

Chemical SMEs Differentiate to Capture Bright Sparks

Singapore's chemical industry, which grew out of a need to diversify from its petroleum-refining base, has come a long way since the early eighties.

The subsequent amalgamation of seven southern islands into Jurong Island in the late 1990s has led to more than 90 leading petroleum, petrochemical, specialty chemical majors and other supporting companies investing more than S\$30 billion in fixed assets such as new plants, warehousing, tankage and terminalling facilities on the island.

Since 2006, the chemical industry has surpassed the electronics industry to be the largest contributor to Singapore's manufacturing output. It now contributes a significant \$81.7 billion which is equivalent to 34% of the total output. About 80% of the nearly 400 chemical companies here are small and medium enterprises (SMEs), which account for revenues of \$4.8 billion and value-added of \$1.2 billion.

"The chemical industry has shown a lot of grit. Most chemical SMEs are still resilient despite the global recession. They are differentiating themselves with new capabilities, for example, investing in research laboratories, innovating new materials and diversifying into new sectors," noted Victor Tay, Director of Transport, Logistics, Environmental and Engineering Services, Biomedical and Chemicals at SPRING Singapore.

"For the next phase of growth, local firms should strive to build long-term sustainability through supply chain management as well as invest in R&D to provide more value-added products and services to meet the evolving needs of global markets," Mr Tay said.

With new trade regulations emerging such as Europe's Registration, Evaluation, Authorisation and Restriction of Chemical substances (or REACH), SMEs should keep themselves updated to ensure uninterrupted servicing of their European clientele.



Executive Director of R&P, Mr Tseng Kau Chou, stresses the importance of R&D.

R&P differentiates with niche and innovative approach

For instance, through SPRING Singapore's facilitation, R&P has been able to secure both research expertise and financial resources to process polymers that are lighter, ultraviolet and heat resistant; and yet with higher tensile strength often used as metal substitutes for various applications.

R&P has also been looking into developing more products that carry smaller carbon footprints so that its clients are able to meet the more stringent quality, safety and environmental standards for plastic products aimed at the European and North American markets.

"Rather than being another processor dealing with low-margin, mass market plastic products, we place a strong emphasis on providing holistic and efficient value-generation in order to offer our clients a wider range of products and sophisticated processes that are more efficient and cost effective," said Mr Tseng.

While most of its competitors had moved to lower-cost countries, R&P which also has plants in Malaysia and China had decided to take the extraordinary tack, which is to beef up its value-added services by shifting its more capable operations to Jurong Island to be closer to its upstream polymer producers.

"By locating ourselves in a petrochemical and logistic hub, we have made our operations almost like an extension of our customers' plants by taking care of not only their polymer processing requirements but also integrating their storage and material handling activities so as to optimise their overall supply chain requirements." ■



Founder of PJI Contract, Mr Philip Loh, believes in constantly upgrading its technology, equipment and the skills of its staff.

With the government's assistance, PJI set up its own lab 2 years ago to provide customised solutions and quality control to its clients. With its Delta brand of products, it is now exploring expansion into Vietnam, Philippines and Indonesia.

"In fact, this current economic downturn is the best time to expand as the set-up costs are lower. Talent is also more readily available," said Mr Loh. The company recently invested in a new 10,000 sq ft chemical facility with progressive installation equipment.

"It's like going to battle, isn't it? If you don't have the right equipment and human resources, you can't go out to conquer new territories. I believe that we have built up our brand and credibility sufficiently to branch out into the region." ■

Aik Moh diversifies into clean energy industry



Executive Manager of Aik Moh Paints & Chemicals, Mr Roy Tan Keng Hong (left) with company's founders, aspires to diversify and penetrate new markets.

Homegrown Aik Moh Paints & Chemicals has shown itself over the years to be a nimble enterprise, adept at evolving with the times and the changing industrial landscape of Singapore.

The company, which started off in the eighties as a retailer of household paints and solvents has since become a distributor of industrial solvents and more recently a supplier of laboratory-grade chemicals to the pharmaceutical and biomedical sectors.

Not content to be just another distributor, Aik Moh has also gone on to offer other value-added services such as the blending of chemicals, repacking, transport and logistics support for its customers as well as becoming a contract manufacturer for multinational chemicals producers.

Said Executive Manager Roy Tan Keng Hong, "The blending business has become an important source of revenue for us even as the demand for some industrial chemicals decline."

The company is now embarking on its next phase of diversification by moving into the clean energy space. Its first foray involves a collaborative consortium supported by SPRING Singapore for the installation of an adsorption chiller at a giant pharmaceutical manufacturing facility in Singapore. Unlike conventional air-conditioning systems, Aik Moh's adsorption chiller is able to recycle waste heat from industrial plants or be powered by solar heat energy.

Mr Tan pointed out that the system will be ideal for industries that generate lots of heat which might otherwise be gone to waste such as the factories, mining and oil and gas sectors.

Aik Moh has also leveraged on SPRING's network to source for suppliers for the system and components. The new technology has already attracted interest from companies in Southeast Asia and the Middle East.

"We are always looking for ways to diversify and to define the next phase of our growth, and clean energy is one area in which we can tap on our existing network in the petrochemical and pharmaceutical sectors," Mr Tan added. ■

PJI invests in surface coating facility amidst challenging times

A former commando officer in the Singapore Armed Forces, Philip Loh decided to take a leaf from his military training and specialise when he founded PJI Contract back in 1990.

The company has since gone on to become a niche provider in flooring and surface protection coating system and count among its multinational clients major players in the food, electronics, pharmaceutical, as well as oil and gas industries.

"We have clients who have special requests for anti-microbial coatings because they are into foods or pharmaceuticals; corrosion-proof flooring due to the chemicals they have to handle; or anti-static floors for their clean-room facilities."

"We can even provide surface coatings that can reduce the ambient temperature of a coldroom or add to the strength of a structure or building. We also have flooring compounds that can harden in 20 seconds for clients for whom any operational downtime can cost up to a million dollars a day," said Mr Loh.

He attributed the success of PJI to its philosophy of constantly looking for ways to upgrade its technology, equipment and skills of its staff.

"We carry out R&D collaborations with external labs or our suppliers to come up with new coating compounds. We also invest in upgrading our equipment so as to build up our credibility as a flooring and coating specialist," Mr Loh added.

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For more information, contact :
Ms Wennie Amedo, Singapore Chemical Industry Council Limited
Tel : 6278 9576 Fax : 6278 9326
or visit www.spring.gov.sg/etac