



FOURSIGHT

ISSUE FOUR 2020

NEWS & INSIGHTS INTO THE WORLD OF CONTINENTAL

Hydraulics in action

► Weather the storm

Customer: NOAA Pacific Marine Environmental Laboratory (PMEL)

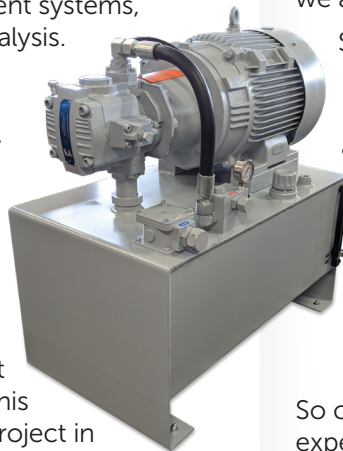
Application: Scientific Research, (this was for a NOAA research vessel)

Product: Vane pump, custom hydraulic unit



PMEL (Federal Lab) conducts research of the global ocean and its interactions with the earth, atmosphere, ecosystems, and climate. Controlling a fleet of vessels all around the globe, with a mission to **A)** observe, analyse and predict oceanic and atmospheric phenomena, **B)** lead the development and deployment of innovative technologies, **C)** identify and understand ocean-related issues, and **D)** inform society with well-documented science. Research areas include ocean acidification, tsunami detection, hydrothermal vent systems, oceanography, and long term climate analysis.

This unit was provided to power a winch that deploys and recovers a tow-able sensor behind the ship. There are already hydraulics on the ship that could've been used but the additional hydraulic plumbing, regulatory body inspections, etc. would've exceeded the budget and tight schedule. Fluid and Motion Control Technologies, LLC designed, manufactured and delivered a power unit using Continentals variable **PVX pump**. This pump was instrumental in bringing this project in under budget and on-time. With proper maintenance, this unit will yield decades of reliable service in harsh environments to those patriots involved in climate science.



Jeff Rosenwinkel - Systems Group Manager

► A powerhouse of ideas and innovations

I have a plaque on my office wall that says "Born to Golf, forced to work." My passion for golf, is also my passion for Power Units and working for Continental for over 42 years. How many different types of hydraulic systems can there possibly be? The challenge and variety of power units is what keeps me motivated day after day to "get R done".

When you're in the market for a hydraulic power unit give us a call. Our team at Continental has over 100 years of combined experience of sales, engineering, and assembly. When you need a high-quality system at a fair price and a quick delivery to finish your custom or OEM machine, our expertise is your only choice.

We are a can-do team. Between our complete standard line of HPU's and inventory and personable approach to system design we are the ones that get R done time after time.

"We ship over 50 power units per month"

Some highlights over the years include:

- Small wash-down stainless steel power units for the food and process industries.
- Large 5000 gal. stainless steel systems with water glycol for walking beam furnace - steel industry.
- Large high-speed multi-axis test equipment for the aerospace industry.
- Literally today we are building cutting edge hydraulics with industry 4.0 IO-Link components for predictive maintenance.

So call me: Jeff (Rosy) and let's make it a personal experience that will bring you back for more.

**Continental's
4 Pillars of Difference**

► Engineering Excellence

► People Who Care

► Application Know-How

► Easy To Do Business With

Turning innovative products into dynamic solutions for force and motion, hydraulics and electrical systems. ►

► Hot news but fire-resistant

Our **PVX** vane pumps now approved for **water glycol** to **2500 PSI!**



Water glycol fluids have proven to be an excellent fire-resistant hydraulic fluid option. This should open up new markets like food processing, steel manufacturing, automotive assembly or and other industry that typically use the water glycol fluids.

PVX: Our variable volume, pressure compensated design makes them an excellent choice for many industrial applications.

These field-proven, highly durable pumps provide long life and quite operation resulting from the use of heavy duty forged, one-piece rotors and hydrodynamic bearings and pressure balance side plates.

When ordering: use option Code "W" under Seals and "25" under Pressure Range.

PVX Vane Pump Key Features:

- Flow rates to 75 GPM on single pumps
- Pressures to 3000 PSI
- Low noise (to 67dBA at 3000PSI)
- Contamination and lubricity tolerant
- Multiple control options
 - Great suction characteristics
 - Great for applications with high speed proportional products



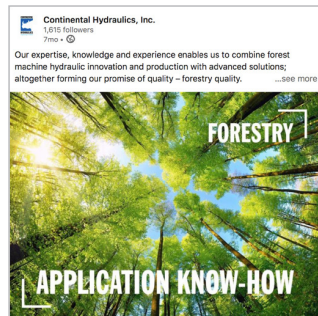
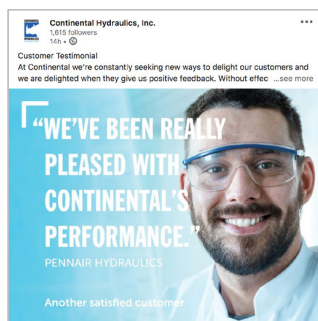
► Social impact

Power of LinkedIn

As engineers, we're wise to the impact social media is having on our sector especially in Covid times. That's why Continental set-out it's own LinkedIn marketing strategy back in 2019 to communicate the advances we are making.

With a strong visual identity, we are able to create powerful messaging that is relevant and consistent. Response has been amazing as we have further plans to inform and engage our audiences in the US and beyond.

[Go to our LinkedIn page here](#) and catch-up on the latest news!



► Feast on this

Food and Beverage Industry

Hydraulics are used for everything from manufacturing, packaging and delivery. Which include food-grade components to reduce the possibility of contamination. Delivery methods rely on more rugged hydraulic components which can withstand repeated and long-term use.

Food, beverages, and hydraulics all have one thing in common: the need for cleanliness. Contamination isn't an option, and that's why hydraulic components, such as hydraulic cylinders, can be manufactured out of stainless steel. And not only do these components need to be sanitary, they also need to be able to function under a wide variety of conditions, such as high temperatures, pressures, and speeds.

Along with food grade hydraulic components, pneumatics are also prominently featured within the food & beverage industry. Both hydraulic and pneumatic hoses and nozzles can be used to clean food manufacturing and processing equipment.



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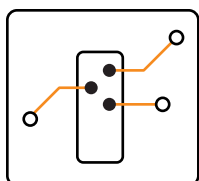
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INSIGHT

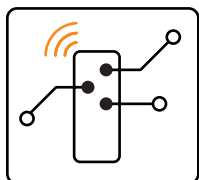


By adopting IO-Link communication, your organization can benefit from these five powerful advantages:



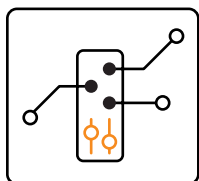
CONNECT

IO-Link devices are connected by **cost-effective**, standard cables with universal connectors to your components.



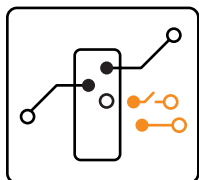
COMMUNICATE

IO-Link gives you access to operational and performance metrics for your devices. Smart components with IO-Link let you remotely access readings and see how well the component is doing. **Real-time diagnostics**, operators can be alerted in advance before it fails.



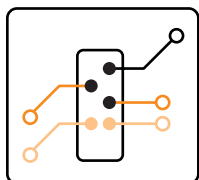
CONTROL

Remote configuration and monitoring allow you to dynamically control devices. Easily switch between device parameters to **speed up** product changeover.



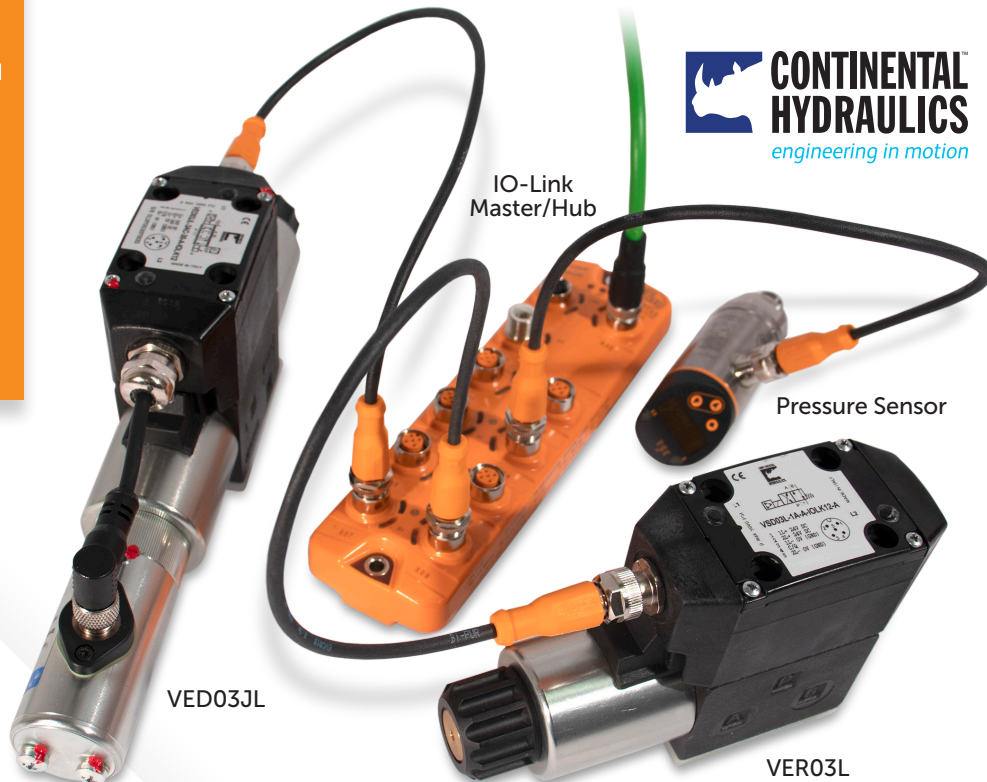
REPLACE

When you need to replace a component, simply swap it out with a new one and let IO-Link **automatically import prior settings**. Helps get your line back up and running as quickly as possible.



PREDICT

IO-Link anticipates problems before they escalate. Calculate equipment effectiveness, identify performance trends, and **optimize maintenance schedules**. Real-time data makes troubleshooting simple, and historical data predicts and prevents downtime.



► Are you talking to me?

As production demands increase, factories are turning to real-time data to make smarter decisions. What if your devices could tell you what they are doing, how well they are doing and instantly alert you to problems?

IO-Link solutions enable the integration of hydraulics valves, both **ON-OFF** and **Proportional**, in digital communication systems. IO-Link is not a communication bus, but a point-to-point digital communication protocol.

Also, by using IO-Link technology on the hydraulic power units, they become a dynamic system made "smarter" using the IO-Link protocol. Advantages which are derived from turning components into their smart and connected versions, a hydraulic power unit can now be used to manage the supply of power. A necessary condition to realize an authentic predictive maintenance.

Optimize your operations, get more from your devices, and make better, data-driven decisions with IO-Link solutions.