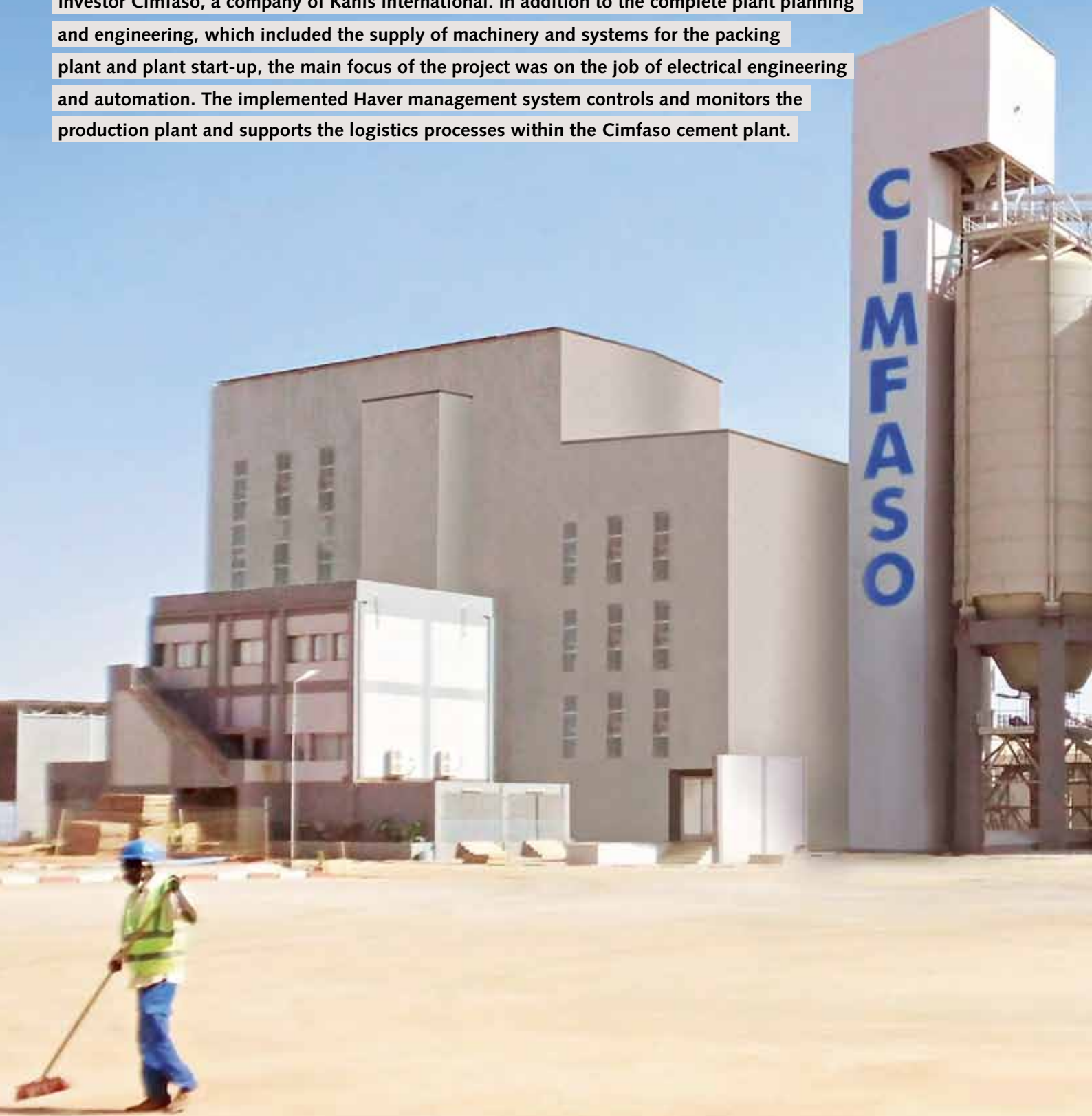


Haver & Boecker was awarded the contract for a turnkey project in Burkina Faso by private investor Cimfaso, a company of Kanis International. In addition to the complete plant planning and engineering, which included the supply of machinery and systems for the packing plant and plant start-up, the main focus of the project was on the job of electrical engineering and automation. The implemented Haver management system controls and monitors the production plant and supports the logistics processes within the Cimfaso cement plant.



HAVER & BOECKER

Cimfaso selects Haver & Boecker for a turnkey cement plant in Burkina Faso

Private investor Cimfaso, a company of Kanis International, was the customer for a turnkey project in Burkina Faso. Haver & Boecker was awarded the contract. The plant was handed over to the customer in the spring of 2015





1 Haver & Boecker managed the civil engineering – everything from foundation design to plant start-up

Contract for complete plant planning, civil works and engineering

Cimfaso contacted Oelde/Germany for the first time in the spring of 2013. The company had planned the construction of a cement mill with a grinding capacity of 135 metric tons per hour. In interaction with the suppliers of the cement mill, Haver & Boecker was contracted to deliver the complete plant engineering and to supply the steel silos, crushing plants, entire packing and loading systems, as well as the control technology. Moreover Haver & Boecker managed the civil engineering – everything from foundation design, to path illumination and including supervision of the installation and plant start-up.

Concerning the project from Africa: “By taking on projects as an EPC contractor we fulfill the ever stronger wishes that a customer has for a company performing everything surrounding the project,” says Wolfgang Bednarz, Director of the Cement Business Unit at Haver & Boecker. “With respect to shrinking project planning departments at out-fitters and operators of cement plants, customers are seeking external experts in the field of cement. With us they are at the right address”, the sales manager is convinced.

2 With the Haver Control-CEDISS® dispatch system, truck identification and loading order assignment are possible using an ID card. Functions such as access authorization rights to the individual plant areas or the control of loading are organized through the ID card



Automation solutions that control production and logistics processes

The complete package delivered by Haver & Boecker is optimized by its expertise in electrical engineering and automation. In addition to energy distribution, switching and control systems, and the Ethernet network, Haver & Boecker supplies the process control system (Haver Control-PCS) as well as the Haver Control-CEDISS dispatching system.

The Haver Control-PCS process control system is a system for operating, monitoring and controlling production processes. The operator receives detailed information about the condition of the plant components. As a result he can intervene in the process in a highly targeted manner at any time. Service technicians also obtain detailed information whenever faults arise so that they are able to precisely intervene and minimize production downtime. The modular design of the Haver Control-PCS can be customized to suit the individual requirements of the customer.

The Haver Control-CEDISS dispatching system organizes and automates the shipping of bulk and packed loose products. It administrates and visualizes the loading sites and serves to control and monitor truck movements within the plant. At Cimfaso the processes of receiving clinker and empty bags and dispatching cement in bags or in loose bulk form are graphically displayed.

The trucks are registered and weighed at Goods Receiving. At check-in every driver receives an ID card which identifies the truck and enables assignment to the loading order. On the plant premises the ID card serves as an access authorization to the individual plant areas (entrance/exit, weighbridge, loading, etc.). At the loading station the driver identifies himself using the ID card and starts the loading by himself. Loading is done automatically, without manpower. Finally he receives the delivery note at the plant's exit gate. Proof of all shipping activities is possible in real time using the ID card.

The Haver Control-CEDISS is connected to both the customer's ERP system and to the Haver Control-PCS. This ensures a continuous, uninterrupted data and information exchange from the business level down to the machine. With the Haver





Control, Haver & Boecker has created a horizontal and vertical integration of the machines and plant components within the logistical processes of the customers.

“By using the Haver Control process control and dispatch system we have created more transparency in production and shipping for our customers,” explains Wolfgang Schlüpmann, automation sales representative. “It allows customers to optimize their processes, improve the flow of goods and information, avoid loading errors and to reduce waiting times.”

A Haver specialist is able to dial into the customer’s plant and machine network via the Tele-service Center in Oelde/Germany, whenever necessary. This provides the chance to check over error messages or operating faults and to conduct software changes and updates on the automation system and machines. This is all part of Haver & Boecker’s After-Sales-Service and an important component of service contracts.

Official opening March 2015

The plant in Burkina Faso has since gone into operation. In September 2013, immediately after the contract had been awarded, the detail engineering began in close cooperation with the customer. Foundation works started on site in the first quarter of 2014. Afterwards the on-site installation by the customer’s personnel started – all supervised by Haver master fitters. The first test runs took place successfully in early 2015 and so the plant was handed over to the customer already in the spring.



Silo technology from IBAU Hamburg

Two 3500-metric-ton capacity steel silos were installed as part of the project’s scope. Two more silos of the same size may be added at a later time. The complete silo technology was contributed by Haver & Boecker. Project leaders were able to rely

4 The trucks are registered and weighed at the plant entrance. Before trucks leave the plant, they are weighed again and a delivery note is printed out



3 Cimfaso organizes the receipt of clinker and empty bags as well as the shipping of cement in bags or in bulk vehicles with the Haver Control-CEDISS® dispatch system



5 The plant is able to optimize processes, improve the flow of goods and information, avoid loading errors, and to reduce waiting times by using the Haver Control process control and shipping system



6 The Haver Control-CEDISS dispatching system organizes and automates the shipping of bulk and packed loose products



on the extensive expertise of IBAU Hamburg. “In this case our customers profit from our mutual strengths and our range of silo and mixing technology, which extends to integrated packing and bulk loading systems,” said Wolfgang Bednarz.

ROTO-PACKER® lines for filling 50-kg bags

Filling cement into bags is done by two ROTO-PACKER® lines each having eight filling spouts (They can be retrofitted later because fully automatic operation was not chosen. With the two eight-spout packers approximately 260 metric tons of cement can be filled each hour. The ROTOCLASSIC® type filling ma-

chines are rotating packing machines with a modular design and rapidly exchangeable filling spouts.

Installed in addition to the packing machines are a Niagara vibrating screening machine and the entire bag discharge and handling line which included the bag cleaning unit, conveyor checkweigher and bag rejecter. The plant is laid out to pack standard cements (3000 to 4000 Blaine) into 50-kg bags. At each line personnel can operate the manual truck loading system. Here the planners already allowed for the installation of automatic loaders at a later time.

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