
CONTROL TECHNIQUES
DRIVES CUT OPERATING COSTS
SCIERIE ZAHND SA | WOOD WORKING
DRIVE OBSESSED

LOWERED COSTS & DOUBLED OUTPUTS

Swiss sawmill, Scierie Zahnd SA, underwent a major upgrade, which included installing 1.2 MW of AC drives from Control Techniques to increase line speed and output.

Overview

- **Increased line speed and production**
- **Lower costs**
- **Excellent support**

The Challenge

To be able to compete in a very aggressive European marketplace, **Scierie Zahnd SA needed to significantly increase their timber output** without experiencing a corresponding rise in energy consumption & operating costs.

> *"We investigated a number of drives before embarking on this project. In all the tests,* ***Control Techniques drives gave the best performance and we have been very pleased with the support from their Drive Centre in Zurich.*** *We have a good relationship with them and have now standardised on Control Techniques products across the plant."*
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> **Scierie Zahnds** | Technical Manager

The Solution

A substantial reorganisation of the drives for the saws and milling cutters over a total of seven DC buses, each with just one breaker per group, shared feed, lower operating temperatures in the cubicles (with less braking capacity being used) and a saving in power consumption was carried out.

Four Unidrive SPM large module drives, rated at 160 kW each were used to drive the 1800 rpm milling cutters, two pairs of which mill the logs from a circular shape to square profile, prior to them going through the circular saws. The Unidrive SPM units are on four separate buses, each with a power supply, rectification, RFI suppression and braking resistors, with 15 smaller Unidrive SP drives arranged on three further DC buses in open-loop mode ranging from 5.5 to 30 kW.

The Unidrive SPM range of IP20 input and output modules enable the creation of a comprehensive range of power systems. Encompassing the range from 90 kW to 1.5MW, the units are extremely compact and are designed for interconnection on a common DC bus supply to reduce running costs by regenerating braking energy to the AC mains and to circulate energy between drives to provide efficient motor-to-motor braking.

The Benefit

The plant's output doubled to 200,000 cu metres of cut timber for approximately the same operating costs, meaning that the electrical power consumption per cubic metre of cut timber was almost halved.