

Specialised container trailers improves cargo-handling efficiency for Transnet port terminals

Afrit, Pretoria, South Africa

It's quite encouraging to see that the global slowdown has done nothing to dampen the spirit that prevails in the parastatal – Transnet.

The multi-billion upgrading project at Cape Town harbour includes deepening the berths to a depth of 15.5 m and building a new quay facility to take the larger container handling cranes, four of which have already been installed, with another four due to be delivered shortly. With space being at a premium, the container yard is being converted to a rubber tyre gantry system (RTG), which will enable them to replace the ageing straddle carriers. The RTG system will enable containers to be stacked more densely and up to five high instead of the three high of the straddle carriers. The emphasis of this upgrade is to set Cape Town apart from the many container handling facilities on the continent and to ensure they are able to meet the ever-changing landscape, which in this case is the handling requirements for the heavier 6 m containers, which when fully loaded, can top 30 t in weight.

One of the priority upgrades that Transnet has identified is the efficiency of the transport system within the container terminal itself. The turnaround time and safety of the operation in transporting containers from ship to container-park has always been a relatively grey area but now through the dedication of the project team and input from the manufacturer, Transnet has unveiled their latest contribution to achieving the efficiency and safety they required.

Recently, Transnet took delivery of sixty-six new specialised container trailers from manufacturer, Afrit Trailers of South Africa. Afrit was able to interpret and conceptualise the design and produce a trailer with all the capabilities with which Transnet require to meet their safety and efficiency levels.

Design changes

The previous trailers had limited capabilities, as apart from merely conveying the containers, they required double handling. When the container was lowered to the trailer by the crane, it had to be firstly lowered to the ground for the twist locks to be removed and then lifted on to the trailer. The new-design trailers have cut outs on each corner, which enables the twist locks to be removed after the container has been lowered on to the trailer. Also, the sides are raised and curved inwards to enable the crane operator to lower the container on to the trailer where it will locate itself without the operator having to conduct a series of manoeuvres, thereby saving time in the loading procedure.

The trailers are of heavy-duty construction, with a capacity of 65 t able to carry two 6 m containers with a combined weight



The new trailer design has cut outs on each corner, enabling twist lock removal after the container has been lowered on to the trailer. The sides are raised and curved inwards to enable the crane operator to lower the container without having to conduct a series of manoeuvres.

of 60 t or one fully laden 12 m container. The axles are supplied by Henred and are of 40 t walking beam design with heavy-duty leaf springs. Adding to the high impact capabilities of the trailer, the axles are fitted with solid puncture tyres, which have minimal deflection under impact loading. As well, the fitting of these tyres has given Transnet a large cost saving in providing a low instance of tyre replacement and puncture repairs. Maintenance on these trailers has been cut down to a minimum by fitting the Groeneveld self-lubricating system. A departure from the norm in trailer manufacturing was included in the design in the landing legs. The truck tractors used to transport the trailers are specially designed and fitted with hydraulically adjustable fifth wheels, which lift the trailers before locking them in place.

Delivery

The order was placed on 14th April 2009 for delivery by 14 July 2009. It was only through high level planning and dedication that Afrit were able to deliver 66 trailers and meet the deadline.

At the recent handover ceremony held in Cape Town, Patrick Cooney, Operations Safety Representative, when asked his opinion of the new trailers, summed it up in one word, "Fantastic – Quality on Time".

ABOUT THE COMPANY

Afrit, with over 30 years experience in the industry, manufactures trailers for the road transport industry within Southern Africa and is currently the leading trailer manufacturer in South Africa with approximately a 25 per cent market share.

ENQUIRIES

Tel: +27 (012) 541 2123
 Fax: +27 (012) 541 2609
 Email: leon@afrit.co.za
 Web: www.afrit.co.za