

# SUDACEM CEMENT TERMINAL at PORT SUDAN

### Location:

Client:

Available area : Storage capacity:

Capacity each silo: Total storage capacity: 16000 t Erection time:

## Port Sudan/Sudan

SUDACEM Silos for Cement Musallam Elkhabeir Orascom, Port Sudan/Sudan 100 m x 50 m = 5000 m² 4 steel plate silos, bolted type, diameter 12 m, height 45 m, truck passable under 2 silos 2970 m<sup>2</sup> = 4000 t 8 month including foundation







Foundation size: 28 m x 28 m x 1,25 m. Acc. to soil test, piling was not necessary. A raft foundation for the 4 silos with a heavy steel reinforcement was sufficient.





 The bolted type silos allowed a rather fast erection. The cranes available did not have the required lifting capacity so for heavy parts 2 cranes have to be used.



▲ Two filling pipes DN 250 have been installed from the pier to the silos, than leading vertically along the stair tower to the silo roofs, where pipe diverters distribute the cement into the 4 silos. Conveying capacity with the vessel's own pneumatic conveying system is up to 250 t/h.





As a new design, the 4-spout-in-line-packing- machine from Haver & Boecker has been placed directly under one silo instead of building a separate packing hall, which would have taken a lot of space and costs.

The silo steel structure has been closed by corrugated sheets with the necessary openings to assure a comfortable climatic working atmosphere for the packer people.



Feeding of the packing machine happens through a rotary valve on the outlet of the silo under which the packing machine is installed, from the other 3 silos by air slides. Both feeding systems are with frequency converters to ensure a constant feeding of the packing machine.







Furthermore the Terminal is equipped with a rail wagon loading system, consisting of a belt conveyor – length 65 m – with a movable wagon loader at the end, reaching from the Terminal border across the road into the rail wagons.





Two silos are equipped with a telescopic bulk truck loader.

A weighbridge is installed under this 2 silos, so the weighing will be done without moving of the bulk trucks.

The control of the Terminal is fully automatically by a SPS from Siemens.





## SUDACEM CEMENT TERMINAL at PORT SUDAN



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Fowzy Omer Musallam, Junior Partner and Member of the Board of Directors from Sudacem

> Following the demands of the customer, 2 big bag filling stations have been ordered and will go into operation end of January 2006.

> A second packing machine together with a special designed truck loading system has also been ordered and will go into operation in March 2006.

This was another turnkey project from **OSTRA**.





#### Export Division

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