

Company News

BEUMER Group commissions Cement Packaging Line from 4000 kilometres away

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Thanks to digitalisation, it is no longer unusual to parametise and commission single components remotely. BEUMER Group thinks ahead and, for the first time, commissions a complete packaging line including palletiser – from a distance of over 4000 kilometres.

Helping customers in the event of faults or shutdowns of existing systems is no problem for BEUMER Group – even from a distance. The system provider was confronted with a completely new situation when a planned commissioning, which involves the dispatch of service personnel to the site, could not be carried out due to travel restrictions caused by the COVID-19 pandemic. BEUMER Group was flexible and set the course for "remote commissioning" – commissioning from a distance.

"The trigger was clearly the pandemic," explains Peter Teichrib, a department manager in Engineering at BEUMER Group. However, this is not the only scenario that requires BEUMER's new service remote commissioning. Everything that makes personal access to systems and users difficult or impossible requires new solutions.

As a concrete example, Teichrib mentions the packaging line of the cement manufacturer Norm LLC in Azerbaijan, which was almost completely erected on site. This line consists of two bag transport systems, the layer palletiser BEUMER paletpac 5000 and the BEUMER stretch hood A packaging line. "All components were already completely installed. Only some electrical installations and commissioning still had to be carried out when our experts had to leave the country due to the worldwide travel warning". A delicate situation for the customer who has already included the capacity of the new packaging line in his calculations. If the line does not start up, the customer faces the thread of delivery bottlenecks and loss of market share.

Test Run required



Never change a running system: BEUMER Group recommends to supply the BEUMER stretch hood A with the previously tested film to ensure a smooth start of the remote commissioning. BEUMER Group decided to launch remote commissioning as a pilot project. "The conditions were exceptionally good, which certainly cannot be taken for granted," emphasises Teichrib. In general, a number of conditions must be met before the "remote commissioning" project can even be considered. The system must be tested in-house in advance. "With this system, we had indeed carried out an extended in-house commissioning, as the BEUMER paletpac 5000 was running with the new PLC S7-1500 for the first time," says the department manager. "We wanted to make sure that everything would work perfectly later. Finally, it was this circumstance that made remote commissioning possible in the first place." BEUMER Group also recommends to supply the BEUMER stretch hood with the film tested in advance. This way, possible differences in film quality can be excluded as a source of problems during commissioning.

Know how meets Technology



On site: BEUMER Smart Glasses, smartphone and laptop provide an audiovisual connection to BEUMER Group.

In general the customer needs qualified maintenance and operating personnel who is preferably familiar with BEUMER systems. This is another prerequisite for

successful remote commissioning. On the hardware side, several IP cameras provide the necessary overview of the complete system, while BEUMER Smart Glasses, specially developed data glasses, connect the BEUMER experts audiovisually to the user on site. "A broadband Internet connection is, of course, required," says Teichrib. The data glasses allow a detailed view: The BEUMER Customer Support sees the same thing as the wearer on site and can directly specify the correct actions to be taken. In this way, the user is guided step by step through the commissioning process.

The cameras and BEUMER Smart Glasses are part of the plug-and-play set for remote commissioning. This also includes a WLAN router for the BEUMER Smart Glasses and a VPN client installed on an mGuard router. The IP cameras must be connected via LAN cable to ensure sufficient image quality and stable transmission. "First, we installed the hardware and software components in our factory and tested the configuration. The complete package has been shipped to Norm LLC," says Teichrib. This procedure has proven itself and is also planned for future remote commissioning projects.

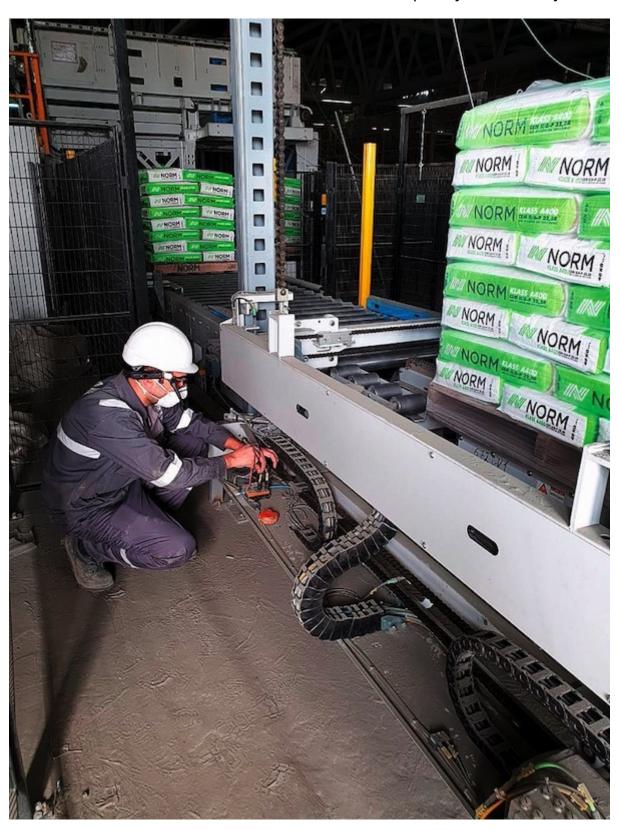
Keeping the Overview



The user is guided through the commissioning process from the back office.

BEUMER Group set up a separate back office for this project at short notice: Using four monitors and a laptop, the service staff always had an overview of the images from the IP cameras, the field of view of the BEUMER Smart Glasses and the data of the system sent via the VPN client.

"Broadband Internet access, technology and know-how – at Norm LLC we encountered ideal conditions, which we made the best possible use of," explains the department manager. "Within a very short time we were able to develop a concept that will guide us safely and reliably through future remote commissioning projects. Standardised processes enable us to eliminate sources of error and offer our customers a reliable service – quickly and flexibly."



Twenty percent of the electrical installation were carried out by the customer itself – the BEUMER Customer Support checked and directed all steps from a distance using the BEUMER Smart Glasses.

Regardless of external circumstances: If BEUMER Group digitally takes the users by the hand via "remote commissioning", the understanding and know-how of the systems grow. This motivates the customer's personnel on site, a fact from which the user benefits as much as BEUMER Group – a better understanding of the system will significantly simplify future remote maintenance and services.

The remote commissioning of the packaging line at Norm LLC has shown that with adequate framework conditions, such as well-trained maintenance personnel and technically high-quality IT equipment, new ground can be broken. BEUMER Group's technology and competence have impressively confirmed this.