

# PROCENTEC



## ProfiTrace gives KEN engineering greater insight into client's network

For an international manufacturer of food commodities located in the Botlek, having a reliable PROFIBUS network is essential. Their annual production is substantial, so faults in their network are directly responsible for considerable missed revenue and lower output.

The company chose to outsource the technical, specialist management of the PLC and SCADA components to multidisciplinary engineering firm KEN engineering. So it was through KEN that ComBricks and the ProfiTrace from PROCENTEC were introduced to this commodities producer.

Erik Groenewegen is project manager at KEN engineering, one of KEN's three business units. A few years ago, their commodities client experienced a significant malfunction. Erik went to the company immediately, even though it was the middle of the night. It took the KEN engineers all night to remedy the failure.

Ultimately they even had to get a PROCENTEC engineer involved. "He had the ProfiTrace with him, so he was able to quickly identify where the failure

was located in the network. We were so impressed with this that we subsequently examined the PROCENTEC products more closely.

"KEN engineering was already familiar with PROCENTEC products, but the help provided by the PROCENTEC technical engineer the night of the malfunction aroused the curiosity of Erik Groenewegen and his colleagues. "We knew the ProfiTrace existed, but we had limited experience of its capabilities. We saw how quickly the PROCENTEC engineer localized the fault in the network and for us

that was an important reason to purchase a ProfiTrace as well.”

#### **Financial damage due to malfunction**

In the past, standard connectors were used in the client’s factory network. The disadvantage of this was that you could not interrupt anything without affecting production. “As a result, you have virtually no access to the network as maintenance provider.” Fortunately, the KEN engineers were able to recommend ComBricks from PROCEN TEC for this situation. It provides permanent monitoring of your network, which allows you to stay ahead of problems and failures. Particularly after that fateful

you to remotely monitor an installation and alerts you if any faults arise or are likely to arise.

The great challenge was to find a moment to segment the client’s network, because that could only take place during a stop in production. “The factory has to be operating virtually all the time, so we can only implement major changes during previously scheduled maintenance slots, when the factory’s operations are shut down. Sometimes we have to wait for a long time.”

This brings Erik to another advantage of ComBricks: the fact that the network can be segmented. “It is

“It is so simple to install and use. That saves a great deal of time and money, certainly in the event of malfunctions”

night when a considerable amount of time and money was wasted, the client was quickly convinced of the benefits of ComBricks. “That night, the entire factory came to a standstill. A malfunction like this causes significant financial damage; I estimate approximately twenty thousand euro per hour. We were busy from 6 PM until 7 AM the following morning.”

According to Erik Groenewegen, the greatest advantage of ComBricks is that it is no longer necessary to work with connectors: “I consider connectors to be the most vulnerable components in a network. Naturally, we see many different networks, not all of which employ connectors with a PG connection, and that makes monitoring difficult. The convenient aspect of ComBricks is that it can be connected in two different ways: with screws or with a DB9 connector. So it’s always possible.”

#### **ComBricks makes testing simpler**

ComBricks is a PROFIBUS and PROFINET modular repeater platform with integrated diagnostics, which unites network components, permanent monitoring with ProfiTrace and remote I/O. The system allows

installed as a sort of hub, to which various nodes can be attached. This means that we can disconnect a connector without negative consequences, and can therefore carry out testing while the factory continues to operate. We no longer have to wait for a maintenance slot. Now, if something happens, it is also easier for us to investigate the fault while the factory remains operational.”

#### **ProfiTrace provides insight into network**

ProfiTrace is a powerful, mobile analyzer for PROFIBUS networks. The instrument provides detailed insight into the network and is indispensable as a tool for carrying out maintenance and solving problems.

KEN engineering uses the ProfiTrace to localize faults, or to test how the network is organized. “That is not always entirely clear, because not everything is documented. With the ProfiTrace it is very easy to acquire detailed insight into the network, if it is not directly obvious from the drawings.” For instance, Erik was recently able to identify whether any apparatus was still connected to a particular network and whether the network was free of faults. The

simplicity of the PROCENTEC products appeals to Erik. “It is so simple to install and use. That saves a great deal of time and money, especially in the event of malfunctions.” KEN uses the ProfiTrace for other

clients as well, so the equipment has more than paid off its investment. “By using PROCENTEC products, we have been able to make the network in our client’s factory genuinely more stable.”

### **About KEN engineering**

The KEN group comprises three business units: Engineering, Construction and Repair. KEN engineering is the multidisciplinary engineering firm in the KEN group. The organization has been active in various design disciplines since 1979 and consists of five divisions, each with their own specialization. The civil engineering & surveying division is active in underground infrastructure and geodesy; the process division realizes projects for the process industry; the automation division is a broadly oriented automation specialist; special products is the division that focuses on the design of mechanical engineering specials and the archiDOL division is concerned with the management of technical archives. The company is located in Oud-Beijerland and has 75 employees.