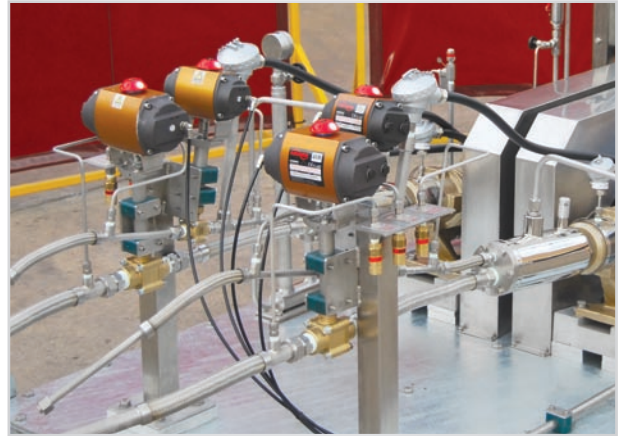


# Allows Remote Monitoring

With the recent shipment of its second dual reciprocating pump skid, Cryoquip-Australia enjoys the continued success of their advanced remote text messaging systems. Designed for Praxair Mexico, the system uses ACD's reciprocating WDPD model to pump liquid nitrogen from a vessel at 150 psig (10.5 barg) to a buffer cylinder at 3,000 psig (210 barg). Using pressure regulators, the stored nitrogen can then be used to supply gas to laser cutting machines at 300 to 500 psig.



With the integration of a Programmable Logic Controller (PLC), the unique pumping system is able to automatically start, stop, and switch pumps. The Short Message Service (SMS) text-enabled skid allows the client to monitor the system remotely—a significant advantage for un-manned pumping installations required at remote customer sites.

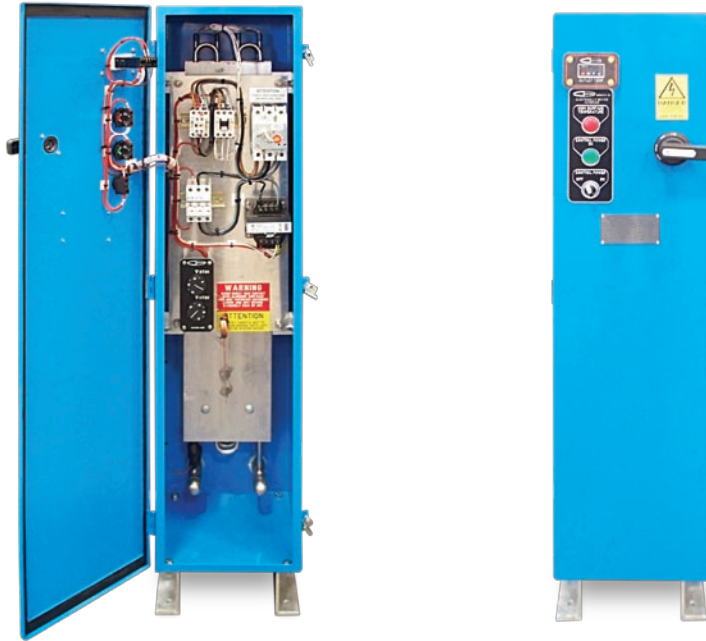
Modern PLC's are now fitted with various types of communication protocols, one of which is a GSM Modem. Depending on the type of SIM card used in the modem, the customer can either "dial into" the PLC to review the pump's operation or use SMS text messaging to review and alter the operation. If a pump trips or operates out of its desired

operating range, a descriptive message is sent to a technician who can often SMS a reply to correct the problem. Vessel level, pressure, and other pump operating information sent via SMS enables the technician to make accurate diagnostics before traveling to the site. Technicians can also wire additional instrumentation through to the PLC for monitoring and receive notifications prior to scheduled maintenance.

The dual WDPD skid is one of over 50 systems supplied by Cryoquip-Australia to companies throughout Southeast Asia, Australia, Taiwan, and the Middle East. Requiring only a bulk vessel to function as cylinder filling stations, these complete systems are ideal for small gas companies. Gases supplied using traditional cylinder packs are costly and inefficient, utilizing only about 75% of the gas. High pressure gas applications, such as laser cutting, spray metal applications, remote purge and pipe line testing, and large torpedo cylinder acoustic emission testing, can now benefit from Cryoquip's economic, efficient, and low maintenance pumping systems.



# Cryoquip Develops A New Series of Modular Electric Vaporizers



Developed as an economical alternative, Cryoquip's new VECX/VEBX Series of modular, cabinet-style electric vaporizers and gas heaters offers the reliability of the successful VEC and VEB Series without the heavier, larger footprint within a small electrical control cabinet.

The VECX/VEBX Series utilizes high quality, easily replaceable electric heating elements and stainless steel heat exchanger tubes suitable for all atmospheric hydrocarbon and

exotic gases. Heating elements and tubes are specially located in highly conductive aluminium modules to meet the specific demands of the process. The vaporizer's heat transfer is enhanced by using special internal spiral vanes which promote boiling and turbulence within the gas internally in the stainless tube. This also reduces fluid slugging and surging and controls pressure drop.

Designed for high or low pressure applications, the vaporizer units can be connected directly

into the gas supply line using external threaded or welded connections. When the gas discharge temperature falls below a pre-selected set point during operation, the temperature control system sends power to the heater rods which, in turn, evenly heat up the thermal block. The heat is then absorbed through the stainless steel tubes into the gas flow.

With a simple, reliable, and flexible control system, the VECX/VEBX Series can be left in "stand by" mode regardless of gas flow. This control system feature maintains the module at a pre-selected constant temperature which ensures that the vaporizer is ready to react immediately when the liquid cryogen or gas flow resumes.

The new electric vaporizers are pressure rated up to 690 bar and individual electrical components are CSA, UL, and IEC approved. Improved insulated panel enclosures provide dust and moisture protection, and the modular cabinet can be easily installed indoors or outdoors as a wall-mounted or free standing unit. Available in multiple voltages and flows, Cryoquip's VECX/VEBX Series ultimately allows customers to select the economical, modular vaporizing unit that best meets their needs.

## Cryoquip Celebrates Its 10th Year of Manufacturing in Europe

In July of 2000, Cryoquip Inc. ventured into the European cryogenic and industrial gas markets in the hopes of providing local customers with the benefits of lower prices, quicker deliveries, and the unique knowledge of local market needs.

The Cryoquip-Europe facility began as a small sales and manufacturing site in Southeast England. As the company flourished, it soon outgrew its 800 square meter (8,611 ft<sup>2</sup>) facility and transferred to

its current location in Kent, England in 2004. The new facility offered triple the amount of storage space, allowing Cryoquip-Europe to expand its manufacturing, repair, and testing capabilities.

What first started as a product line of ambient vaporizer and related products soon developed into an extensive product line, which now includes high pressure stainless lined vaporizers, piping modules, skids, forced draft vaporizers, and most recently,



the patented Uniflo vaporizers. Since the expansion, Cryoquip-Europe has continued to secure major supply contracts and has increased its sales five-fold.

