

The progress in Mexico's ports mirrors that of many others in the region, with external influences both positive and negative calling the shots

# Going for broke

**L**ocated on the Pacific coast, Manzanillo is Mexico's leading port and the fourth busiest in Latin America. With a throughput of 1.4m teu, up 13% on the previous year, it handled almost 48% of the country's entire container volumes in 2007. Manzanillo comprises a number of terminals, with most containers – 732,212 teu in 2007, 52% of the total – being handled at its only dedicated container terminal, SSA Mexico (SSAM), a member of the Carrix Group of companies.

SSAM is operated on a 20-year concession, with an option for a similar period. It occupies 24 ha (59 acres) and comprises two 250 m berths with 14 m depth alongside, together with the priority use of a further 500 m public berth. The terminal is equipped with six ship-to-shore gantry cranes and 28 RTGs on its patios and four on the rail operation (with an additional six units being delivered in October 2008). SSAM is one of the few terminals in Mexico with an extensive double-stack rail connection adjacent to its berth, and around 27% of its container traffic is transported by rail. In March 2008, NYK began using this facility, which will add up to 90,000 containers to SSAM's annual throughput.

The remaining 48% of containers at Manzanillo are handled at two multi-purpose



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terminals: the 100% Mexican-owned OCUPA (Operadora de la Cuenca del Pacífico) and TIMSA (Terminal Internacional de Manzanillo), which is owned by Hutchison Port Holdings. These terminals handle mainly self-gearred vessels carrying cargoes from the Far East and Central America, where load/discharge ports do not have the facilities for handling cellular vessels.

In October 2007, after long negotiations with the Ministry of Transport, an expansion agreement was signed that will allow SSAM to handle increased volumes through the priority use of 554 m of new berth and 10 ha of back land for its container yard.

Furthermore SSAM, in partnership with FERROMEX, is building a third rail track within its facility. Scheduled for completion in September

2008, this will be fully dedicated to container handling and will allow a much more efficient operation. SSAM is investing US\$68m in this expansion, including equipment and yard paving, and is planning to invest an additional US\$36m next year.

## From Manzanillo to Manzanillo

Earlier this year, following a prolonged surge in container volumes due to the growth in Latin American economies and an increase in trade with Asia (volumes have increased by 39% over the past two years, and an additional increase of 40-50% is anticipated over the next three years), the Manzanillo terminal found itself in desperate need of additional equipment in order to meet the requirements of its clients.

Although SSAM was scheduled to receive six RTGs and two additional ship-to-shore (STS) cranes in November 2008, the dramatic increase in volumes meant that it was unable to wait that long and new equipment was needed – fast.

Accordingly, Manzanillo, Mexico (SSAM) approached its sister company Manzanillo, Panama (MIT), which had experienced a dip in volumes, and an inter-company deal was negotiated for two of MIT's 16 STS cranes to be sent to SSAM to add to its four existing units.

The entire job of lowering the cranes, loading and transporting them (including transit through the Panama Canal), unloading them, carrying out span changes and re-raising them at Manzanillo, Mexico was awarded to Portek International of Singapore.

According to Portek, the crane transfer was challenging not least because of the many modifications required. MIT and Manzanillo have different rail gauges, and one of the main challenges was to reduce the rail gauge by approximately 6 mm. This required reinforcement of the portal tie beams to adjust for the change in the location of the two back legs of the STS cranes.

Not only was there a



Portek International of Singapore arranged transportation of the cranes from Manzanillo to Manzanillo, including transit through the Panama Canal

tight schedule to work to; there was also the added complexity of having to cut the crane legs at 8.7 m from ground level so that the cranes could pass under the Bridge of America, which spans the Pacific entrance to the Panama Canal (the crane leg sections were reinstalled in Manzanillo).

### **Demanding challenges**

Owing to strong demand from the oil and gas sector, the availability of suitable vessels was extremely tight. Portek's initial plan was to use a tug and barge combination from the US West Coast, but this had to be aborted when the vessels became unavailable at the last minute. Eventually Portek had to charter a self-propelled ballastable ship, the *Dongbang I*, which had to be diverted from the Mediterranean to the Caribbean for the job, incurring much higher costs.

There were also logistical challenges, as steel materials, fabrications and skidding systems had to be shipped to Colon, Panama, for the first phase of the work. All these different components had to be shipped from different parts of the world, to prepare the cranes to be ready to

load when the *Dongbang I* eventually arrived. As Larry Lam, chairman of Portek International Ltd, explained, "Demurrage charges are expensive in today's freight environment, and hence are to be avoided."

After loading, the cranes had to be lashed down safely for the eight-day sea voyage (including the transit through the Panama Canal into the Pacific Ocean), which fortunately proceeded without incident. After unloading at SSAM, the second phase of the work began when the cranes were raised and the span was changed from 23.1 m to 16.7

m. The first crane was up and running by May 2, 2008 and the second on May 22.

Although the entire exercise took longer than expected due to the issue of shipping availability, Portek was grateful to its client SSAM which, according to Lam, despite being stringent and exacting in its requirements, "went out of its way to facilitate the job and render us all possible assistance".

In addition to the cranes from Panama, four RTGs were also needed. Four spare RTGs were available in Los Angeles/Long Beach to meet the dire need in Manzanillo, and so once again a move between Carrix companies was undertaken.

Once the deal was done, the search was on to find a barge at short notice. Fortunately, Crowley Maritime was able to provide one large enough to move the four RTGs (two each from Terminal A and PCI), together with 25 hustler trucks that SSAT was replacing due to the strict air quality standards in southern California.

Finally, SSAM has ordered three additional

ship-to-shore cranes, which are expected to arrive during the first quarter of 2010.

According to the company, "These equipment investments continue to show Carrix's commitment to be the leading port investor in Mexico."

### **Veracruz: down but not out**

Veracruz is Mexico's second largest container port and the largest port on the country's Caribbean coast, ranking 117th in the world. In 2007 its cargo volumes fell by 2.6% to around 18.1m tonnes, reflecting diminished movements of breakbulk, liquids and dry bulk cargo. However, there were gains for the port's container and automobile traffic.

Internacional de Contenedores Asociados de Veracruz (ICAVE), operated by Hutchison Port Holdings, is the only specialised container terminal in Veracruz, and in 2007 it handled more than 80% of the port's container traffic. ICAGE occupies 42 ha and has two berths totalling 507 m, with an alongside depth of 14 m. It is equipped with five quay cranes, 12 RTGs, seven reachstackers, 28



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