

Khorfakkan Container Terminal: calling all mega-ships



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Recently, all eyes were on Khorfakkan Container Terminal (KCT) as it set a new throughput record for a single vessel call of 19,561 TEU. KCT completed the record breaking call of the 'CMA CGM Jules Verne' containership in only 54.5 hours. The 396 metre long and 54 metre wide vessel was, at the time, the largest containership in the world sailing under the French flag.

KCT, as the only fully fledged operational container terminal in the UAE that is located outside the Strait of Hormuz, is a major transshipment hub for several shipping lines in the Middle East region. But regardless of its status as a major hub and its ability to handle the largest operational containerships, the sheer size of this transaction through a single call is mindboggling. KCT has since continued operations with an impressive track record of productivity and it recently completed 4,073 container moves in a single 12-hour shift.

These are not one off events in the port sector, as Gulfainer, like several other global terminal operators, had aligned its management and corporate strategy in anticipation of rapid changes in the container shipping industry. The company has invested heavily across its terminals globally and is prepared for the very large container carriers, growing dominance of shipping alliances and continuous demands of high productivity from its customers.

KCT's performance in handling CMA CGM Jules Verne was the culmination of Gulfainer's strategy of continuously evolving with the market with a long term view. With this level of forward planning in place, once the vessel was alongside, the operations team were able to execute the plan and completed the vessel 11.9

hours ahead of schedule. With this new record KCT demonstrated its ability to accommodate large container volumes and to keep pace with the increasing volumes generated.

Future container vessels

The competitiveness of ports is now defined by their ability to evolve as hubs that attract the new mega-vessels. Lines are seeking cost savings, and have identified that the most effective way to take cost out of their networks is to increase the number of paying containers on a vessel.

As a result, vessels have been growing in size at a dramatic rate, with the largest vessels today being almost three times the size of the largest vessels in the late 1990s. But it is also important that the vessels are utilised to optimal capacity. Studies have found that an 18,000 TEU vessel needs to be at least 90% utilised before it can gain sufficient economies to warrant the initial capital outlay.

This means that carriers will have to maximise liftings on each vessel, and expect their terminal vendors to handle these full loads on mega-ships at the same productivity rates as their predecessors.

Port authorities now have to develop their ports in such a way to accommodate these mega-ships in their ports by ensuring sufficient depth. Terminal operators are also feeling the strain of having to make sure that they are equipped with the latest technology and STS equipment capable of accessing 9/10 high container stowage on deck and that they do so efficiently and productively.

Mega-vessels, to stay competitive, however, must reduce the number of ports to which they call.

More containers need to be loaded and

unloaded in fewer ports than before. The technological advances in equipment can now help in reducing time at the port, but terminal operators still need to make sure that the turnaround time for ships is as fast as possible, so the economies achieved at sea are not lost in the ports.

The increasing proliferation of mega-vessels therefore represents a challenge for terminal operators, who have to complete increasingly large move counts in the shortest time possible.

Investment

Classed as one of the world's most productive container terminals, KCT has completed a US\$60 million investment by Gulfainer for the addition of four state-of-the-art STS cranes and twelve RTG cranes, which scaled up the terminal's capacity and competency to underline its credentials as one of the top-performing terminals in the world, as well as strengthen its position to welcome mega-ships.

The new cranes have complete PLC (programmable logic control), and feature user-friendly operator interfaces, as well as climate-controlled ergonomic operator cabs and consoles to maximise the comfort of the operators, thus boosting performance.

The addition of the new STS cranes, which are better able to cope with the giant 18,000 TEU and above vessels, has helped speed up terminal operations, and this in turn, is creating even better value for our customers.

Although the scaling up of equipment has enabled KCT to be mega-ship ready, and able to handle the latest generation of ultra large containerships (ULCS), we are currently exploring viable options for further expansion to ensure that the



terminal can accommodate the increasing volumes being witnessed year on year.

How to make it work

Khorfakkan Container Terminal has long been renowned for its high productivity levels, particularly on mainline vessels, and the terminal's management team strives relentlessly to maintain this reputation.

At KCT, we count on the support of an excellent in-house engineering team that provides outstanding equipment availability levels. We undertake regular communication with all levels of employee to apprise them of performance levels, and to reinforce expectations of all staff. It is all about team work. Meticulous pre-planning of each vessel call with input from all members of the team makes each call a little bit easier.

Managing risk

Rapid changes in the industry, along with the increasing buying power of shipping lines (through alliances), presents several commercial and financial risks to a terminal operator. Any terminal investment has a long gestation period for financial return, while over the past few years, the nature of the market in terms of both economic outlook and shipping traffic has also turned very volatile. As larger container vessels are now the new norm for both mainline and feeder services, many port operators face a conundrum to either invest now in improving their infrastructure to prepare for the new realities, or wait for the volatility to settle down.

As the figure below shows, terminal expansion happens in significant segments, which is an expensive affair, while container volume growth is staggered over this period. This means that a terminal needs to be sufficiently utilised in order to recover the investment outlay, and faces a considerable risk of being congested or underutilised.

As port demand is rather inflexible in the short-term, Gulftainer has pursued a constant dialogue with shipping lines and industry experts which assisted in aligning its long terms goals with customer expectations. The risks of overcapacity with exposure to financial burden, and under capacity which may lead to commercial failures, have been managed by the company; providing equal opportunities for both terminal operator and its customers to stay ahead of the curve.

The future

The future trend is increasingly large vessels. By 2016, vessels of 12,000+ TEU will form approximately 25% of the global carrying capacity. Therefore, both ports and terminal operators will need to continue adapting to the newer, bigger ships and further developing to handle higher and higher volumes per call.

Gulftainer sees strong growth opportunity in this, and while KCT has already established its credentials with mega-vessels, the group is focused on consolidating its operations and footprint worldwide to provide a seamless network for vessels.

About the author

Daniel Wright began his managerial career at the Royal Mail attaining the position Transport/Area Collection Manager. In 2008, Daniel moved into the port industry as a member of the Quayside Management Team at the Port of Felixstowe. Daniel joined Gulftainer as Terminal Manager at KCT in December 2012.

About the organisation



Gulftainer was launched in 1976 and is headquartered in Sharjah, where Gulftainer operates the award winning Khorfakkan and Sharjah Container Terminals. The international reputation of these terminals led to a global expansion in 2006, and Gulftainer now has terminals in Brazil, Iraq, Lebanon, Saudi Arabia and the USA, with further announcements to come soon.

Enquiries

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