

Low-cost computing for manufacturing

European sawmill sharpens their IT systems

Challenge

Keep the Pollmeier sawmill's state-of-the-art production running where industrial computers have failed because of the brutal operating conditions.

Solution

Install NComputing L-series virtual desktops to increase dependability and reduce maintenance costs.

Impact

Reduced costs and downtime that is caused by the constant upkeep of traditional industrial computers.

Based in Creuzburg, Germany, Pollmeier is the global market leader in high-quality beech lumber. Customers in 60 countries purchase over 500,000 cubic meters of Pollmeier lumber annually. The lumber is processed at state-of-the-art sawmills that use cutting-edge systems and technology. Computers are used in the facility for machinery monitoring, quality assurance, process visualization, and access to SAP software.



Pollmeier's state-of-the-art sawmill.

A harsh environment

Even though the factory is high-tech, the operating conditions are brutal.

Sawdust jams up disk drives and fans. And the movement of timber and heavy machinery creates continuous vibrations that dramatically shorten computer life. The factory also has large temperature swings as the lumber moves through the production line. The factory temperature can range from 0° to 45° Celsius (32° to 113° Fahrenheit).

Initially Pollmeier tried industrial-grade PCs. The industrial PCs were housed in special protective cases, which were expensive, difficult to access, and required a lot of space. In addition, dust filters on the cases required constant replacement. As a result, the total cost for each industrial PC and cover was €2,050.

“The L-series is a real alternative to industrial PCs for use in rough industrial environments. These devices are rock solid and just work!”

SVEN RAAB, IT ADMINISTRATOR FOR POLLMEIER IN CREUZBER

No moving parts

Pollmeier turned to NComputing. NComputing desktop virtualization enables a single PC (located centrally) to be shared by multiple remote users at the same time. For example, Pollmeier placed a small number of shared PCs in their central administration building that power NComputing L-series access devices located throughout the factory. The solid-state NComputing devices are small, rugged, and can handle the environmental challenges posed by the harsh production floor at Pollmeier. Since the devices have no fans, sawdust is no longer a problem and the need to replace filters has been eliminated. Finally, with a mean time between failure (MTBF) of over 100,000 hours (7 times longer than a PC), Pollmeier can enjoy unmatched reliability.

Pollmeier also centrally manages their virtual desktops via remote control, minimizing IT staff trips into the factory.

Savings now—and into the future

Pollmeier deployed L-series virtual desktops in its Creuzburg factory and has been very pleased with the solution. The key benefit is the 30% reduction in PC hardware costs because the solution eliminated the need for specialized industrial PCs and protective cases. In addition to the cost savings, Pollmeier also realized several operational benefits.

First, the IT staff does not have to waste time constantly replacing dirty filters because the protective cases and filters have been eliminated.

Second, PC downtime has been nearly eliminated because the shared PC is in a dust-free, vibration-free, temperature-controlled location (in the administration building).

Finally, in case a shared PC has a problem, the IT staff can maintain it from within the administration building which is quicker and easier to access.

Based on the positive results at its Creuzburg facility, Pollmeier decided to equip its other existing and planned factories with NComputing systems as they are built and upgraded.

