



An Innovator in Technology-Based Solutions

“BOI incentives have the potential to fundamentally change the landscape of Thailand’s machinery and factory maintenance industry.”

Charoenchai Prathuangsukri  
Managing Director

## Rayong Engineering & Plant Service Co.,Ltd

Rayong Engineering & Plant Service is the subsidiary engineering and maintenance arm of one of Thailand's largest business conglomerates, the Siam Cement Group (SCG). The company was established by consolidating the maintenance, engineering & construction and procurement services for SCG's petrochemical and other industrial plants throughout the country, and first registered in Thailand in October of 2001. The company is well known for providing innovative technology-based solutions for factory and machine maintenance. Rayong Engineering's ongoing pursuit of innovation is reflected in a number of advancements that have been made in multiple areas, such as system integration, the utilization of data analytics, and the development of sensors to detect and monitor machinery erosion, all of which facilitate preemptive maintenance and help avoid expensive repairs and unnecessary business disruptions due to unexpected mechanical breakdowns. As a result of their influence, Rayong Engineering & Plant Service has made a significant contribution to the changing nature of factory machine maintenance in Thailand. Their emphasis on predictive maintenance has resulted in many businesses fundamentally changing the way

they approach maintenance and operating standards. The company currently employs about 170 people and has shown strong financial performance in recent years. In 2018, for example, the company saw net sales revenue increase 4.56%, with an associated total asset growth of 4.96%.

Rayong Engineering & Plant Service believes there can be no ‘one size fits all’ approach to developing industrial mechanical solutions. Instead, they seek to identify and implement tailored solutions that address the needs of each specific business model, utilizing their expertise in research and development together with their industry leading centralized machine analytics software. This technology has been developed so that mechanical problems can be identified and addressed before they occur, without the need for factories to store data across numerous separate hard and soft platforms, but rather bringing everything under a single system. This reduces the disjointed nature of existing data, and provides a cohesive body of information for analysis, creating an overview of the machine and what maintenance needs to occur. This advancement helps preempt any serious

issues that would otherwise force a machine to be suspended from operation and avoiding costly delays to production.

## **Vision for the Future**

Throughout Asia, factory and machine automation has become increasingly prevalent. Presently South Korea, Japan and Singapore account for three out of the world's top four countries with the highest density of robot workers. However, in Thailand, interest in automation is still developing. Presently, there still remains a high reliance on physical labor in many industries, primarily due to the high upfront costs involved with implementing robotics, a financial hurdle that many companies are unwilling to meet at this point in time. According to Mr. Charoenchai Prathuangsuksri, Managing Director of Rayong Engineering & Plant Service, current BOI incentives can be a strong catalyst to motivate Thai based manufacturers to increase their level of automation.



*“BOI incentives have the potential to fundamentally change the landscape of Thailand’s machinery and factory maintenance industry. By incentivizing*

*automation, costs will inevitably reduce, thereby resulting in improved outputs for factories across Thailand”* he said.

As an industry leader, Rayong Engineering & Plant Service has an essential role to play in the future development of Thailand's machine automation and maintenance sector. Through such measures as knowledge sharing and capacity building, Rayong Engineering & Plant Service seeks to act as an additional catalyst for increased competition for both the domestic and international markets. This in turn will spur further demand for the company's services, and help propel Thailand forward as an innovator within the burgeoning machine automation sector.

## **Supporting Policies from the Government**

As one of the government's targeted future industries, the government and education centers are focused on supporting the automation and robotics industry. There are numerous research centers actively engaged in robotics research and development and workforce training, including The Institute of Field Robotics (FIBO), the Center for Biomedical and Robotics Technology (Bart Lab), the Intelligent Robotics and Mechatronics Laboratory (SKUBA), as well as the Regional Center of Robotics Technology at Chulalongkorn University. Since Rayong Engineering & Plant Service was established nearly twenty years ago, it has benefited from an assortment of Board of Investment (BOI) tax and non-tax incentives. To date, the support given by the BOI has provided Rayong Engineering & Plant

Service with the ability to ‘push the boundaries’ when it comes to improvements to machine automation and maintenance processes. This has resulted in both SCG and other Thai companies operating at ever-increasing levels of automation, resulting in reduced operating costs contributing to increasing profit margins and growth. With the continued support for machine automation by the BOI, and the government's “Thailand 4.0” ambition to create an environment fostering a digital-based economy, it is anticipated that the sector will continue to develop and provide a strong platform for future growth.

### **Attractive BOI Incentives**

The Thailand Board of Investment (BOI) offers a wide range of tax and non-tax incentives for projects that meet national development objectives. Tax-based incentives include an exemption or reduction of import duties on machinery and raw materials, as well as corporate income tax exemptions of up to eight years. Non-tax incentives include permission to bring in expatriates, own land and take or remit foreign currency abroad.

Recognizing the importance of the robotics and automation sectors, tax incentives are granted to approved projects in numerous related activities, including software development and services provisioning such as big data and business process management, IT and cyber-security, software for controlling and/or connecting advanced technology equipment and devices, automation machinery and/or automation equipment, and design engineering, and

assembling of robots or automation equipment or parts.

Additional information about specific manufacturing activities relating to the robotics and automation industries can be found by clicking [here](#) or contacting the BOI’s Investment Promotion Division 2.

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Source: Rayong Engineering & Plant Service. *Thailand Investment Review*, 30, 8-9  
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