

Paper's long path under the care of KVM



While you are reading, have you actually ever thought about what a long way the paper in your hand has gone through? No? Producing a piece of paper requires more than 60 steps. That's what it takes for Dutch manufacturer Crown Van Gelder to produce its paper in a non-stop process. They are on the job day and night, at weekends and on public holidays to fabricate a capacity of 220,000 tons high quality paper per year. Two production lines, each 150 m long, have to be observed around the clock. Monitored with KVM products from German Guntermann & Drunck GmbH that meet these high quality standards.



More than a century of experience

In 1896, Pieter Smidt van Gelder set up a mill for newsprint in Velsen. The name "Crown" was added in 1963 when the company collaborated with the American Crown Zellerbach

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Corporation in the field of tabulating card paper. In 1985 the company was floated on the stock exchange, in 2003 it was given a new, transparent corporate structure, involving the abolition of the holding construction and the creation of a single company "Crown Van Gelder N.V."

CVG is an independent paper manufacturer, listed on Euronext Amsterdam. Almost 300 employees generate an annual turnover of around € 160 million. The company produces specialties for graphical and industrial applications in the wood-free uncoated and single-coated paper sector.

CVG produce a niche product which is mainly distributed in Western Europe. The production recipe varies for each type of paper, so that each product can be optimally adjusted to its purpose. Quality is a big issue at CVG, who operate two paper machines to produce paper from 50 to 270 g/m². Each paper line is 150 m long, one 5 m wide, the other 3.6 m.

How to operate IT in the paper industry

Dutch integrator Koning & Hartman are experts in the paper industry and its rough and steamy environment. They removed sensitive computer hardware into a clean and air-conditioned

Overview

Customer

Crown Van Gelder N.V. manufacture and sell high-quality speciality products in the woodfree uncoated and single-coated paper sector. Based in Velsen, The Netherlands, the company currently produces 220,000 tons of paper a year. The mill occupies a site of 10 hectares situated on the North Sea Canal and is supplied with electricity by its own total energy power plant.

Partner

Koning & Hartman provide solutions for all sectors of telecom, industry and infrastructure. Their employees embrace latest technologies on a daily basis and collaborate with leading technology partners and clients.

Challenge

- Coping with a rough environment and interferences due to electronic environment
- lower costs of maintenance
- reduced downtimes
- ensure intuitive operation for staff
- integrate special alarm keyboards

Products

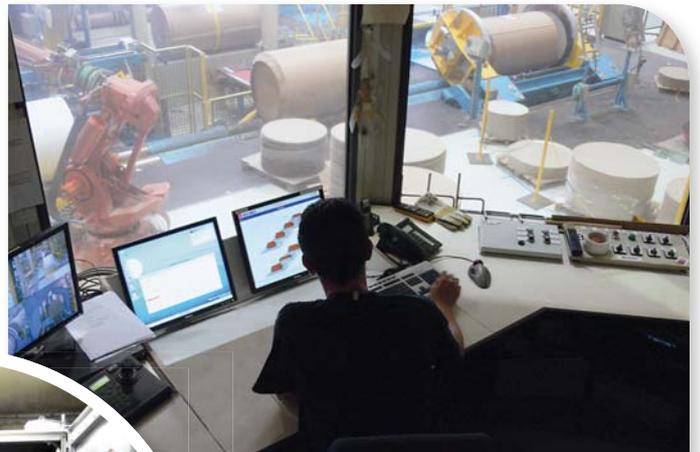
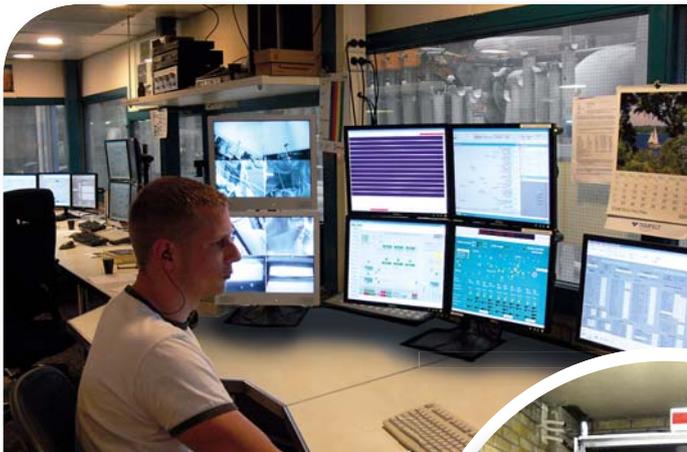
- G&D KVM extenders (CATVision) for analogue video signals and the use of CAT infrastructural cables
- G&D KVM switches to operate multiple computers over one console (miniMUX)
- G&D KM switch to combine keyboard and mouse of multiple computers into just one set of keyboard and mouse (TradeSwitch)

Solution

KVM extenders and switches that easily deal with a rough environment.

Benefits

Plug-and-play feature of the G&D components, latency free work, improved product quality and higher throughput, real-time machinery health monitoring, user-defined thresholds alert operators of potential problems before they cause an unscheduled machine shutdown.



room, which also prevents unauthorised people from accessing the computers. The server room houses computers for process monitoring, standard Windows computers and workstations for general office tasks.

The control room is in the middle of the two paper production streets. Process operators access multiple servers that manage, adjust and control the production process. At the wet production part, the IT devices serve for process monitoring of recipes and quality when cellulose gets into the grinder and chemicals as well as water are added. Operators need to detect problems before they cause a shutdown of the machines or even the paper web tears.

Industrial monitoring via KVM extenders

Peter Janssen from Koning & Hartman advised KVM extender systems from Guntermann & Drunck to bridge the distance between computer and controller. Each KVM extender system consists of a sender and a receiver. Connected through CAT cable or optical fibres, a local transmitter is placed at the computer in the server rack and sends video, keyboard and

mouse signals to the receiver unit at the controller's desk. The simple plug-and-play KVM devices support user terminals at both ends allowing local and remote access to the connected computers. Now transmitting even multiple video channels at the same time is no longer an issue. Interferences due to the electronic environment on the UTP cables are adjusted automatically by the extenders. As units work in 1:1 connection, the system does not require any software or additional devices for operation. Once connected and powered on, the devices are ready for use.



Keeping track

If a controller has to monitor multiple computers or needs process monitoring as well as office or ERP applications, the use of a KVM switch comes in handy. A single switch can control between 2 and 8 computers. It saves equipment at the desk and provides controllers with a detailed overview of the system. The KVM Switch enables users to access and monitor different



◀ Klaas Kraaijeveld, Project Engineer CVG

„We achieve the highest paper quality by continually monitoring the production process using high end KVM products from G&D.“

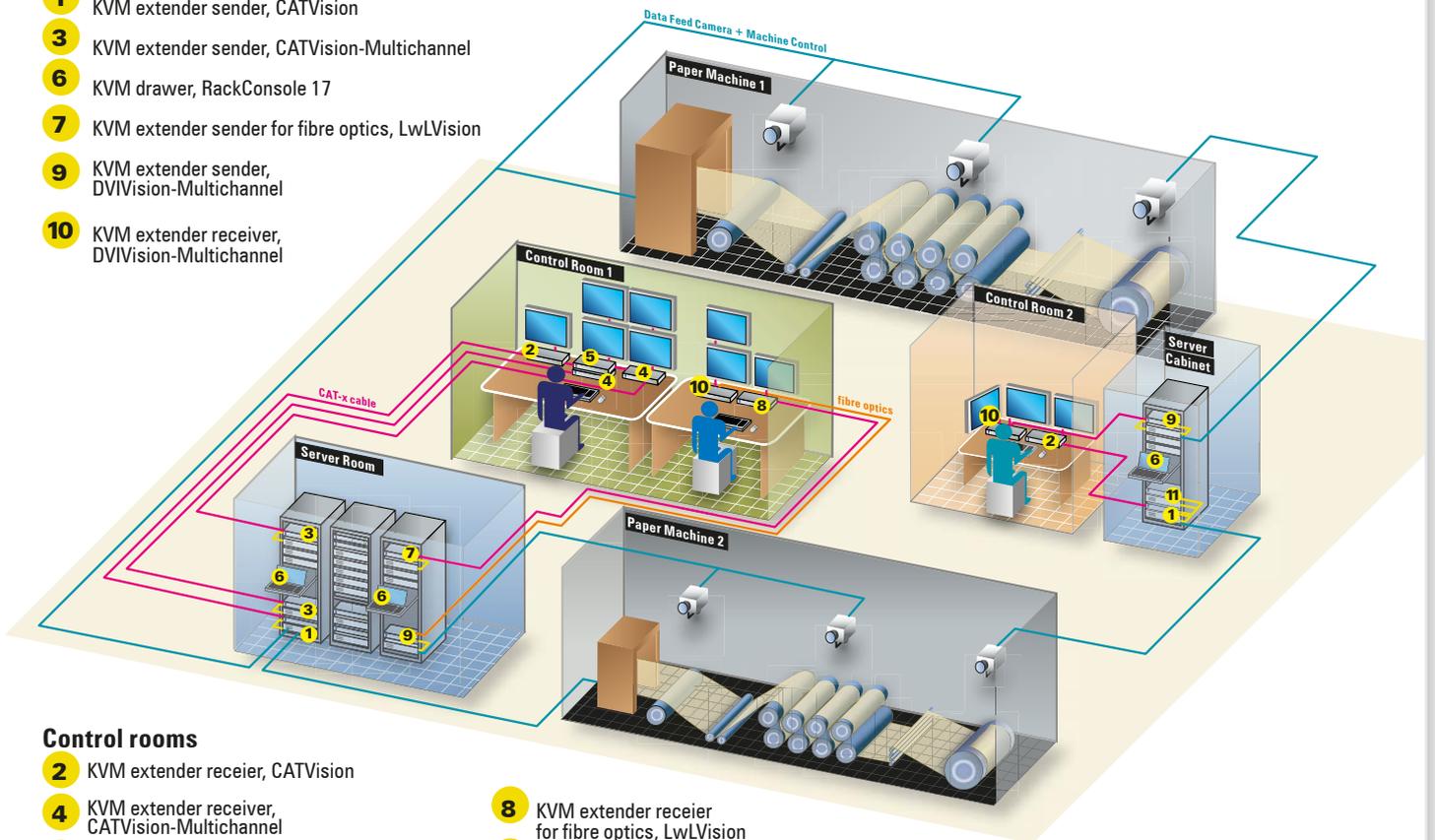
„The easy operation of G&D devices increases the learning curve for employees and guarantees a high Return on Investment.“



Peter Janssen, Sales Consultant at Koning & Hartman ▶

Server rooms

- 1 KVM extender sender, CATVision
- 3 KVM extender sender, CATVision-Multichannel
- 6 KVM drawer, RackConsole 17
- 7 KVM extender sender for fibre optics, LwLVision
- 9 KVM extender sender, DVIVision-Multichannel
- 10 KVM extender receiver, DVIVision-Multichannel



Control rooms

- 2 KVM extender receiver, CATVision
- 4 KVM extender receiver, CATVision-Multichannel
- 5 KM switch, TradeSwitch
- 8 KVM extender receiver for fibre optics, LwLVision
- 11 KVM switch, miniMUX2

computers simultaneously with just one set of peripherals (keyboard, monitor, mouse). To switch between channels, the controller can use the buttons on the front panel, hotkeys or an external device connected to the RS232 interface. Thanks to the RS232 interface of the G&D KVM extenders, special alarm keyboards can easily be integrated into the application. These switches are ideal for applications that deploy analogue and digital devices. Bigger installations as well as greater transmission ranges are covered by a KVM matrix switch that also provides a larger user side.

Monitoring the entire process and beyond

KVM products monitor all processes from blending, to wet production part, over drying, paste application, calendaring, up to the jumper reel and finally the packaging station. Users don't even realise that they are not working on a computer placed at their desk since high-end KVM systems generate no latencies.

Outlook

Crown Van Gelder is a solid company, whose strong competitive position has proved

its worth in a difficult cyclical phase. CVG remains firmly committed to developing new specialty papers. Fierce competition rules on the European markets. Not only the raw and operational materials but also the IT and IT services need to meet the high future demands on quality.

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