NIVISION

PROCESS VISUALIZATION SYSTEM

30 YEARS

nivelco

3 YEARS WARRANTY

OUR PROFESSION IS YOUR LEVEL

SOFTWARE

GENERAL INFORMATION

NIVISION is a **VISION X9** based process visualization software which uses the XSDL (**E**xtensible **S**tructure **D**eclaration **L**anguage) programming and configuring language.
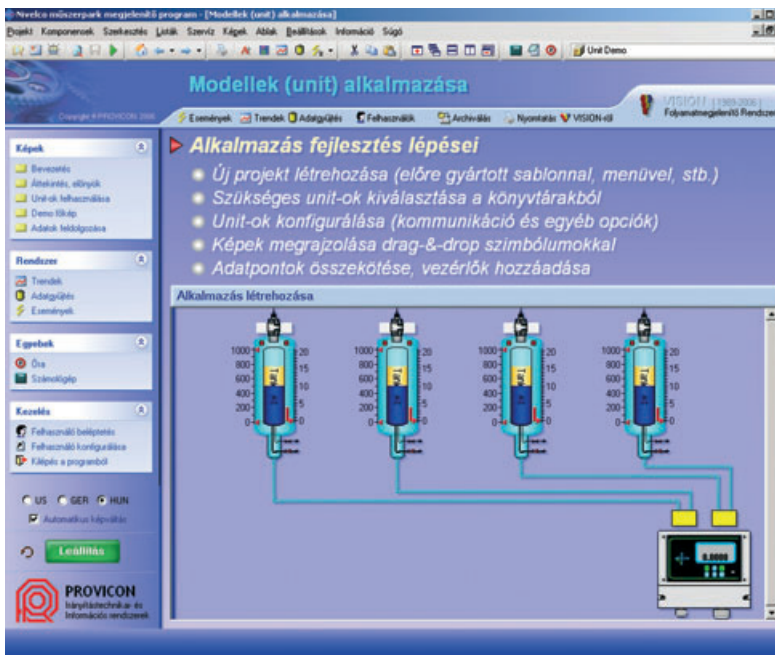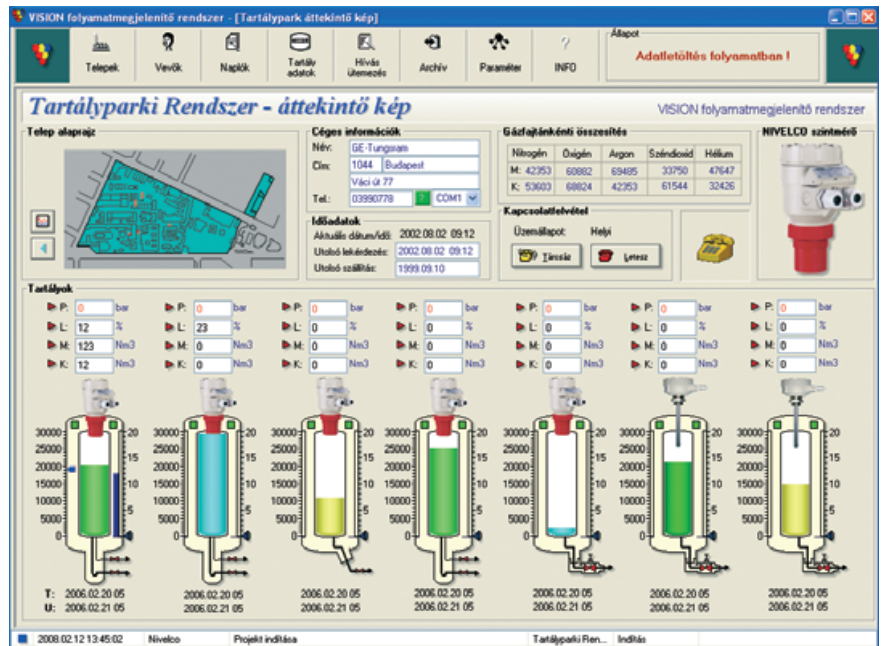
- Tank configuration
- Transmitter configuration
- Tankpark visualization
- Displaying of measured values
- Displaying of limit values
- Trend monitoring
- Data logging
- Database handling
- Archiving
- Other log functions (alarms)
- Remote connection (LAN or Internet)

Nivision can visualize a process control system built with **Nivelco** instruments on a PC.

The instruments can either be intelligent transmitters with analogue output or digital communication, or different switches based on different measuring principles. The tankpark layout with tanks, instrumentation and other process devices can easily be visualized. **NIVISION** offers a wide range of visualization elements of the measured and limit values, time based trends, databases and logs. Exporting and importing different database types is also a basic feature of the software. A clear and transparent overview of all processes involved in an application makes stock and material management a simple task with a well constructed **NIVISION** project. Another great feature of the software is that a **NIVISION** project can be visualized on a remote computer (with no **NIVISION** installed) through a local area network (LAN) or the Internet using an ordinary internet browser.

It is a perfect solution for small and medium sized process control systems where setting up a **SCADA** system is too expensive.
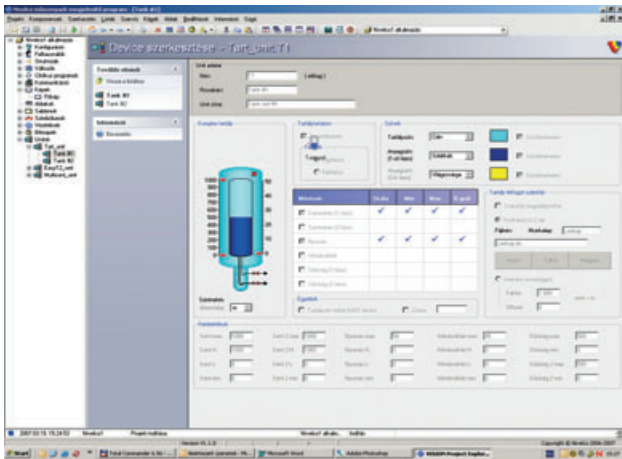
APPLICATION

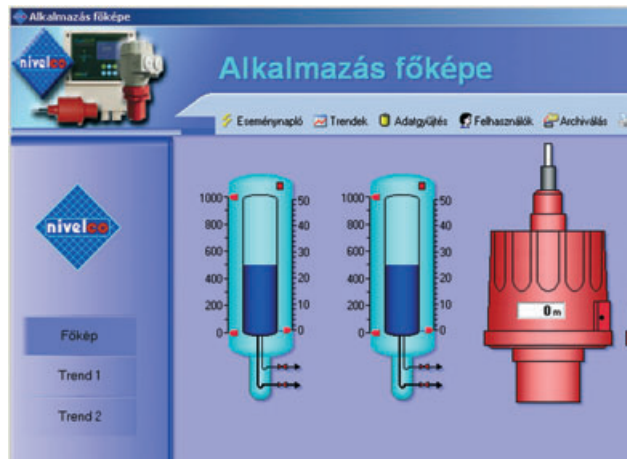The steps of customizing **NIVISION** to a specific application:

- The end-user draws the technological, operational and functional requirements of the application.
- Based on the customer's requirements the developer configures the visualization project in the **NIVISION** developer system graphically and makes the required programming. The developer system can only be accessed by the project developer.
- The finalized project can be executed by the end-user using the **NIVISION** runtime system.

The basic element of the software is the so called "**UNIT**" which contains the applied instrument (with graphical representation), the instrument's variables, event handling, communication and data display.

With the help of these units a complete process instrumentation system can be set up for visualization.
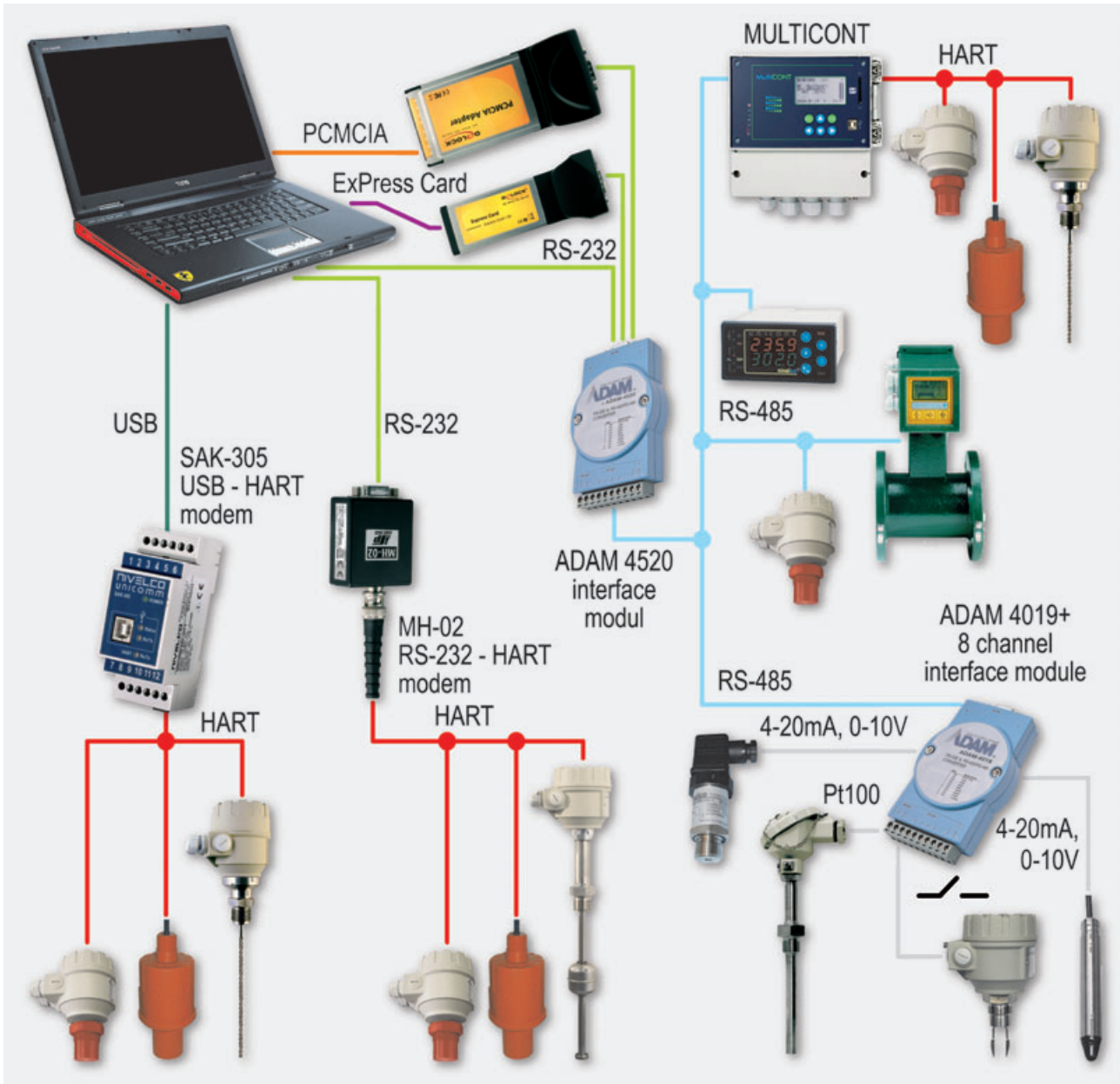
Tank unit configuration

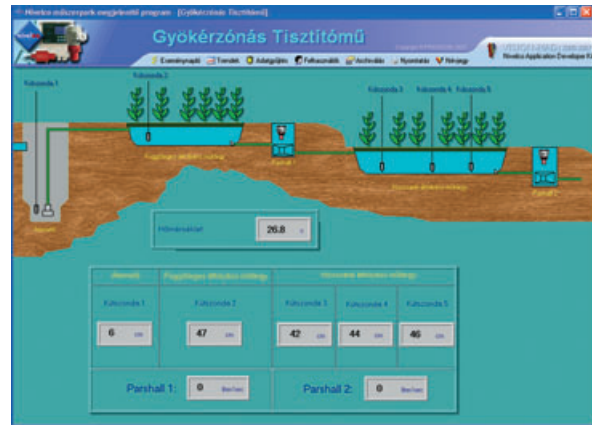Device unit configuration (EasyTREK)

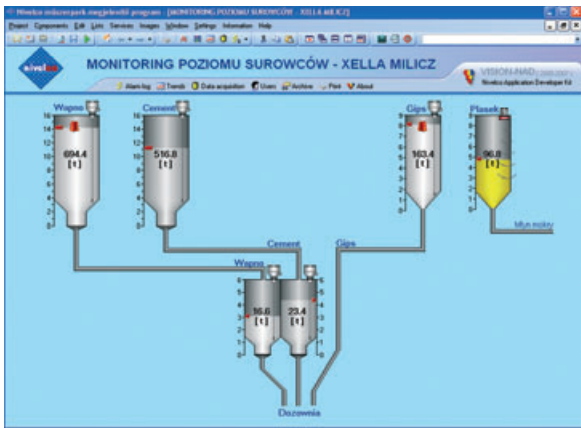## SYSTEM ARRANGEMENT WITH DIFFERENT COMMUNICATION PROTOCOLS

PCMCIA

ExPress Card
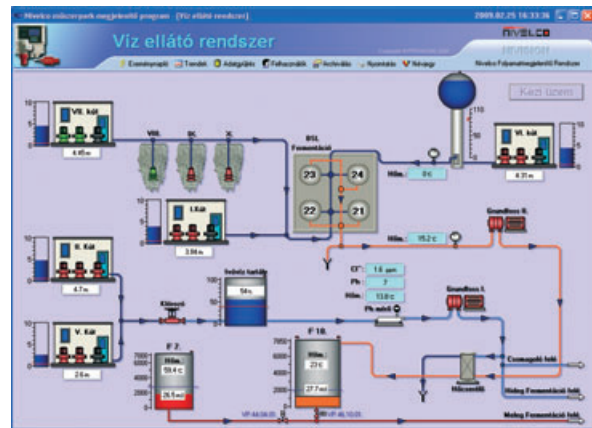
RS-232

MULTICONT

HART

USB

RS-232

SAK-305
USB - HART
modem

ADAM 4520
interface
modul

RS-485

MH-02
RS-232 - HART
modem

HART

HART

RS-485

ADAM 4019+
8 channel
interface module

4-20mA, 0-10V

Pt100

4-20mA,
0-10V

RUNTIME PROJECTS

Level measurement in oil tanks:
With **MicroTREK, MULTICONT** instruments, data logging, trend monitoring and database handling.
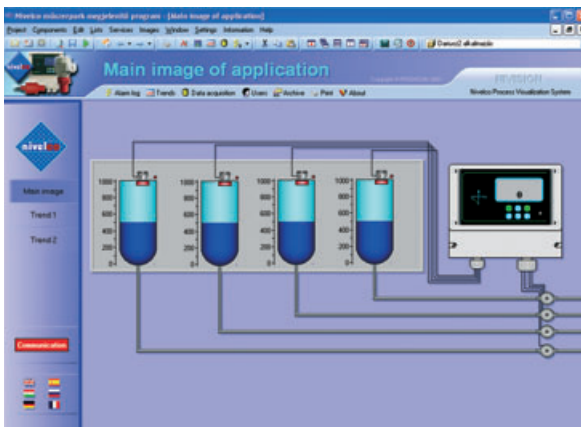

Water purifier system: Level measuring of water in reservoirs with **NIVOPRESS** bore-hole level transmitters, open channel flow measurement with **EchoTREK** transmitter and **Parshall flume**.

Cement plant
Level measurement with **MicroTREK** microwave and **EchoTREK** ultrasonic transmitters.
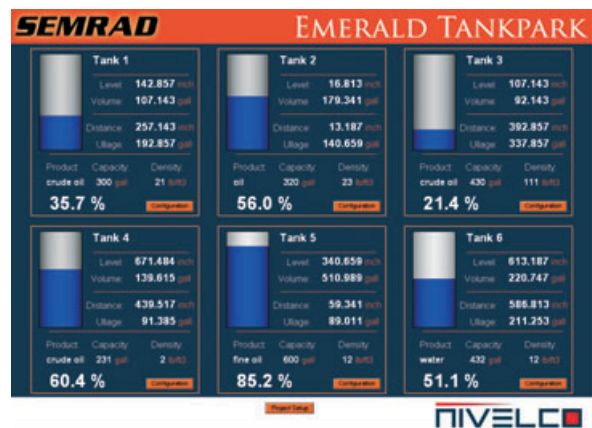

Water supply system: Level measurement of wells with **NIVOPRESS** bore-hole level transmitters and pressure transmitters, temperature measurement with **THERMOCONT** transmitters. Signal transmission is done by wireless transmission.

Level measurement of chemicals:
With **EchoTREK** ultrasonic level transmitters and **MULTICONT** process controller.

Tankpark visualization: Level measurement of oil and water tanks with **MicroTREK** level transmitters and **MULTICONT** controllers at different locations using Internet connection.

System requirements:
- *PC or Notebook with RS232, USB or PCMCIA port*
- *Appropriate communication interface*
- *Microsoft Windows XP Professional*
- *Microsoft Office*
- *Winzip*
- *5 Gb free harddisk space*

Multifunctional devices

	Tank	
	MULTICONT	(RS485)
	UNICONT PM	(RS485, 4-20 mA)
	UNICONT PD	(HART, 4-20 mA)

Intelligent transmitters

	EchoTREK 2 and 4-wire	(HART, 4-20 mA, RS485)
	EasyTREK 2 and 4-wire	(HART, 4-20 mA)
	NIVOTRACK	(HART, 4-20 mA)
	MicroTREK	(HART, 4-20 mA)
	PILOTREK	(HART, 4-20 mA)
	NIVOCAP	(HART, 4-20 mA)
	NIVOPRESS N	(HART, 4-20 mA)
	NIVOPRESS D	(HART, 4-20 mA)
	ISOMAG	(RS485, 4-20 mA)
	THERMOCONT	(HART, 4-20 mA)

Analogue transmitters

	NIVOPRESS N	(4-20 mA, 0-10 V)
	NIVOPRESS D	(4-20 mA, 0-10 V)
	NIPRESS	(4-20 mA, 0-10 V)

Switches, sensors

	NIVOFLOAT	(switch)
	NIVOCONT K	(switch)
	NIVOROTA	(switch)
	NIVOCONT R	(switch)
	NIVOMAG	(switch)
	NIVOPOINT	(switch)
	NIVOSWITCH	(switch)
	UNICONT PK	(switch)
	Thermocont TS	(Pt100)

www.nivelco.com