



Hydrovision Ltd. Aberdeen, Scotland



A Hydrovision Ltd.
ROV Model



ROV Model Monitoring and Control by Hydrovision

“Through many ROV implementations with the ICONICS GENESIS32 software over several years, it has proven to be a highly reliable, accurate and dependable system.”

Hydrovision Ltd.

system running under a Windows operating system and meeting open standards like OPC. AlarmWorX™32, TrendWorX™32 and GraphWorX™32 modules met all their needs.

Key Features

The modularity of the GENESIS32 software allows the desired scalability of their complete control system on a scale of 4 to 1, which represents their largest machine to the simplest system configuration. The GENESIS32 software suite of applications operate seamlessly together, communicating solely via an OPC server which allows easy interface to any industry standard hardware and software systems. The software also has an intuitive development environment, which allows for speedy development and re-engineering by both experienced and new SCADA Engineers.

Project Summary

ICONICS GENESIS32’s GraphWorX32 software was used to create the Operator Interface HMI screen using multiple touch screen control panels for control of the ROV machine with a single main display to continuously present the system data. The sequential tasks that

About Hydrovision Ltd.

Hydrovision Ltd. is the world leader in the manufacturing of Remotely Operated Vehicles (ROVs). Hydrovision is a private limited company located in the heart of the UK and specializes in the design and manufacturing of sub-sea robotic systems. These systems need to meet extremely demanding standards of performance, control and endurance for the Underwater Salvage, Cable Laying and Offshore Oil drilling industries that deploy these ROVs.

ICONICS Software Deployed

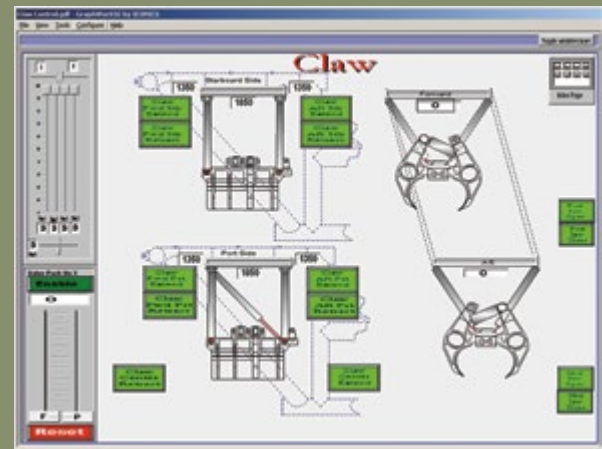
Hydrovision Ltd. selected ICONICS GENESIS™32 Software suite of SCADA and OPC products to meet their requirements for a new scalable control system for their ROVs, sub-sea tooling and other custom tooling applications. Their specifications required a PC-based

needed to be performed were created on separate individual HMI display screens, which are brought up to view using touch screen control buttons. Each sequential screen presents only the controls and feedback information required for each sequential task. This was achieved by creating a series of animated general assembly CAD drawings of the machine and sections of the tool to be controlled. Sensor feedback information from the tool was used to animate these drawings allowing the operator to continuously view the real time status of the tool and of each sequential task. Backup video cameras are also fitted to the machine to assist the operators and to enable them to observe the tool's operation. As the opera-

ing basis. The software system is based on a hardware and software platform that will continue to evolve and be supported for many years to come. Also, the nature of the control system implemented with the ICONICS GENESIS32 software allows Hydrovision Ltd. to train their customers to make their own modifications to the machines, in the case of using different tooling or in different use applications.



Another Hydrovision ROV Control Screen



ROV Claw Control

tors progress through the display screens to control the tool's functions, using the touch screen buttons, they will carry out the complete machine process operation.

Benefits of the System

The experience Hydrovision Ltd. has had with the ICONICS GENESIS32 software suite of tools is that they have exceeded their goal of creating an ROV control system that is totally open in design, maintainable for the foreseeable future, scalable from their smallest designed machine up to the most complex machine, easy to modify after implementation on an original manufactured machine, and initially economical/proven to be on an ongo-

Conclusion

ICONICS has worked closely with Hydrovision Ltd. to make this ROV Machine control project successful in every aspect. Hydrovision Ltd. participates in the ICONICS OEM Support and Maintenance program to keep its software updated and for access to technical support personnel as needed.