TOYO TIMES

TOYO COMMUNICATIONS

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Toyo Engineering Corporation

UP TOYO COMMUNICATIONS TO DATE

Meeting Client Expectations with Speedy Responses

—TOYO provides value for diversified client needs

As the economies of emerging countries, represented by the BRICs, continue to expand, and many companies around the world start looking for growth again, TOYO is taking a more client-oriented approach in order to steadily capture business opportunities. At the same time, TOYO is striving to develop new technologies and services. In this edition of UP TO DATE, we interviewed Hideki Shiinoki, Senior Executive Officer and Division Director, International Sales and Marketing Unit, on how TOYO is meeting diversified client needs.

Hideki Shiinoki
Senior Executive Officer and Division Director, International Sales and Marketing Unit

Getting Involved at the Project Planning Stage and Offering Speedy Response to Client Needs

Q **A "client-oriented approach" is one of TOYO's policies this fiscal year. Would you give us the background on this policy?**

Recently, there have been dramatic fluctuations in the business environment, such as those we have seen in the economic directions and political situations of countries around the world. In response, clients have been diversifying their investment strategies. Based on the premise that markets will constantly change, flexibility has become a priority. While some clients are being selective and focused in their capital investments, specializing in their core businesses, other clients are seeking to ensure stable earnings by diversifying their businesses. Therefore, it is more important than ever to be positioned near clients, understand their way of thinking at an early stage, and use this information to make speedy business proposals. In today's market, engineering companies must demonstrate quickness in being able to respond to changes in the market or client needs.

Q **Are there any important points to keep in mind when dealing with diversified client needs?**

To deal with clients' increasingly diversified and sophisticated needs, we are required to have the capabilities to meet and solve the challenges of new issues in addition to the traditional requirements of experience, knowledge, and information gathering. Going forward, the trend in project execution is toward localization. In addition, the issues involved with projects become more complicated because of clients' increasingly higher requirements regarding the use of multiple contractors on project execution; Health Safety Environment (HSE) policies; and other issues. TOYO was one of the first companies to establish a global network and has successfully completed projects around the world. We currently continue to receive repeat business from major chemical and oil companies in Germany, the United States, and Brazil. I take pride in knowing that repeat business from such clients is proof not only of our project execution capabilities, but also of their high evaluation of our solutions capabilities in dealing with their increasingly complex issues.

Q **What sort of value do clients gain from using TOYO?**

Probably the greatest value TOYO offers its clients is order-made services in all aspects of project execution. For example, even with the form of the contract, TOYO can offer a wide range of options, such as lump-sum turnkey basis, cost reimbursable basis, or a mixture of the two types of contracts. These alternatives allow the clients to select the best structure for their capital investment plan or their own project execution type. In addition, we can adjust to client needs in such ways as proposing a shortened project timeframe, which is based on determining critical points, or working with the clients right from the beginning as an alliance partner that acts as their engineering division.

TOYO likes to be involved with the project right from the first stages and to maintain a close relationship with the client throughout the project. For that purpose, we have developed a marketing style that keeps us close to the client. By being able to meet clients' needs quickly and accurately from the preparation stage of the project, we can assist the client in achieving the best capital investment plan possible.

Using the Global Toyo Network to Stay Close to Clients

Q **Are the independent activities of your overseas group companies important in pursuing a client-oriented approach?**

Toyo-Japan was mainly the sole contact point for clients. However, in order to enhance the client-oriented approach, we have to stay close to clients. In the future, Global Toyo companies will take the reins for our sales efforts because they are familiar with the business climate and market trends in each country and region, while Toyo-Japan's International Sales and Marketing Unit will provide support. To that end, TOYO has made "Advance Global Toyo" one of the basic policies of the medium-term management plan that covers three years from the fiscal 2009. Based on this policy, TOYO will strengthen the sales resources of each Global Toyo company, including Toyo-India, Toyo-China, Toyo-Korea, and Toyo-Malaysia, which performs EPC business.

Q How does TOYO plan to differentiate itself from its international competitors in the global market?

Competitive price is one important factor in standing out among the competition. However, we can't just focus on low price, because in the final analysis, what is going to satisfy the client is assistance with formulating an investment plan that suits the client's needs and resources and a project proposal that is in line with the client's strategies at a reasonable price. We have to be sensitive about such factors as the client's needs and social requirements and create a proposal that fulfills the client's expectations.

I will give the details on our R&D efforts later, but we are investing sufficient resources in state-of-the-art technologies and services. With project execution, it is our policy to be diligent in completing the project right up to the last step. Our overseas projects are strongly affected by political and economic conditions, but by overcoming challenges and completing projects, we earn the trust of our clients. Steadily building that trust in TOYO leads to new orders.

Newly Established Infrastructure Sales and Marketing Division and Americas Sales and Marketing Division

Q We hear that some changes were made in your organization in April 2010. Would you tell us what changes were made and why?

In parallel with the Plant Sales and Marketing Division, we newly established the Infrastructure Sales and Marketing Division. With this initiative, we have established an independent organization specializing in the infrastructure domain, an area in which project orders are expected to expand in the future. Moreover, in the potentially strong growth region of the Americas, we newly established the Americas Sales and Marketing Division, which will endeavor to develop overall business in the infrastructure and hydrocarbon-related fields. The General Manager of the Americas Sales and Marketing Division resides in Brazil. With these organizational changes, we believe that TOYO can now respond more fully to client needs.

Q What are your current activities in the infrastructure market?

Although TOYO's core business is hydrocarbons, we are also developing business in the infrastructure field, such as the water resource, power generation, and transportation markets.

Starting with the water resource market, in 2008 we jointly purchased Atlatec Holdings, S.A. de C.V., a water treatment engineering company in Mexico, with Mitsui & Co., Ltd. Utilizing Atlatec's sewage recycling-related knowledge and expertise, we are building our water resource-related business in Asia. In the power generation market, we are focusing on coal-fired power generation and combined cycle power generation. In the transportation market, we jointly established Toyo Transport Engineering Co. Ltd., with Mitsui Co. three years ago. Toyo Transport has formed a technology base for entering this market.

Q How important are the training, development, and use of human resources that can serve client needs?

With the popularization of Information and Communication Technologies (ICT), resources can be accessed around the world instantly. It has become an age where the value of human resources to clients lies in their performance. With cost reimbursable basis projects, the contractor is required to have transparent work processes that ensure the client and related parties of proper project execution. This type of project differs from the traditional lump-sum turnkey basis project because the contractor has many opportunities to show the performance of individuals to the client. Therefore, in addition to a high degree of expertise, the cost reimbursable project requires professional engineers who can take the initiative within a project team including the clients or partners.

Q What are your thoughts on strengthening the sales staff?

Strengthening our sales capabilities cannot be achieved without developing human resources. We are paying particular attention to training and developing human resources that can carry out sales activities daily as well as on a medium- to long-term perspective based on understanding market trends. People who operate locally but with a global per-

spective of the market. People who can think on a macro basis and take action on a micro basis. The engineering business of the future demands these types of multifaceted abilities.

Product Development and Maintaining Proprietary Technologies

Q **Will you tell us about TOYO's progress with development of a small- to medium-scale Gas to Liquids (Micro-GTL*) plants and Medium-scale Liquefied Natural Gas (M-LNG) plants and the future potential of these markets?**

The basic technology for the Micro-GTL plants that TOYO has been developing jointly with Velocys Inc., and MODEC, Inc., is almost complete. With the cooperation of PETROBRAS in Brazil, we have entered the verification stage. The demonstration plant is scheduled for completion in the beginning of 2011. After test operations, we will start a full-scale marketing drive.

With M-LNG plants, our target will be plants with maximum annual processing capacities of 500 thousand tons to 3 million tons. There are many small- to medium-sized gas fields around the world that cannot be developed profitably using the same technologies as a large-scale LNG plant. We are strongly marketing these economic M-LNG plants as the optimum method for developing stranded gas fields.

*GTL: A process for producing liquid fuels, such as diesel and naphtha, from natural gas.

Q **TOYO develops and owns proprietary technologies. What is the purpose behind this strategy?**

TOYO's mission is to provide clients with total solutions that enable them to optimally commercialize their operations. For example, when we are building a plant for developing gas fields, an important issue is how to go about processing the products from the gas field in order to increase their value-added content. To do so in terms of an energy value chain or a gas value chain, it is necessary to accumulate technologies within the Group.

Over many years, TOYO has carried out state-of-the-art and proprietary technology development. Our technology development fields have covered a wide range, including our urea synthesis technology ACES21®, dimethyl ether (DME), methanol synthesis technology, COREFLUX™ technology that can efficiently extract natural gas liquid from natural gas, and removal technology for acid gas that damages the environment. All of these technologies represent important business resources for TOYO.

Our Role as the Most Reliable Engineering Partner

Q **In conclusion, do you have a message for the readers of TOYO TIMES?**

TOYO was a pioneer in localization of overseas bases in the industry, and has now gone one step further through efforts to establish its Global Toyo structure. We are striving to meet clients' diversifying needs and sophisticate our project management skills with the aim of maximizing customer satisfaction (CS). Our continued efforts in these areas have been highly evaluated by our clients and have served to build a solid relationship of trust.

For those companies with which we have not worked in the past, we sincerely hope to have the opportunity to show them TOYO's ability. We readily contribute to the creation of clients' value as the most reliable engineering partner.

Hideki Shiinoki

Senior Executive Officer and Division Director,
International Sales and Marketing Unit

Profile

Since joining Mitsui & Co., Ltd., in 1973, Hideki Shiinoki has spent his whole career in the oil and chemical plant field, with particularly strong experience in plant sales in the Asia area. He served as the representative director of an affiliated company of Mitsui & Co. from 2005 to 2008. Mr. Shiinoki joined TOYO in May 2009. In April 2010, he was appointed to his current position. With his comprehensive knowledge of sales and management, Mr. Shiinoki says that he hopes to help TOYO to become an engineering company that can meet evolving market demands by having a balance of aggressive and sound management.

Successive Completion of Projects on a Cost Reimbursable Basis

—TOYO's project management diversifying to meet client needs

This spring, TOYO completed two large-scale reimbursable contract projects in Singapore and in China. TOYO has been focusing on these projects as new core business recent years. With the cost reimbursable basis, the contract calls for the client to reimburse to the contractor the cost of all expenses necessary for the execution of the plant, such as engineering, procurement, and construction and pre-commissioning. Therefore, decisions regarding costs necessary to execute the project need the approval of the client. Compared with the EPC lump-sum turnkey basis, where the contractor makes independent decisions regarding outlay of funds, the cost reimbursable basis requires more transparency and accountability, as well as different management skills and methods to avoid schedule delay and cost overrun. TOYO is diversifying and advancing its project execution methods and skills in response to the growing demand among clients for larger-scale projects and fast track reimbursable projects.

An Ethylene Plant for Shell Eastern Petroleum (Pte) Ltd.

On May 4, 2010, Shell Eastern Petroleum held its completion ceremony for the ethylene plant at its complex on Bukom Island, Singapore. The completion ceremony was attended by Prime Minister Lee Hsien Loong and other senior government officials of Singapore as well as by Peter Voser, President and CEO of Royal Dutch Shell plc.

The project consists of an 800,000 ton ethylene plant, a 450,000 ton propylene plant, and a 230,000 ton benzene plant (annual production capacities) on a site adjacent to Shell's refinery on the island. These plants will use heavy oil produced by the refinery to manufacture high value-added petrochemical products.

TOYO and CB&I Lummus did the detailed engineering and project management jointly on a cost reimbursable basis. TOYO signed the basic engineering phase contract in June 2005 and concluded the EPCm phase contract in July 2006.

Building a Win-Win Relationship with the Client

The Shell project was implemented by an integrated organization formed by a joint venture, with the basic engineering done in the Netherlands and the detailed engineering in the Czech Republic, Singapore, and India. In addition, it is worth noting that the project was completed on schedule, despite problems arising during the project. These problems included scarcity of materials and equipment, difficulties acquiring adequate labor, and restricted storage and accommodation space on the construction site, Bukom Island. In spite of various challenges, the joint venture completed the project with a record of 39.8 million man-hours without lost time incidence, which is an outstanding record for both joint venture companies as well as for Shell. The project was completed in February 2010, and production started in the following March. Along with TOYO's strong project management skills, building a win-win relationship with the client based on mutual respect was a key element of succeeding in the project.

TOYO's completion of this large-scale, 2 billion US$ project, on schedule and without cost overruns, on a cost reimbursable basis, has major significance for the Company.

Saudi Arabia
●2002 >>> Oil Field Development

Venezuela
●2007 >>> Refinery Modernization

Cost Reimbursable Contract

Siloxane Plant for Dow Corning Corporation in China

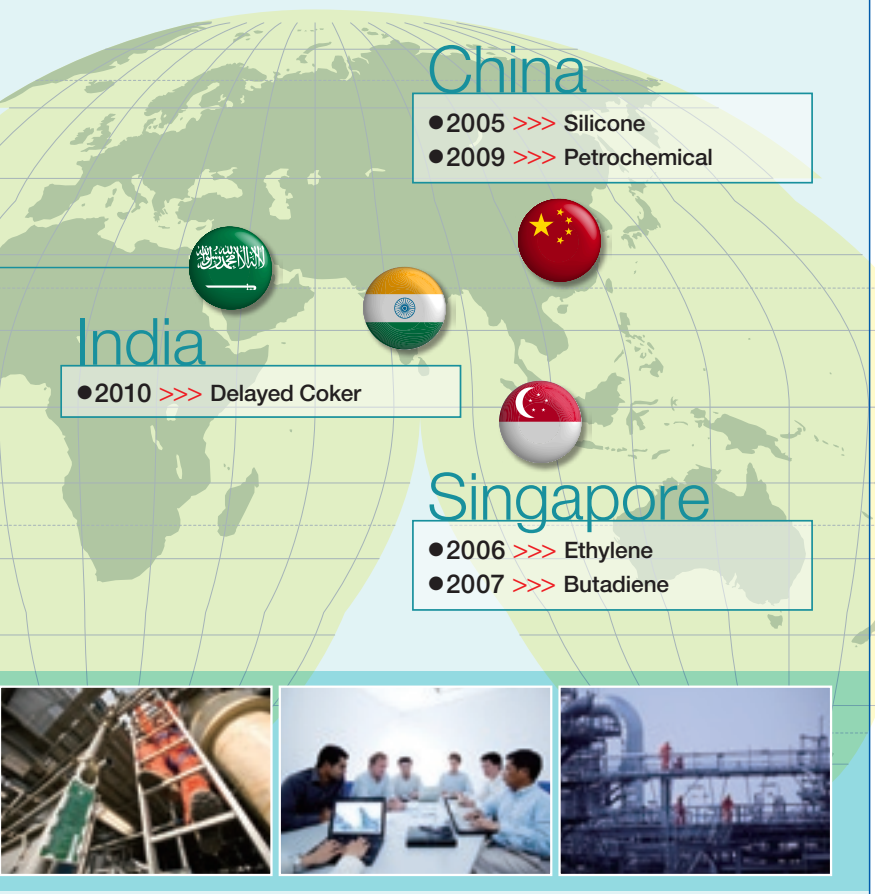
Following the ethylene plant in Singapore, in May 2010, TOYO completed siloxane plant construction for Dow Corning Corporation in Zhangjiagang, Jiangsu Province, China. Commissioning of the plant is undergoing an area-by-area by client.

The project was to construct a plant to produce siloxane, which is a raw material of silicone products. The plant will supply siloxane to a downstream plant of Dow Corning and Wacker Chemie AG for the production of silicone resins and oils, semiconductors, and other products. A joint venture of TOYO with Aker Solutions China (AS-China) was responsible for project management on a cost reimbursable basis contract.

Project Implementation with the Global Toyo Organization

TOYO applied an international formation for the execution of the project, utilizing the Global Toyo organization, including Toyo-Japan, Toyo-Korea, and Toyo-China. Toyo-Japan led project execution, forming a project directorate team to oversee collaborative overall integration of the project and prepare common execution procedures; basic set up of engineering specifications, tools, and databases; and execution of common service, such as procurement. Toyo-Korea provided extended Front End Engineering Design (FEED) services that included essential detailed design information. Based on the extended FEED, Toyo-China and AS-China shared the tasks of detailed design management and area-by-area construction execution as project execution teams. This project organization, which utilized the strengths of each company in their respective regions and specialized fields, and the integration with the client drove the project to success, enabling the optimized balance of cost, quality, and schedule.

Projects on a Cost Reimbursable Basis



One of the special features of a cost reimbursable contract is that, compared with the EPC lump-sum turnkey basis, it is easy to reflect the client's indications or opinions on plant specifications. For that reason, it is essential to have the necessary experience and technical expertise to provide clients with accurate advice on their ideas and plans. In addition, the contractor is responsible for providing the clients with cost information that enables them to make decisions on economic feasibility. In other words, the project manager and all project members should have the proper skills and knowledge to successfully answer clients' requests and queries. By being able to respond to these diversifying client needs and successfully completing the large-scale projects in Singapore and China, TOYO has demonstrated an expanded range of project management capabilities. The Company is currently working on a similar type of project for BASF in China, based on a cost reimbursable contract.

Ethylene Plant

TOYO Completes World-Class Ethylene Plant in India

In April 2010, TOYO successfully completed commissioning of a world-scale naphtha cracker plant for Indian Oil Corporation Ltd. (IOCL), a Government of India Undertaking. The plant has a production capacity of 800,000 tons per year of ethylene and 600,000 tons per year of propylene. It is situated in the grass-roots Panipat Petrochemical Complex in close proximity of the existing IOCL Panipat Refinery, 120 km north of New Delhi. The petrochemical complex, built at a cost of over 3 billion US$, is the largest operating cracker in India. It includes downstream polymer plants and full utility/offsite facilities. The petrochemical products it produces will be consumed in the domestic market. The project was executed on a turnkey lump-sum basis, by a consortium of TOYO and Larsen & Toubro, Ltd (L&T). This consortium was responsible for all stages of project management, including detail engineering, procurement, construction, and commissioning. This is the 38th grassroots ethylene plant constructed by TOYO.

From the beginning until the end, this project was exposed to circumstances that impeded its execution. These included an extraordinary price hike of equipment and materials in volatile global market in 2006–7, unprecedented construction boom in India in 2007–8, and the collapse of the global economy in 2008–9. Exhibiting marvelous teamwork with the client, the high caliber Global Toyo project members came to grips with all difficulties, made thorough efforts, and arrived at a successful completion. Toyo-India played a major roll in this project. The consortium of TOYO and L&T reached the goal of zero lost-time incidences with a remarkable record of 39.6 million non-LTI man-hours.

With our ability to provide full-range services and comprehensive solutions in the industry, TOYO is always ready to be a long-term partner for contributing to the sustainable growth of India.

Completed ethylene plant

Mid-Scale LNG

M-LNG Feasibility Study for Australian CBM Starts

TOYO is conducting a joint feasibility study with Hitachi, Ltd., for a coalbed methane (CBM)[1] development project by Eastern Star Gas Limited (ESG), Australia, in Newcastle, in the state of New South Wales, Australia. The three companies signed an agreement in May 2010.

Currently, there are several projects of CBM under planning in Australia, a country rich in this gas. ESG owns the largest CBM concessions under production in New South Wales, and has plans to begin exporting LNG in 2014. ESG will begin by exporting one million tons of LNG to Japan and other countries in the first year of operations, eventually raising exports to four million tons annually.

The feasibility study will be based on TOYO's Mid-scale LNG (M-LNG) plant, which incorporates the LNG liquefaction technology of Chart Energy & Chemicals, Inc. The M-LNG plant features a simple and compact structure because of its single mixed refrigerant process. In addition, the use of a modular construction method reduces construction costs, shortens construction time, and enables scalable expansion. All these features make the M-LNG plant a more appropriate plant for small- to medium-sized gas fields than the large, traditional LNG plants. Furthermore, the M-LNG is also easy to operate, featuring shorter start-up and shutdown times because of the use of electric-driven compressors.

Signing ceremony for M-LNG feasibility study

Since there are many stranded gas fields[2] in the Asia-Pacific region, TOYO expects that there is a strong latent demand for M-LNG plants. With a view to using floating LNG production plants in the future, TOYO is aiming to expand its business in this area.

Notes: 1. CBM is produced during the coal forming process and trapped underground between coal seams or in surrounding areas.
2. "Stranded gas fields" refers to small- and medium-sized gas fields that have not been developed for economic or geographical reasons.

Gas Development

TOYO to Plan Saudi Arabia Oil and Gas Field Project

Oil operations flow chart

In June 2010, TOYO signed an oil and gas field facilities planning contract with Al-Khafji Joint Operations (KJO) for the Khafji oil field located in the border between Saudi Arabia and Kuwait. KJO is owned and operated jointly by Saudi Arabia's Aramco Gulf Operations Company (AGOC) and the Kuwait Gulf Oil Company (KGOC).

The contract calls for TOYO to plan and implement the development of KJO's onshore and offshore oil and gas field from a long-term perspective. TOYO will also be responsible for core operations in the development of these oil and gas fields. The proper execution of such a wide-ranging project over a long period requires extensive knowledge of oil and gas field development and highly creative proposal capabilities. TOYO was the only Japanese company considered qualified to bid for the contract by the client.

In October 2002, TOYO signed a general engineering service contract with KJO regarding its operations. The contract was extended twice at the client's request, and it finally came to a successful conclusion in October 2009. In addition to building a performance record and accumulating knowledge about the operations during the seven years of the contract, TOYO also cultivated a solid relationship of trust with KJO that led to the current order.

TOYO's role up to now was mainly maintenance and modernization planning aimed at improving the operating efficiency of the existing production facilities. While under the new five-year contract, TOYO's development plan is expected to focus chiefly on operations that will map out a vision of the oil and gas fields for the future, such as the introduction of new technology and the development of new oil and gas fields.

Licensing Technology

TOYO Awarded Urea Technology License Agreement by Cuba

In May 2010, TOYO concluded an agreement for a technology license and engineering services for a urea plant to produce granular urea with Cuvenpeq S.A., a petrochemical and fertilizer joint venture between the Cuban government and Venezuela's state-run petrochemical company, Petroquímica De Venezuela S.A. (Pequiven). The plant will be built on the southern coast of central Cuba in Cienfuegos Province and will have a daily production capacity of 2,200 tons. TOYO will provide technology licenses and the process design package for its urea synthesis technology, ACES21®, and granulation technology. The plant is scheduled to start up in 2014.

Cuba is well known as an agricultural nation, especially for sugar cane, but the domestic demand for fertilizer for farm production has been covered by imports from other countries until now. In accordance with the Cuban government policy to realize greater self-sufficiency regarding fertilizer, this project has been floated to supply fertilizer for the domestic market by using advanced cost- and energy-saving processes to produce high quality granular urea.

To decide on the awarding of the contract, Cuvenpeq invited the world's three major licensors of urea production technology for technology evaluation. Among the candidate technologies, Cuvenpeq gave the highest mark to TOYO's ACES21® (urea synthesis technology) and granulation technology. TOYO's technologies also have a strong record for low construction costs and utility consumption, boasting more than 100 plants applied in countries around the world. Including this new order, 6 plants have chosen to use TOYO's ACES21® state-of-the-art synthesis technology, while 20 plants have implemented TOYO's urea granulation technology.

This is the first project in Cuba for TOYO. Through this project, TOYO will commit to playing a role in maintaining and developing friendly relations between Cuba and Japan.

Signing ceremony (May 2010)

On-Purpose Propylene Plant

TOYO Completes On-Purpose Propylene Plant in Japan

Plant briefing session

TOYO has completed, safely and on schedule, the construction of an on-purpose propylene plant for a combination of three Japanese companies; Idemitsu Kosan Co., Ltd., Mitsui Chemicals, Inc., and Sumitomo Chemical Co., Ltd. The plant produces 150,000 tons per year of propylene. It was operated for verification after successful start-up in January 2010, and the official ceremony to celebrate its completion was held on June 2, 2010.

The companies embarked on the planning and construction of the on-purpose propylene plant in April 2006 as part of the RING III Project supported by the Japanese government. TOYO was responsible for providing engineering, procurement of materials and equipment, and construction services for this project.

Until now, C_4 fractions by-produced in Fluid Catalytic Cracking (FCC) plants and steam crackers in refinery-petrochemical complexes have not been utilized. The purpose of the on-purpose propylene plant is to utilize C_4 fractions by reacting with ethylene to produce propylene with high selectivity.

New large-scale oil refining and petrochemical plants that mainly produce ethylene derivatives are coming on stream in such places as the Middle East and China. In order to compete, it is necessary for companies to strengthen their collaborations, increasing their competitiveness by further upgrading the functions and capability of shared complexes. TOYO built this plant as one of those efforts. TOYO expects to make further such contributions to heightening the international competitiveness of overall complexes in the future.

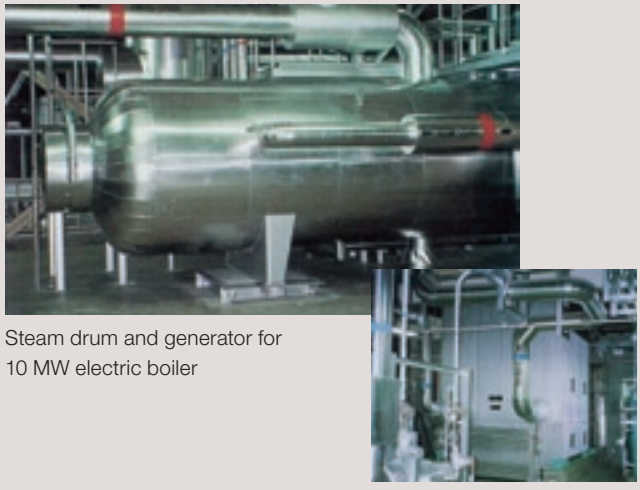
Nuclear Power Plant Boiler

Nuclear Power Plant Boiler Order Received from Tokyo Electric Power

The Tokyo Electric Power Company, Inc. (TEPCO), the largest electric power company in Japan, recently decided to use two of TOYO's 20 MW electric boilers as auxiliary-steam boilers for its Higashidori nuclear power station in Aomori. TEPCO, which operates nuclear power stations in Fukushima and Niigata, plans to build two 1.38 GW advanced boiling water reactors at the Higashidori site, and is moving ahead with preparations. The electric boilers are to supply "clean" steam to the electric power station.

Since TOYO delivered electric boilers for the No. 2 unit at TEPCO's Kashiwazaki-Kariwa nuclear power station in Niigata, Japan in 1989, electric power companies have recognized their superior technology, utilizing TOYO's electric boilers in a total of 10 nuclear power generation units. Those electric boilers continue to reliably provide auxiliary steam. The Kashiwazaki-Kariwa nuclear power station was damaged during an earthquake in 2007, and TOYO's electric boiler contributed to the safe shutdown of the power station directly following the damage. In choosing TOYO's electric boilers for its new power station, TEPCO highly evaluated the over 20 years of economical operation, maintenance, running, and durable performance of previous units.

Compared with fossil-fired boilers, electric boilers are dramatically more environmentally friendly. TOYO's tubular electric boilers differ from electrode-type electric boilers in offering great durability, extremely low problem occurrence rates, safe supply and maintenance of "clean" steam, and low operating costs. TOYO is aiming to not only market its electric boilers to planned new nuclear power stations in Japan, but also to existing nuclear power stations using auxiliary steam boilers that have renewal plans. Moreover, TOYO is looking at developing the business overseas.



Steam drum and generator for 10 MW electric boiler

Large-Scale Logistics Center

TOYO Receives Order for Large-scale Logistics Center

TOYO was awarded an order from Arata Corporation, one of Japan's major wholesalers of daily household necessities, for the design, engineering, and project management for the construction of a large-scale logistics center. This is the second order TOYO has been awarded from Arata. TOYO's performance in the first project led to the current order.

The new project will construct a large-scale, three-story logistics center on a 33,000 square meter site in Ishikari city, Hokkaido, Japan. The new center will be provided as a logistics center especially for the major drugstore chain TSURUHA CO., LTD., and will also function as a general logistics center for Arata. It will have state-of-the-art equipment, such as an automated pallet stacking system and multi-destination sorters to enable thorough efficiency and high-speed operations. The center is scheduled for completion in June 2011, with full-scale operations starting in August 2011.

In the daily household necessities wholesale industry, the growth strategy is to expand business scale by merging. After each merger, the wholesalers merge, close, and optimize logistics bases, taking into account customer service levels, in order to increase the efficiency of their logistics operations. In such optimization of business operations, it is essential to reform and improve productivity from both macro and micro perspectives through a combination of measures such as automating and simplifying logistics operations. TOYO assists clients with logistics systems reform in various phases of the process. These phases include business consulting, logistics planning, logistics system building, and logistics center construction.

Illustration of large-scale logistics center

International Exhibition

TOYO at INTERPHEX JAPAN

From June 30, 2010, TOYO participated for three days in the 23rd INTERPHEX JAPAN exhibition in Tokyo, Japan. This event specializes in devices, systems, and technologies related to the manufacture and research of pharmaceuticals, cosmetics, and detergents. This is Asia's largest international exhibition in these industries, and it has more than 50,000 visitors every year.

At TOYO's seminar booth, we introduced our services under the theme of "Meeting the Next Generation Challenge." We held presentations on multi-plants for diversification of market requirements, containment engineering for the manufacture of high pharmacological activity pharmaceuticals, biopharmaceutical engineering, total risk management systems for plants, efficient support for validation based on user Good Manufacturing Practice (GMP) requirement manuals, and environmental engineering for reducing environmental impact. We also held demonstrations on our IT solutions, including the global Manufacturing Execution System/Logistics Execution System (MES/LES) "eSenrigan®," production scheduling system "Komei®7," and the manufacturing/sales integration system MCFrame/Pharma. Our overseas market entrance support services also drew great attention from visitors to the seminar booth.

Seminar booth

We had the opportunity to discuss various customers' issues and needs at the exhibition. Taking advantage of this feedback, we are pressing forward with next-generation service development as well as services and solutions.

IN ACTION

CHINA

Trustworthy Partner for Foreign Companies

Since TOYO was awarded a contract for an ethylene plant soon after China normalized relations with Japan in 1972, the Toyo Group has built a strong record in China, boasting over 150 completed projects.

Toyo-China, which was established in Shanghai in 2004, has steadily expanded its capabilities as an EPC company. It currently has a staff of about 400 skilled people providing a broad range of project services, including design, procurement, and construction management. As an engineering contractor with deep roots in China and fully licensed to provide design, procurement, and construction services, Toyo-China is contributing strongly to the realization of capital investment projects by foreign companies in this giant market.

China achieved GDP growth of 9.1% even in 2009, and maintained its high GDP growth in the first quarter of 2010, at 11.9%. Continuing to post high growth, China has become the first major economy to emerge from the global financial crisis. In addition to providing price-competitive Chinese manufacturing equipment to clients inside and outside China, Toyo-China offers its project services throughout China with the intention of being its clients' best engineering partner in terms of on-the-ground support and reliability.

Recent Major Projects

●	Taixing	Taixing CP Kelco Specialty Chemicals Co., Ltd.	CMC plant	Completed Jan. 2009
	Changshu	Arkema Daikin Advanced Fluorochemicals (Changshu) Co., Ltd.	R125 plant	Completed Dec. 2009
	Zhangjiagang	Dow Corning (Zhangjiagang) Co., Ltd.	Siloxane plant	Completed May 2010
	Nanjing	BASF-YPC Company Limited	Petrochemical plant	In progress
	Shanghai Jinshan	Lingyou Engineering-Plastics (Shanghai) Co., Ltd.	Polycarbonate resin plant	In progress
	Dalian	Dalian Sumika Jingang Chemicals Co., Ltd.	Agricultural chemical plant	In progress
●	Zhangjiagang	Univation (Zhangjiagang) Chemical Co., Ltd.	Polyethylene catalyst plant	In progress
	Guangzhou Foshan	Foshan Mitsui Chemicals Petrochemicals Polyurethanes Co., Ltd.	Resin premix plant	In progress
●	Shanghai Fengxian	Shanghai Fujikura Kasei Coating Co., Ltd.	Paint plant	In progress

● Toyo-China Independent Projects

TOYO ENGINEERING CORPORATION

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