Novo Nordisk

Novo Nordisk Invest in DeltaV and FOUNDATION Fieldbus.

In connection with two different projects at Novo Nordisk in Bagsværd, Denmark, Novo Nordisk decided to install the DeltaV control system from Fisher-Rosemount. Furthermore, the second installation of these two projects is based on FOUNDATION Fieldbus which makes it the biggest FOUNDATION Fieldbus installation in Scandinavia up to the present. In order to meet the requirements which projects of this scale demand, Fisher-Rosemount has decided to extend the solutions group in Denmark.

The first of these projects includes automation of a pilot plant for fermentation of enzymes. The installation includes 10 fermentation units complete with instrumentation. A number of digester units have already been put into service. The project is expected to be completed in year 2001 and will include approximately 4000 I/O points distributed among 35 controllers. The control system includes an interface for the recipe database in the plant's MES system which supports the intensive efforts in developing recipes at the plant. The facilities of the batch history in DeltaV (PI from Oil Systems Inc., OSI) are used to show data outside the DeltaV system. The openness was an important element in selecting the DeltaV control system and the project has taken advantage of this element to a great extent. Two project engineers from Fisher-Rosemount have been part of the Novo Nordisk Engineering Project Team.

In the second project, which is a pilot plant installation for Novo Nordisk's Health Care Business, Fisher-Rosemount is also contributing project experience and assisting especially with the construction of the Fieldbus Foundation installation. This installation will produce medicine for many pharmaceutical products, primarily insulin. The size of the DeltaV control system will reach a total of 3300 I/O points and it is prepared for integration with the datalogging system (OSI/PI). However, the most interesting element of this project might be that Novo Nordisk has chosen to base the complete installation on FOUNDATION Fieldbus which means installation of more than 100 Fieldbus Foundation devices delivered by Fisher-Rosemount and other suppliers.

Novo Nordisk and Fisher-Rosemount both expect a number of new and interesting advantages in connection with FOUNDATION fieldbus including considerable savings in installation and start-up costs, and savings during operation from using the facilities which the instrumentation offers to employees in the maintenance department. Changes to the installation have already taken place in the construction phase as the new technology has extended the communication between the project engineers from the instrumentation and the control system department in order to obtain a more efficient co-ordination of design specifications.