

MAJOR DRIVES PROJECT FOR BULGARIAN ANTIBIOTIC PLANT

A total of 40 variable-speed AC drives from Control Techniques have been integrated into a second fermentation area at the Biovet plant in Peshtera, Bulgaria.

This is the result of close co-operation with fellow Emerson Company, Emerson Process Management, who won the order to provide PlantWeb digital plant architecture at the plant. PlantWeb with its DeltaV™ digital automation system and modular Unidrive SP drives has significantly increased stability and reliability, giving an improvement in operational performance of the fermentation process by 30%. Improved control has resulted in a saving of 10% in human resource costs.

Biovet is one of Bulgaria's largest pharmaceutical companies and a specialist manufacturer of antibiotic feed additives and pharmaceuticals for farm animals and pets. The batch fermentation process, which incorporates some 30 vessels

with cycle times varying from one to three weeks, is part of the process of manufacturing well-known products including Monensin-USP, Tiamulin-USP, TYlosin Base, Tylosin Phosphate, Tylosin Tartrate and others. The Control Techniques drives, varying between 100 and 160 kW, control the agitators in the vessels.

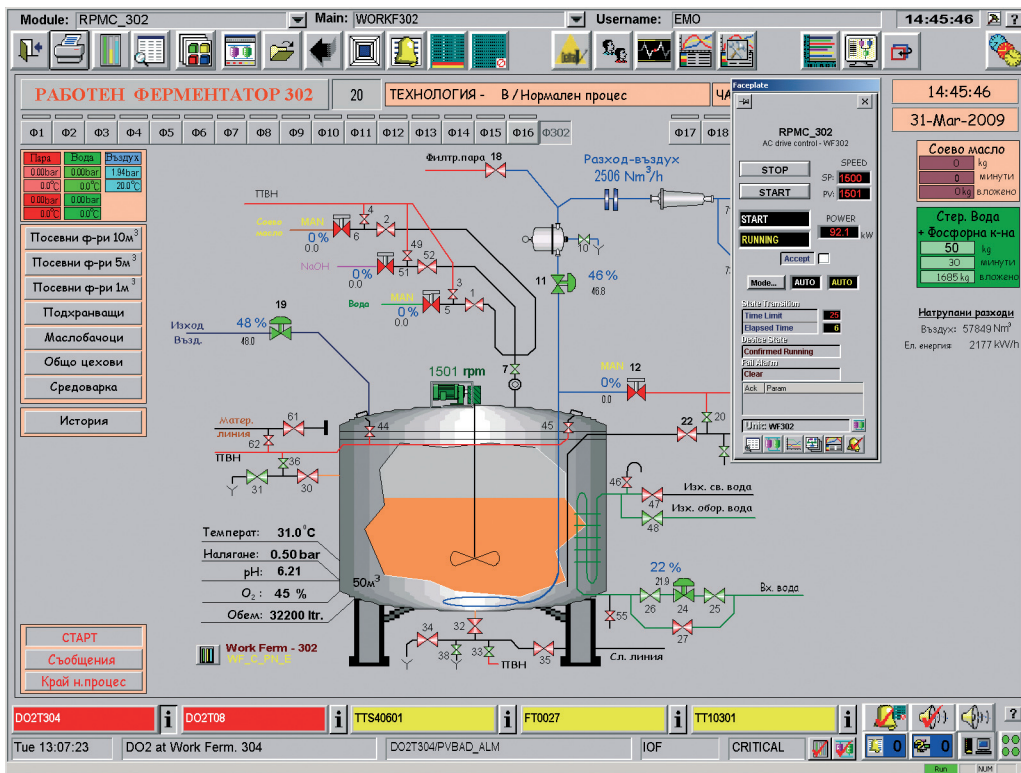
"It is crucial that the agitation process, which adds oxygen to the mixture, does not stop," says Borislav Mladenov, Manager for Emerson Process Management in Bulgaria. "There is a very narrow window and after that the product is scrap," he says. "Biovet were happy to use drives from an Emerson company because of their confidence in the group and the high level of support that we have been able to provide throughout the development process."

The modular nature of the Unidrive SPM's power circuits help with fitting into non-standard enclosures, yet provide the full standard and optional features of the well-proven and popular Unidrive SP range, and are integrated using the same software tools for commissioning and programming. The Unidrive SPM



KEY BENEFITS

- 30% IMPROVED OPERATION PERFORMANCE FOR FERMENTATION PROCESS
- 10% HUMAN RESOURCE COST SAVING DUE TO CENTRALISED CONTROL
- SIGNIFICANTLY INCREASED STABILITY AND RELIABILITY
- HIGH LEVEL SUPPORT IN DEVELOPMENT PROCESS



of the field devices to enable configuration, calibration and diagnostic tests to be performed. The automated nature of the plant contributes to Biovet's aim to manufacture high quality products at low manufacturing costs.

The stability of the new system is outstanding and Biovet has not experienced a single incident that has damaged production or equipment. Local support is provided by the Emerson office in Bulgaria, reinforced by technical centres in Switzerland and the UK when required.

Control Techniques is part of Emerson Industrial Automation

is extremely versatile, configurable into open and closed loop modes, paralleled and load sharing, with active input and regeneration, in multi-pulse configuration (12, 18, 24 etc.) or fitted on a common bus for circulation of energy between drives. A wide range of modules give additional functionality, communications or connectivity with feedback devices.

In this instance, the drives were fitted with modules to provide communication with the DeltaV controllers via Profibus DP. The drives were also configured to ensure that, should the drive approach overload levels, rather than trip out, it would back-off to below the motor-rated current, set to 90% of the motor current trip limit. This eliminates unnecessary down-time and ensures that the stirring process continues uninterrupted.

The drives were installed by Biovet's in-house electrical team who were trained on site by Control Techniques in conjunction with Control Techniques' local distributor, BLS Automation.

Emerson Process Management's scheme at Production Unit 3 uses seven DeltaV workstations, communicating with 450 field instruments via the Foundation fieldbus protocol as well as with the drives via Profibus DP. AMST[™] Suite intelligent device manager software accesses the predictive intelligence

and has a worldwide network of drive centres and distributors to provide localised support wherever their drives may be installed.



For further information please visit www.controltechniques.com



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