Cement suppliers bank on green alternatives as competition stiffens

| BY ANGELINE CHEONG |

GWYNETH YEO/THE EDGE SINGAPORE

Cement is unloaded from ships and transferred to Engro's silo through conveyer belts and air slides at Jurong Port's cement terminal

Plant manager Chua Chee Kian adroitly climbs up a steel staircase at the side of a silo as he takes *The Edge Singapore* on a tour of **Engro Corp**'s cement plant at Jurong Port's cement terminal on Pulau Damar Laut, a reclaimed island sitting between Jurong Island and mainland Singapore. Unlike Chua, the uninitiated would struggle a little, trying not to look down through the openings of the staircase grille and holding on tightly to the railings, which vibrate with each unloading of cement. From 10m above ground, Chua points to a series of interconnected rectangular structures, which are the conveyer belts and air slides that transport cement from ships to the silos at the cement terminal.

Like most building materials, cement — an essential raw material for the manufacture of ready-mixed concrete (RMC) — needs to be imported into Singapore. Jurong Port's cement terminal, one of the largest common-user cement facilities in the world, with an annual handling capacity of over four million tonnes, also houses the silos of **Jurong Cement**, **Pan-United Corp**, **Hong Leong Asia**, **Asia Cement** and **Lafarge**. Two other companies, **Holcim** and **Sin Heng Chan**, operate their silos on the opposite berth on the mainland. Jurong Port's spokeswoman says the decision to relocate all cement companies to the cement terminal was taken to intensify land use in Singapore. "These companies used to occupy a total of more than 12ha of land in the various industrial estates in Singapore; now [they take up] about 3.5ha at the Jurong Port cement terminal."

But, the consolidation also means the cement terminal is a key choke point for RMC players, because it is the most efficient way to bring in cement from a wide range of suppliers by sea instead of by road and rail from Malaysia. Chua reckons each shipment brings in about 25,000 tonnes of cement versus up to 30 tonnes over land. Engro's general manager Eugene Ho says, "We get to avoid the traffic jams along the Causeway. You need to be in the cement business to be able to grow your RMC business. Otherwise, it's easy for you to be cornered by a cement supplier who may think you are a threat [to his RMC business]. The cement supplier can then choose not to supply to you or sell to you at a very high price."

"Being able to source for our own supplies directly helps us to ensure quality in our raw materials, which leads to higher-quality RMC products," says CEO Patrick Ng of Pan-United, whose share in the local cement and RMC market is estimated at 25%. Those without a berth at Jurong Port's cement terminal would have to rent from competitors, operate their own clinker grinding plants or import over land, which may explain the tussle between Holcim and Malaysia's **YTL Cement** for Jurong Cement's berth in January. Sources say the expiry of Holcim's lease from Jurong Port in two to three years could be another factor. Holcim and Jurong Port declined to comment.

Competition heats up

Already, RMC players are reporting lower profitability amid intense competition. For the year ended Dec 31, Jurong Cement's losses swelled to \$5.6 million from \$756,348 previously. To streamline operations, Jurong Cement said it would suspend its batching plants in Tampines and Pandan Road, in a Singapore Exchange filing dated March 11. Meanwhile, Pan-United's building-materials segment reported a 50% fall in earnings to \$17.8 million in FY2009. DBS Group Research analyst Ho Pei Hwa notes that the company's weak earnings were due to a decline in average selling prices (ASPs) of about 20%, resulting in a drop in gross margin to 14.4%.

Engro, however, emerged relatively unscathed, with earnings from cement and building materials down 24% to \$9.4 million in FY2009. One of the reasons for its better performance could be the company's joint venture with steel mills in China to produce a green cement, part of which is imported into Singapore. Engro's Ho reckons it is the largest cement trader in Singapore, selling about 80% of its cement to medium-sized RMC players and contractors. This compares with Pan-United's use of over 70% of its cement for its own RMC operations.

Competition could intensify with Jurong Port's plans to expand the existing cement terminal. The Jurong Port spokeswoman says, "The port is currently undertaking a plan to develop an additional cement-handling berth besides the existing berths on Pulau Damar Laut, supported by unloaders and conveyor system. The new development, catering to two to three cement companies, will be integrated with JP's existing cement terminal." This could mean the relocation of Holcim and Sin Heng Chan from the mainland as well as additional players, which could signal more competition for everyone. This will add pressure on the major building-materials players here to focus on getting costs down, improving service and coming up with innovative products.

Cutting-edge technology

At Engro's terminal, Chen Enyi, business development manager at Engro, walks past corridors lined with accreditation certificates to a research and development lab, where technicians conduct simulation tests to create customised cement solutions. "Give me your conditions, and we will give you a solution," he says.

Engro's terminal is equipped with mixers that blend different proportions of ordinary Portland cement (OPC) and ground granulated blastfurnance slag (GGBS), a steel by-product that improves the durability, lifespan and chloride resistance of concrete, Chen says.

"When water is added to OPC, temperature rises to over 90°C. If you add GGBS, replacing up to 65% of OPC, temperature rises more slowly, reduced by about 15°C," explains Chen. "This is important because if OPC is too hot, it will cause cracking internally, so the building structure may not be too sound."

GGBS is also generally cheaper than OPC, with the proportion of GGBS to OPC ranging from 20% to 75%. "But, we conduct simulation tests to determine the percentage of GGBS to be used," says Chen.

Engro also has a cost advantage over other players as it enjoys a discount for the GGBS it imports from plants in China that it jointly set up with local steel mills since 2003. The company imports its VCEM brand of GGBS from eight production lines spread out over three provinces — Hebei, Shandong and Jiangsu. Each line can produce 600,000 tonnes a year. With increasing demand for GGBS, Chen admits steel mills are raising the price of their by-products.

Meanwhile, Pan-United and Jurong Cement import OPC from Japan. While it costs more, Ng of Pan United believes it offers value for money. "To produce good RMC products, we must have good ingredients. The OPC from Japan is of a very high and consistent quality [and] has a lesser carbon footprint than cement imported from other countries," says Ng, whose company also imports GGBS.

Furthermore, by maintaining a long-term partnership with its Japanese cement manufacturers, Pan-United knows it can rely on them even when the industry faces shortages. This in turn allows Pan United to provide better service to customers. "Our customers have less downtime when they use our RMC," says Ng.

Pan-United has come up with innovative

Investing in mortar

NAME OF COMPANY	WHAT IT DOES	LAST TRADED (\$)	MARKET CAP (\$ MIL)	YEAR-TO-DATE CHANGE (%)	PER (TIMES)	YIELD (%)
Engro Corp	Sale of eco-friendly speciality cement	1.00	117	11.11	4.9	3.0
Hong Leong Asia	One of the largest ready-mixed concrete suppliers in Singapore and major shareholder of Malaysia's cement producer Tasek Corp	4.84	1,851	66.9	14.5	2.0
Pan-United Corp	Largest cement and ready-mixed concrete producer	0.52	287	-1.89	8.2	5.7

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solutions to help customers save costs. For instance, in the Fort Canning Tunnel project, "shotcrete" was sprayed onto the tunnel lining instead of putting up form work on the underside of the tunnel. "Shotcrete helped our customer save time and manpower costs in the construction of the tunnel. The quality is also better with shotcrete, as it is harder to pour RMC into the form work of the underside of the tunnel without voids in the concrete," says Ng.

Another product developed in-house by Pan-United is high-grade self-compacting concrete for structural use, which helps customers to save time, manpower and equipment. "This type of concrete is used to cover working areas that are very difficult to reach, involving congested steel reinforcement design as well as difficult architectural design," says Ng.

More such innovative solutions are expected to be adopted with the government's introduction of a $250 million package to raise the productivity of workers in the construction industry and help companies adopt new technologies. Last week, a $15 million sustainable construction capability development fund was launched by the Building & Construction Authority (BCA) to recycle demolition waste and other materials.

Watching the bottom line

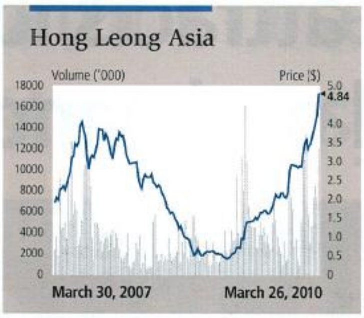
Companies may innovate and adopt environmentally friendly practices, but does that mean building materials are less of a commodity, with prices driven by the forces of demand and supply? Chua Leong Hai, CEO of civil engineering specialist Hock Lian Seng, says concrete prices are largely similar across manufacturers. He is not so concerned about the use of eco-friendly materials unless it is a project requirement. Ultimately, Chua is more concerned about service and the ability to provide a ready supply. Hock Lian Seng's RMC suppliers include Hong Leong Asia's Island Concrete and Pan United.

CEO Chua notes that prices of raw materials like sand have fallen from peak levels, and this in turn leads to lower prices for RMC, which may have affected the profitability of suppliers like Pan-United. Ho of DBS has a "hold" recommendation on Pan-United and expects demand and ASPs for RMC to soften further in 1H2010. "We understand that order flow from new projects will slow, as a number of the major projects awarded and smaller infrastructure projects are still at the design stage. Demand is expected to pick up from 2H2010 with the commencement of construction works for these projects," she says in a Feb 24 report.

No let-up in infrastructure projects

Singapore continues to experience a building boom as public funds pour into infrastructure projects ranging from airport runways, expressways and MRT tunnels to new healthcare, sports and educational facilities. The BCA expects $21 billion to $27 billion worth of projects to be carried out this year, from $21 billion last year. About 65% of demand will come from public-sector projects like Downtown Line Stage 3. For 2011 and 2012, construction demand is estimated at $18 billion to $25 billion a year, of which $10 billion to $14 billion a year will come from the public sector.

While Engro, with a combined storage capacity of 60,000 tonnes, is happy to stick to its successful strategy of cement trading, some players are expanding their base at Jurong Port cement terminal to ride the boom. Last year, Pan-United completed its second 40,000-tonne cement silo, more than doubling total capacity to 85,000 tonnes. "This helps us to better serve our customers, as we have a bigger capacity to meet short-term peak demands and achieve more economies of scale. With our new silo, we can also handle more special cement," says Ng. ■



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