



Press release, August 2020: Bangkok, Thailand and Weimar, Germany

Glatt selected for Engineering Project for new GMP Biorefinery by NSTDA in Thailand

National Science and Technology Development Agency Thailand (NSTDA) is implementing the Government initiative Thailand 4.0 with regard to strategic biotechnology growth hub at Eastern Economic Corridor of Innovation (EECi) in Thailand. One part of the new BIOPOLIS complex is the GMP Biorefinery Pilot Plant, for which the German engineering company Glatt Ingenieurtechnik was selected to provide the engineering services. The contract between NSTDA and Glatt comprises the Conceptual as well as the Basic Design phase for the GMP Biorefinery.





Figure A.1 – GMP BIOPOLIS Pilot Plant Building at EECi

Fig. (NSTDA©): BIOPOLIS plant complex with indication of GMP Biorefinery building within the complex

The main objective for the development of the GMP Biorefinery Pilot Plant at EECi is to provide a “non-proprietary (generic) equipment” platform for private and public organizations, as well as local and international universities to scale up and validate their laboratory prototype and perform the techno-economic feasibility study before investing on a specific production line.

This Biorefinery platform will be designed in such a way that allows users to reconfigure the unit operation line-up arrangement (“Lego box” concept), adjust process parameters to the extreme values in order to find the optimal process conditions (“Flexible process window for optimization”), and customize or scale the equipment for larger production scale.

Glatt Ingenieurtechnik in Germany will lead the engineering project and design the biotech process plants.

	Glatt engineering project for GMP biorefinery of NSTDA in Thailand	
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Eastern Economic Corridor of Innovation (EECi) aims to advance and transform existing industries, both within the EEC and in other parts of the Thailand, through innovative research and development and advanced laboratory-scaled technology development to actual industrial application. Innovative Agriculture and Biorefinery are among the target industries of EECi. Thailand has developed a basic infrastructure to support the growth of Biorefinery industry. Thailand government has approved the investment policy in Biorefinery infrastructure at EECi as a central facility to advance targeted Biorefinery technologies to higher Technology Readiness Level (TRL).

National Science and Technology Development Agency Thailand (NSTDA) is a government agency established to promote the development in science and technology for Thailand. NSTDA has multiple cooperations worldwide with research institutes, innovate industry, university and many companies. NSTDA was established in December 1991 as an autonomous government agency under the National Science and Technology Development Act 1991. NSTDA is affiliated to the Ministry of Higher Education, Science, Research and Innovation, with the Minister serving as the chairman of NSTDA Governing Board. NSTDA is entrusted with an important task to accelerate science, technology and innovation development in Thailand in order to respond to the need of the industry and enhance the country's competitiveness in the global economy, and as a result, making contribution to national economic and social development. NSTDA's mission is to perform and support Research and Development, Design and Engineering, Technology Transfer, Science and Technology Human Resource Development and Infrastructure Development. This mission is implemented through working with partners from academic, government, private, and non-government sectors, both domestically and internationally. <https://www.nstda.or.th>

Glatt Ingenieurtechnik GmbH plans and carries out international projects from the enlargement or modernization of existing production facilities to the construction of whole new factories. In doing so, the company combines professional engineering with sound technical know-how derived from patented process technologies it has developed itself, such as Glatt powder synthesis and fluidized and spouted bed methods for granulation and coating processes. The focus of the projects is on processes in the field of particle design and particle engineering for the development, optimization, functionalization and production of powder and bulk goods such as granulates and pellets for food, feed, chemicals and fine chemicals and processes for the manufacture of biotechnological and chemical active ingredients for sterile and non-sterile dosage forms of drugs.

Within the competence area of Process & Plant Engineering the company provides long year competences in biotechnological projects as well as in chemical synthesis engineering and has wide project experience in Asia, including Thailand, India, China, Vietnam, Bangladesh and further countries.

Glatt Ingenieurtechnik GmbH has its headquarters in Weimar. Affiliates are located in Wiesbaden and Dresden, Switzerland, Russia, India and the USA. As an integral part of the international Glatt Group, Glatt Ingenieurtechnik can draw on a global network of some 3,000 employees. Numerous agencies exist worldwide as contacts for the full range of goods and services. For more information, please visit: www.glatt.com/ppe