



## Windows application for **MANAGEMENT OF INTELLIGENT VALVE CONTROLLERS**

Prosys has developed several software systems for Metso Automation Inc., one of the world's largest automation companies. Metso's automation business line offers a wide range of flow control solutions, automation and information systems and applications as well as life cycle services for oil and gas, pulp and paper, energy and process industries.

Prosys has designed and developed ValveViewer, a Windows application for management of intelligent valve controllers, according to the requirements of Metso. The implementation is based on Delphi and Prosys Sentrol, a leading SDK (software development kit) for OPC client, server and application development. Other tools that have been used include ModelMaker for UML, FinalBuilder, InstallShield and CVS for version control.

During the active development phase, agile methods were used in a seamless joint-operation. Extensive testing was performed both at development lab and on-site to ensure integration with automation systems from different vendors. ValveViewer quickly achieved acceptance as a productive tool for professionals of field devices and instrumentation, and is used in numerous installations worldwide. The software is currently in maintenance and support phase, where small enhancements and updates are made according to customer needs.

ValveViewer is a Windows application for management of Neles ND9000F series of intelligent valve controllers (and thereby also valves) connected to FOUNDATION fieldbus. The software is used during all main life cycle phases: commissioning, operation and maintenance.

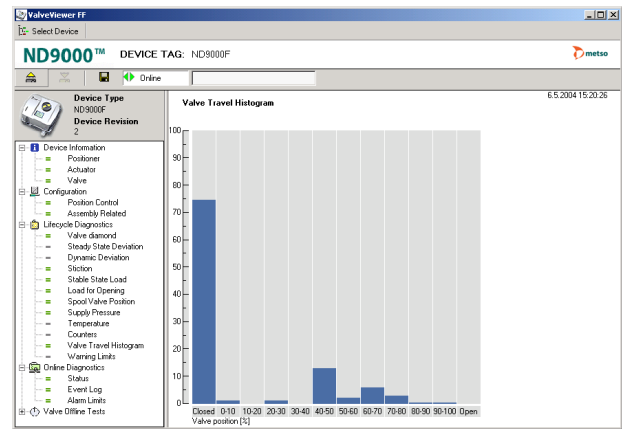
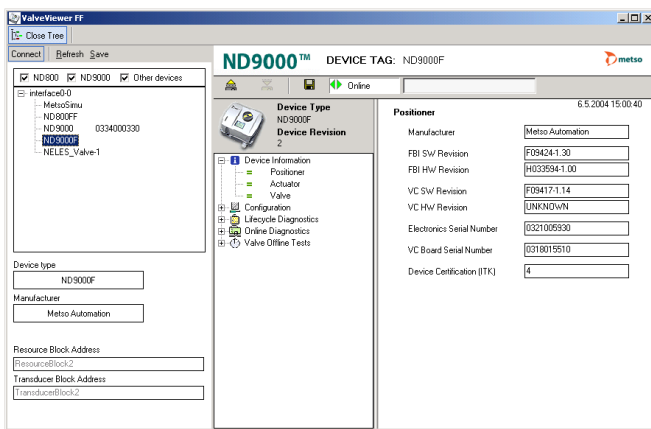


ValveViewer provides a graphical user interface for configuration, monitoring, calibration, diagnostics and testing purposes. Advanced features of the software are based on the Neles valve controllers' unique ability to store information from the valve's entire life cycle in its memory, from where valuable valve performance and predictive diagnostics data can be retrieved.

ValveViewer includes an OPC client which connects to different OPC servers and reads information from devices of ND9000F series. Upon startup, the software scans available devices from the factory network (available from the OPC server), shows the device list for the user for device selection and opens the diagnostic interface for the selected device. Alternatively, the application can be launched directly for a selected device, which enables smooth integration with other systems and significantly improves usability.

Using smart adaptive algorithms ValveViewer can use information from OPC servers of various FOUNDATION fieldbus compatible automation systems such as Metso, ABB, Emerson, Honeywell, Yokogawa and National Instruments. All things considered, ValveViewer offers a unique set of beneficial features to valve maintenance & engineering.

Figures show screen shots of the software in operation



“ Prosys has provided us software experts and tools with a long-term commitment. In our projects specification work is very important, yet it is difficult to get all requirements and details written in advance. This challenge was addressed by using agile methods, which produced good results. Another important factor was the demanding work required to achieve interoperability between different systems. Overall, I rate Prosys services as praiseworthy and professional.”

**Pasi Heikkinen**, Metso Automation Inc.

Prosys PMS Ltd  
 Tekniikantie 14  
 02150 Espoo, Finland  
 +358 9 420 9007  
 sales@prosys.fi