficient material handling resulting in minimum of \$100 savings in parts per day and 6 hours labor per day.

Adapter Time

- Labor savings of up to 4 hours per installation.
- Less damage to components from unneeded wear, saving up to \$500 each time the machine is attached.

Maintenance

- Replaceable parts savings of \$2,500 and labor savings of 4 hours each time the machine is used.
- Flow control block is now within easy reach and protects the expensive rotator from damage, resulting in downtime

Safety

- Much safer to fit up with all personnel close to the ground.
- Saves labor and possible injury.

Stats on Innovation Improvements

Belt Drive

Time

- Saves up to 4 hours labor and up to \$3,000 in parts.
- Doesn't need to be serviced as often
- Forecasting about 6000 hours on each belt, and only takes 10 minutes to replace instead of several hours to repair a gear box

Maintenance

- Saves labor each day and parts, maintenance is virtually zero

Safety

- Increase safe working environment toward eliminating all possible injuries.

Foldable Legs

Time

- Legs are always where the unit is, saves minimum 2 hours of labor each day.

Maintenance

- Saves up to \$1,500 in parts

Safety

- Increase safety in handling

Stats on Innovation Improvements

Wait... there's more!

- Utilizes telematics so that you can have a live report of the condition and location of each beam.
- Wirelessly controlled through a touch screen.
- New electronics are going to streamline assembly, maintenance and repairs.
- We can build units in a fraction of the time, utilizing more of our own labor and making more of our own parts!
- Meets or exceeds ANSI/ASME standards, section B30.20, ASME BTH-1 and AS 4991; CE compliant
- Currently on the market. Patents pending.

