

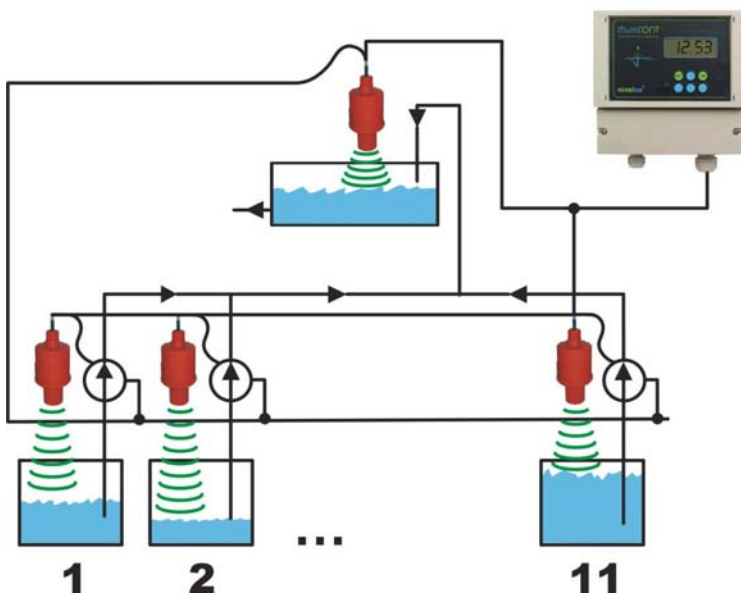
NIVELCO APPLICATION NEWS

NIVELCO INSTRUMENTATION AT THE RENAULT FACTORY IN ROMANIA

Dacia-Renault plant launched an environment conservation project to clean oil-contaminated waters to show their dedication towards the environment and populace. The oil-contaminated water, resulting from washing car chassis, is pumped to a cleaning and separating system, in which the oil separated from the water is stored in appropriate containers to achieve 100% environment protection. The process is controlled by an automated system, managing the storage of the contaminated water, and the transportation of it to the separator tanks with the help of pumps. The separator tank's capacity is limited, so secure filling of it is controlled by a level transmitter. The outstanding price/performance ratio of NIVELCO level transmitters, not mentioning the 30 month warranty, made the customer choose NIVELCO for the installation of the system. To control the pumps NIVELCO's EasyTREK programmable ultrasonic level transmitter featuring HART protocol was recommended. Due to the special conditions, the model with IP 68 ingress protection was chosen. The diagram below shows the design of the automation block.



Contaminated water is collected in tanks 1...11. When the maximum level is reached the level transmitter starts the local pump, but only if this is authorized by sensor of the separating tank.



In case of high fail safe indication, the transmitter records the last true measured value and keeps the pump working. The pumps of the full tanks start emptying when authorized by the level transmitter of the separator tank. When the programmed low level is reached, the level transmitter stops the appropriate pumps. The MULTICONT, with HART protocol, allows the user to program the level meters the same time as making online measurements.

The company decided to use star-topology for connecting the devices. The system has been working outstandingly for over a year, serving the protection of the environment.

