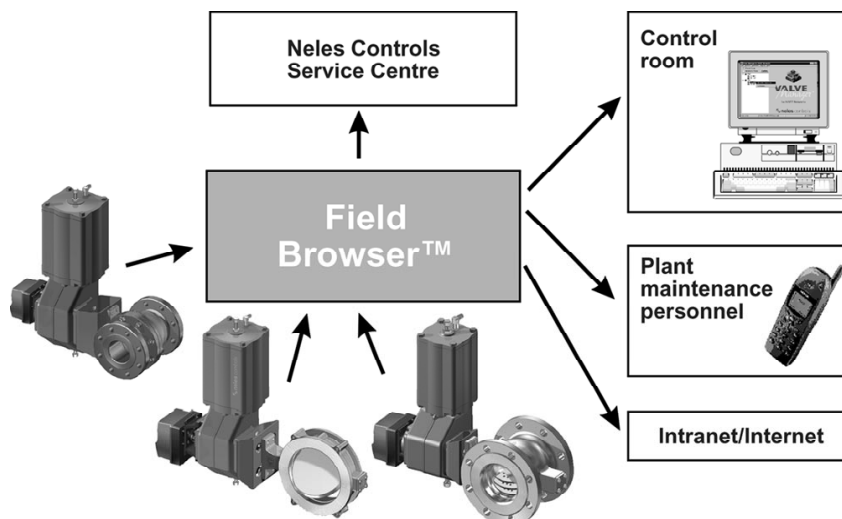


FIELD BROWSER™ SYSTEM FOR CONTROL VALVE MAINTENANCE



Earlier, when the communication between field device and automation system was just analog signals there were no possibility to acquire the field device diagnostics or operation information even if the device was 'smart'. Along with digital HART® communication the amount of data provided by a smart field device is increased tenfold. The operational information of a smart device such as Neles Controls ND800 series valve controller is valuable asset for overall factory operation; reduce maintenance costs and unnecessary process shutdowns with just-in-time maintenance, or increase plant throughput via increased control loop and valve operation knowledge.

To fully take advantage of the huge amounts of process and device-related data the ND800 can gather, Neles Controls offers a full range of software and service products.

SYSTEM PRODUCTS

Complete valve management and condition monitoring system consist of two software packages: Field Browser™ is a maintenance tool to continuously monitor the condition of valves. When Field Browser detects some exceptional event on the control valve maintenance staff of the factory is alerted and Valve Manager can be used to diagnose the situation. Valve Manager for HART Multiplexer Networks is an on-line engineering software to configure, diagnose and run tests on a valve via multiplexer. These actions are taken when the valves are installed, diagnosed for faults and repaired.

FIELD BROWSER FEATURES

The purpose of Field Browser is to free you from spot-checking the condition and performance of a control valve. Field Browser monitors continuously the devices and reads the diagnostics information from the control valves; travel deviation, actuator load, valve counters, etc. If something unexpected happens with the device, Field Browser will notify you.

- Automatic valve condition monitoring.
- Automatic valve diagnostics data reading and analysis.
- Automatic HART device alert monitoring for transmitters.
- Simple 3-level alert priority: OK - Check the device - Device Malfunction.
- Up to 992 devices under constant monitoring.

To help you to utilize Field Browser monitoring capabilities and ND800 self diagnostics features Neles Controls has decided to leave the alert user interface out. Install and forget Field Browser and the ND800 valve controllers. When a valve is about to fail or the performance is reduced, you will be automatically notified by e-mail or short message to your pager or mobile phone you can use your favorite Internet browser. To check at the status of all field devices. The status of nearly one thousand valves can be viewed within just a few seconds. Remotely or locally.

- Alerts via e-mail.
- Alerts for external software.
- Device status via Inter/Intranet.

The diagnostics data read from valves can be automatically sent everywhere in the world via E-mail attachment. Check the valve performance from the office, home or leave it to Neles Controls.

- Diagnostics data sending via e-mail.

ADDITIONAL VALVE MANAGER FEATURES FOR HART NETWORKS

Central Management of Control Valves

Neles Controls Valve Manager for HART Multiplexer Networks is a user-friendly and powerful tool to configure, diagnose and perform control valve calibrations and tests from a single workstation. Hazardous environments can be avoided because the valve diagnostics and configuration can be performed from a clean operator or maintenance room.

- Valve diagnostics data reading.
- Graphical diagnostics trends window.
- Diagnostics database.
- Valve configuration, configuration database.
- Valve testing, test result viewing, test database.
- Device variable monitoring.
- Remote configuration of control valve characteristics.
- Process & valve info database.
- 3 Security levels for users.
- Up to 992 valves can be connected on-line.
- Simultaneous operation with Field Browser.

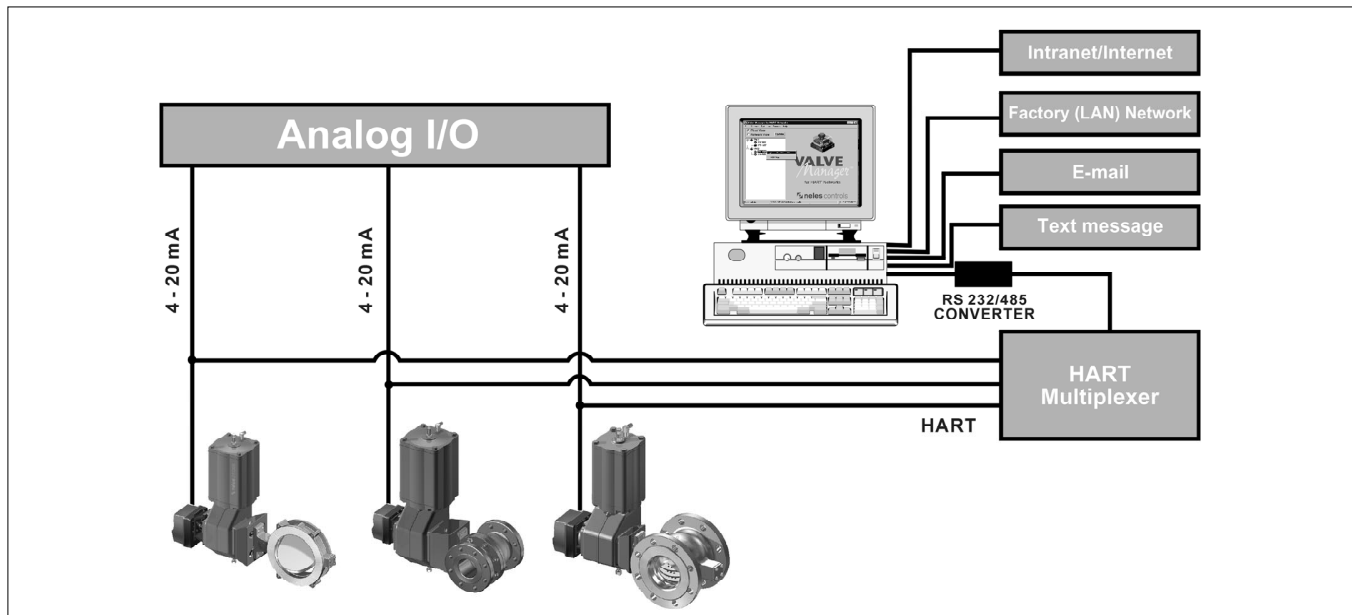
Benefits

- Save in valve maintenance costs.
- Maintain valves only when maintenance is needed.
- Identify valve performance problems before they start to effect your process.

SERVICES

Services related to our valve management and monitoring solutions are

- System Installation and Startup Services,
- Customer Training,
- Remote Valve Diagnostics,
- PID Control Loop Tuning.



REQUIREMENTS

For standalone workstation

- Neles Controls ND800-series valve controllers with unique HART tag name assigned to each device
- HART Multiplexer network; supported multiplexers are Arcom H-PORT, Fisher Rosemount HART Interchange Network Unit, Elcon Type1700 Multiplexer, Pepperl + Fuchs KFD2-HMM-16.1S. Maximum network size is 31 multiplexers with 32 devices in each multiplexer totaling 992 field devices per one serial port of PC.
- Standard RS232/485 converter with automatic handshaking capability, e.g. Westermo MA-44 or MA-44DC
- Microsoft Windows NT 4.0 workstation with at least 64MB RAM, 1 GB free disk space and a CD-ROM drive
- Separate HART network. No other software product can access the same network at the same time with Valve Manager or Field Browser. Separate HART network is required for other field devices if using e.g. Cornerstone from Applied Systems Technologies.

Additional requirements to the network system

- Local Area Network (LAN) connection with TCP/IP protocol
- SMTP Server configured. Field Browser can send alert mails and diagnostics data via standard Internet mail by using your factory SMTP server. To receive e-mails you should have a Lotus Notes or Internet mail address. In most countries there are E-mail -> pager or E-mail -> SMS routing services available by local telecom companies.
- WWW/HTTP server for Intranet connection. Field Browser writes pure HTML files that can be written in a user-specified directory. The directory can be simply shared to users or accessed via HTTP server; e.g. Microsoft Internet Information Server
- Internet browser, e.g. Microsoft Internet Explorer or Netscape, to view the device status HTTP page

HOW TO ORDER

FIELD BROWSER SYSTEM

HFB	B150	C	M2
1.	2.	3.	4.

1. sign	PRODUCT GROUP
HFB	Field Browser System for control valve maintenance utilising HART protocol.

2. sign	FIELD BROWSER SOFTWARE
N	No software.
B	Field Browser System configuration and monitoring software.
016 - 992	Quantity of licences for Field Browser connections. To be specified, min quantity is 16. Note. If 2. sign starts with B, quantity of licences must be specified. To update existing Field Browser for higher number of licences, just specify number of new licences without B.

3. sign	CONVERTERS
N	No converter.
C	RS-485/232 Converter, MA-44, 230/110 V AC.

4. sign	FIELD BROWSER HARDWARE
N	No hardware.
M1	16 channel HART Multiplexer (Pepperl+Fuchs) 24 V DC. Includes master unit (type KFD2-HMM-16), FI-Interface (type FI-DO-Y37023) and cable (type K-HM26, 26-pin flat cable for analogue connections). Can be used in intrinsically safe environment together with HART compatible isolators, recommendation is SMART Current/Voltage Repeater KFD2-SCD-Ex1.32 (Pepperl+Fuchs).
M2	32 channel HART Multiplexer (Pepperl+Fuchs) 24 V DC. Includes master unit (type KFD2-HMM-16), slave unit (type KFD0-HMS-16), 2 pieces of FI-Interface (type FI-DO-Y37023), 2 pieces of cable (type K-HM26, 26-pin flat cable for analogue connections), and 1 piece of cable (type K-HM14, 14-pin flat cable for master-slave connection). Can be used in intrinsically safe environment together with HART compatible isolators, recommendation is SMART Current/Voltage Repeater KFD2-SCD-Ex1.32 (Pepperl+Fuchs).
M3	32 channel HART Multiplexer, type H-Port (Arcom), 24 V DC.

VALVE MANAGER

HART	12	M	C	M1	N
1.	2.	3.	4.	5.	6.

1. sign	PRODUCT GROUP
HART	Software utilising HART protocol for communication with ND800 valve controller.

2. sign	VALVE MANAGER SOFTWARE
N	No software.
11	Valve Manager™ for HART Modems – software and modem with RS-232 interface for PC.
12	Valve Manager™ for HART Multiplexer Networks – software.
15	Valve Manager™ for Nelflow - software and modem with RS-232 interface for PC.
16	Configuration software for Nelflow, no diagnostics, monitoring or testing. Not needed if 2.sign is 15.
17	Valve Manager™ Viewer – software. Diagnostics database viewer to analyse databases transferred by e-mails or diskettes.
18	Update old Valve Manager™ to latest version of Valve Manager™ for HART Modems.
19	Update Valve Manager™ for HART Modems to Valve Manager™ for HART Multiplexer Networks.

3. sign	MODEMS
N	No modem.
M	Modem Kit: RS-232 Modem + Cable + User's Guide. Note: 2. sign 11 and 15 includes always one Modem Kit, 3.sign M is used to order additional modems.

4. sign	CONVERTERS
N	No converter.
C	RS-485/232 Converter, MA-44, 230/110 V AC.

5. sign	MULTIPLEXERS
N	No Multiplexer.
M1	16 channel HART Multiplexer (Pepperl+Fuchs) 24 V DC. Includes master unit (type KFD2-HMM-16), FI-Interface (type FI-DO-Y37023) and cable (type K-HM26, 26-pin flat cable for analogue connections). Can be used in intrinsically safe environment together with HART compatible isolators, recommendation is SMART Current/Voltage Repeater KFD2-SCD-Ex1.32 (Pepperl+Fuchs). 2. sign must be 12.
M2	32 channel HART Multiplexer (Pepperl+Fuchs) 24 V DC. Includes master unit (type KFD2-HMM-16), slave unit (type KFD0-HMS-16), 2 pieces of FI-Interface (type FI-DO-Y37023), 2 pieces of cable (type K-HM26, 26-pin flat cable for analogue connections), and 1 piece of cable (type K-HM14, 14-pin flat cable for master-slave connection). Can be used in intrinsically safe environment together with HART compatible isolators, recommendation is SMART Current/Voltage Repeater KFD2-SCD-Ex1.32 (Pepperl+Fuchs). 2.sign must be 12.
M3	32 channel HART Multiplexer, type H-Port (Arcom), 24 VDC. 2. sign must be 12.

6. sign	OTHER SOFTWARE
N	No other software.
41	ND800 communication for Fisher-Rosemount AMS-software.

If configuration support is needed, contact your local representative for quote.

Subject to change without prior notice.

INTERNATIONAL MANUFACTURING AND SALES LOCATIONS

UNITED STATES: Shrewsbury, Massachusetts. MEXICO: Chihuahua. BRAZIL: São José dos Campos.
FINLAND: Helsinki. FRANCE: Wittenheim. PEOPLE'S REPUBLIC OF CHINA: Shanghai.

Our products are available through Neles Controls sales offices in Australia, Austria, Belgium, Canada, Chile, Denmark, England, Germany, Indonesia, Italy, Japan, The Netherlands, Norway, Portugal, Russia, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, United Arab Emirates, Venezuela, as well as through a world-wide network of representatives.



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