

A detailed view of a large industrial printing machine. A roll of printed material with various colorful patterns is being processed. The machine features a control panel with several black knobs and buttons. The overall scene is industrial and technical.

**CONTROL
TECHNIQUES**

IMPROVED CONTROL & 50% ENERGY CUT

PANTEC ENGINEERING AG | PRINTING

DRIVE OBSESSED

IMPROVED EFFECTIVENESS AND 97% MORE EFFICIENT

Pantec Engineering AG, a high-end system designer, provides electronics solutions for the printing industry. In collaboration with Control Techniques' engineers, the company has launched a highly innovative controller for UV-drying and curing applications (UVC).

The Challenge

Pantec sought to improve the efficiency and effectiveness of ultra-violet drying and curing systems widely used in the printing and manufacturing industries.

Machine printing and production speeds are limited by the UV curing rate, so improvements in the accuracy of control of the UV curing system can have major effects on the overall output. The company's vision was to use a standard drive platform merging cost-effectiveness and the reliability of a proven technology.

Having worked closely with the Control Techniques for several years, Pantec Engineering had experienced the Unidrive SP range's versatility, which met most of the UV-application's requirements – voltage, current and frequency control, communication with all industry-standard networks, as well as having powerful on-board processing capabilities.

The Solution

To meet the UV-application's requirements on the Unidrive SP, Control Techniques developed a special program to support Pantec with the integration.

Pantec used Unidrive SP drives for their feasibility study where they quickly achieved the required ignition times for the UV-lamps.

"From the beginning we were inspired by the scalability of the UVC series, their reliability and their power effectiveness," said Stefan Richartz, Sales & Marketing Manager of Uvitermo AG. "Using the Pantec UVC based on Unidrive SP-platform is a huge success, putting us up amongst the world's market leaders."

Overview

- Up to 50% energy saving
- Reduced operating costs
- Excellent connectivity

The Benefit

The system offers major benefits to both UV-system supplier and their customers. Projects can be more competitively priced as separate PLC control of each head is not needed since the programming is carried out in each Unidrive SP's application module.

As well as improving effectiveness and being 97% efficient, with better, more accurate lamp switching, ease of connection to the end user's fieldbus network and meeting all international standards for safety and quality, the new control system is producing significant energy savings that can be as much as 50% compared with previous methods of control. On an 8-head system, this saving can translate to 40kW, meaning lower operating costs and higher profits.

