



# Goldhofer

## Report Nr. 75

### Cold Box from England to Zambia



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- Transport distance:** By ship from the UK to Walvis Port  
on the Trans-Caprivi highway from Walvis  
BayPort / Namibia to Chingola/Zambia  
approx. 2400 km
- Transport load:** Cold Box  
Width 4,5 m  
Height 5,1 m  
Length 50,0 m  
Weight 140 tons
- Equipment:** 10-axle Goldhofer heavy-duty combination as self-  
steering rear bogie with bolsters
- Total combination:** Length 70,00 m  
Height 6,6 m  
Weight 260 tons
- Tractors:** Tractor 2x MB Titan 600 PS
- Haulage company:** VANGUARD  
Heavy-duty transports  
South Africa

## Cold Box on its way to Zambia

It was quite an adventurous travel, this cold box with a weight of 140 tons and a length of 50 m made. Its travel started in England to the port of Antwerp and from there with the container ship „Golden Isle“ to the port of Walvis Bay in Namibia. There the cold box was unloaded onto a lowloader and transported over a distance of 2.400 km to Chingola in Zambia. The DHL Global Forwarding Company was in charge of this transport and contracted the South African heavy-duty company VANGUARD for the road transport. „We have chosen Walvis Bay as landing port because Namibia owns special logistical advantages regarding infrastructure“, explained James Robinson (Vanguard project engineer and manager).



In the run-up extensive planning and authorization procedures had to be carried out. The entire transport distance of 2.400 km was checked, uncertainties and weak points were taken down. A team of structural engineers was in charge of checking all bridge structures and getting the permits for crossing over them or finding alternatives.



For the transport of the 140 tons cold box with a length of 50 m, a width of 4,5 m and a height of 6,1 m, the haulage company chose a Goldhofer heavy-duty combination with bolster equipment. Thus absolute manoeuvrability in any kind of transport situation was guaranteed, as the vehicles could clear under the load.

„Due to its manoeuvrability and the levelling, the Goldhofer heavy-duty combination was the ideal solution“, explained Robinson.

The Vanguard transport team made two 10-axle heavy-duty modules type THP/SL available equipped with a so-called long load equipment and two Mercedes Titan tractors with 600 hp each. The rear 10-axle trailer was equipped with a self-tracking device and could also be steered manually if necessary. „Due to the modular system we could put together exactly the combination we needed“, assured James Robinson.

The transport travelled mainly on the Trans-Caprivi Highway.



#### Trans-Caprivi Highway:

This highway is the link between the Walvis Bay Port on the Namibian Atlantic Coast and Lusaka, the capital of Zambia.

The Trans-Caprivi Highway has its name from the Namibian region of Caprivi, where the most important part of the highway leads through. Until the highway was finished in 2004, Caprivi had only poorly been linked with West and Central Namibia. Due to the Zambezi-bridge Zambia also has a quicker access to the sea and Namibia a better link with Central Africa.



After loading in the port the convoy with a total combination length of approx. 70 m and a total weight of approx. 260 tons sets off. It was the first and biggest transport of this kind that had ever left this port going on its way across Namibia. At 30 km/h and with over 600 PS they continued along the Trans-Caprivi-Highway. In Namibia the highway was very well and was only limited with a few buildings. Thus the transport advanced very well.



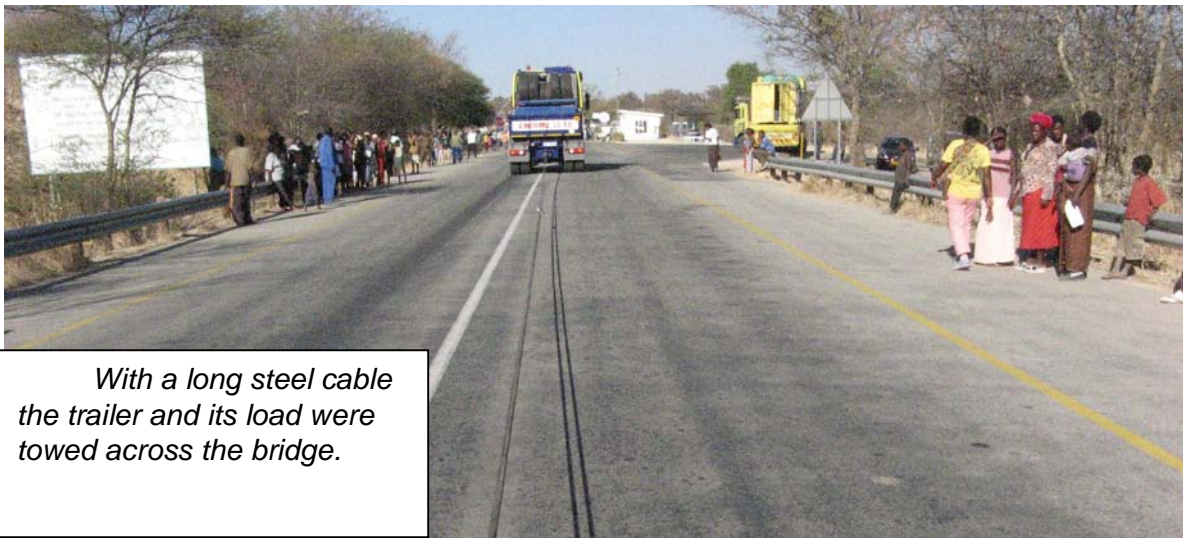
*Crowds of people romped around in order to see this impressive transport.*

Not even narrow bends were a problem due to the good manoeuvrability of the trailer. But the closer they were getting to Central Africa the more limited and difficult the road conditions became. Extreme side tilts of the road had to be compensated by means of levelling of the Goldhofer modules. Over and over again curious people lined the highway in order to marvel at this unique transport, so that in addition the convoy sometimes got stuck due to the many people.



*Constantly extreme side tilts had to be compensated, which was no problem due to the hydraulic levelling of the Goldhofer trailers.*





*With a long steel cable the trailer and its load were towed across the bridge.*



*Even such onlookers could often be seen.*

The first problem arose at the Kavango River as the bridge was relatively small and did not possess the necessary bearing capacity for the entire convoy. Therefore, the tractors were uncoupled from the trailer and drove alone over the 60 m long bridge. Then the trailer with approx. 180 tons was towed with a steel cable across the bridge. However beautiful the country is, the Vanguard transport team did not have much time to enjoy the magnificent and varied impressions. Nevertheless, during transport they still had time to take some pictures of strange onlookers.

In one of the many villages the transport team had to manage a 180 degrees bend. Here the Goldhofer heavy-duty modules with their hydraulic auxiliary steering along with the bolster equipment could prove their full power. To the astonishment of many spectators the trailers cleared under the load and thus took the total combination with a length of around 70 m through the bend without major problems.



*Thanks to the extreme manoeuvrability of the Goldhofer modules along with the possibility of auxiliary steering, even the most extreme bends could be managed.*

After approx. 6 weeks they had finally made it: They had reached the destination the „Konkola Copper Mine“ in Chingola. Here the last obstacle had to be taken, a narrow factory entrance. The cold box is needed in the mine as an important component for melting copper.

After the transport the transport team was more than satisfied. „Our decision in favour of the Goldhofer heavy-duty system was right“, told us James Robinson after the transport. „The good manoeuvrability, the levelling but also the road protection due to the swing axle system of the Goldhofer trailers offered considerable advantages against customary transport systems.“



*The transport at its last obstacle. Again the approx. 70 m long self-steering rear bogie combination managed this entrance without any problems.*