

BETTER RISK MANAGEMENT

Asset management technology aids Hydro Agri's explosion-risk program.

A NEW asset management technology is being utilized by Hydro Agri at an ammonia plant in Porsgrunn, Norway. The system automatically documents the condition of field instrumentation as a part of the company's explosion risk safety program.

New Asset Management Solutions (AMS) software, loaded into a PC, captures information from the control network regarding the condition of Hart or Foundation Fieldbus devices. When integrated into a single database, organized, and processed, this field-based data can be used in many ways by control engineers and maintenance personnel.

Technicians sitting at a PC in the instrument shop can then examine the condition of 50 instruments in explosion-risk areas of the Hydro Agri plant to verify whether any change has occurred since the devices were configured. The current configuration of any instrument can be compared to "as built" information on that instrument stored in the database. If an instrument must be removed, its replacement can be configured very quickly by downloading the configuration specifications from the database right into the new device.

Hans Jørgen Vinje, Hydro Agri senior engineer, says, "We also have documented nearly 100 Fisher valves with Fieldvue DVC digital valve controllers, based on Hart 4-20 mA communication."



At left, the Hydro Agri complex. Above, an employee works the AMS software program.



Improved Maintenance

In addition to documenting maintenance information automatically and making online diagnostics possible, AMS makes maintenance more efficient by:

- Streamlining such tasks as loop checkout and tuning, instrument configuration, and calibration.
- Monitoring the condition of devices connected to the system, and providing a "status alert" warning when the operating characteristics of any device exceed limits.
- Troubleshooting field devices

by examining their condition from the safety and convenience of the maintenance shop.

The AMS is being used globally. For example, a chlorinated solvents plant in France uses AMS to monitor all field instrumentation as part of a predictive maintenance program. 