

OIL & GAS

DARTT

Dart Technologies (DARTT) has chosen Getac to provide ruggedised convertible notebooks to underpin its pressure testing product for oil and gas operations.

/ Challenge /

DARTT contributes to safer and more efficient operations in the oil and gas industry with its DARTT Recorder, a digital pressure testing tool that operates reliably in some of the world's harshest environments. The DARTT Recorder, while originally designed for the oil and gas industry, is equally applicable for water corporations, aviation, mining, pipeline, hydraulic and other industries.

Compliant, accurate, and reliable pressure testing is crucial for oil and gas operations to operate safely and efficiently. The Dart Technologies (DARTT) DARTT Recorder pressure testing solution was designed to be simple to use even in extremely harsh environments. DARTT's business model means there are lots of DARTT Recorders in locations around the world where any performance issues would be unacceptable. DARTT therefore needed a device that would operate reliably and safely even in extreme temperatures while under high frequency sensor data streaming loads, while remaining responsive to user touch screen gestures.

/ Solution /

DARTT uses the Getac V110 and V110 with ANSI/UL 121201, CSA C22.2 NO. 213 certification rugged convertible notebooks with 11.6-inch multi-touch display technology that makes them highly responsive to touch, press, and drag motions. Ideal for harsh environments, the V110 with ANSI/UL can be used in Class I, Division 2 Hazardous Locations. This enhanced enterprise security functions, making this powerful device ideal for use in oil and gas applications.

/ Benefit /

The Getac devices underpin the DARTT Recorder plug-and-play pressure testing solution, letting DARTT stand out from the crowd with a reliable, rugged solution that can cope with harsh environments. The DARTT Recorder is a military-specification, solid-state platform that eliminates the need for specialist personnel.

/ Quote /

"The Getac machines are high-spec and there are no issues or failures. They offer a very slick user experience, especially with the touchscreen. One of the biggest challenges for electronic equipment is extreme temperatures. The Getac machines have proven to operate perfectly in both extremely cold and extremely hot environments, which is unique in our experience."

Dave White, managing director, Dart Technologies.



Getac V110
Fully Rugged Convertible

/ Challenge /

Compliant, accurate, and reliable pressure testing is crucial for oil and gas operations to operate safely and efficiently. The Dart Technologies (DARTT) DARTT Recorder pressure testing solution was designed to be as simple to use as a chart recorder with the significant advantages of digitised data. The DARTT Recorder offers an intuitive user interface with a guided three-step workflow that simplifies pressure testing, removing the need for specialist personnel, saving on costs for users.

The DARTT Recorder operates in some of the world's harshest environments from sub-zero temperatures in Norway to hotter than 58 degrees Celsius in the Middle East. In fact, the V110 can operate in any temperature between -21 and 60 degrees Celsius. In most cases, these temperature extremes occur in wet, salty ocean conditions, with hazards such as the potential for gas in the atmosphere. This puts extreme demand on the hardware used for the DARTT Recorder.

DARTT had been using hardware from a vendor that proved difficult to work with. When a battery fault necessitated a recall, the burden fell entirely to DARTT to manage the process. This presented an unacceptable risk to DARTT, so the DARTT team determined that a different solution would be required.

DARTT's business model means there are lots of DARTT Recorders in locations around the world where any performance issues would be unacceptable. When the DARTT team began searching for a solution, it found the Getac team to be responsive and supportive from the start, even providing marketing materials to help DARTT update its own materials featuring the new hardware.

/ Solution /

DARTT chose the Getac convertible notebooks to underpin its DARTT Recorder solution because

of their high performance and reliability.

The success of the DARTT Recorder is highly dependent on performance. The software must be responsive and easy to use. The DARTT pressure testing application is unique in that the user interface utilises touch gestures that users find familiar from everyday applications such as maps on their smartphones. The DARTT Recorder charting screens allow for near-infinite touch gesture zooming, pinch, and panning to quickly focus on areas of interest during pressure testing troubleshooting operations. This is one of the features that separates the DARTT Recorder from less-sophisticated systems.

A demanding application meant DARTT required a machine that could stream a lot of data at a high rate, deliver a responsive touch screen, and include a high-performance processor.

The Getac machines are high-spec and there are no issues or failures. They offer a very slick user experience, especially with the touchscreen. One of the biggest challenges for electronic equipment is extreme temperatures. The Getac machines have proven to operate perfectly in both extremely cold and extremely hot environments, which is unique in DARTT's experience.

/ Benefit /

The Getac rugged notebooks are ideally suited to the harsh environments in which DARTT operates. Equally responsive in extreme cold and extreme heat, the machines also cope with ocean spray and salty air. The responsive touch screen makes these machines easy to use and their reliability contributes to the DARTT Recorder's return on investment for customers.

Its objective is to provide products to create safer and more efficient operations in the oil and gas industry. DARTT believes complex tasks can be simplified with ergonomic workflows, state-of-the-art equipment and concise presentation of data.

The directors of DARTT are experienced engineers active in the oil and gas industry specialising in subsea engineering, completions engineering and light well intervention. DARTT's founders' philosophy is to make tools for themselves which they required but were not available. DARTT products are born out of a real need and are developed with a passion for perfection.

/ Quote 2 /

"One of the critical components of a responsive, live-data streaming touchscreen user interface is high-performance hardware. The Getac systems are efficient and use well-engineered touchscreen hardware and drivers. The hardware maintains its high performance through a range of temperature environments from sub-zero to more than 58 degrees, an essential quality since DARTT's systems operate internationally from Northwest Australia (57 degrees) to Norway (sub-zero temperatures) and recently in Qatar in 58 degrees and very high humidity. Data processing time is also fast; the Getac machines are 15 per cent faster than the previous solution we used."

Dave White, managing director, Dart Technologies.



/ About Dart Technologies /

DART Technologies (DARTT) is an Australian specialist engineering company founded in 2009.

