

Global Thought of Tech-Long
Intelligence + Team = World Quality



FOCUS TECH-LONG

聚焦達意隆

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San Miguel Project
New Milestone for Chinese Beverage
Packaging Equipment Industry to
launch into the world.

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Congratulations:

***Warm congranulation
for Tech-Long Mechani-
cal and Philippines San
Miguel Corporation to
sign the contract of
w h o l e f a c t o r y
equipments!***

Introduction of SMC project

(SMC as San Miguel Corporation)

| | | |
|------------------------|---|------|
| Pretreatment System | --CIP system | 1Set |
| | --Hot Water System | 1Set |
| | --Deoxygenated Water System | 1Set |
| | --Beverage Mixing and Storage System | 3Set |
| | --Carbo-cooler | 1Set |
| Water Treatment System | --Soft Water System | 1Set |
| | --RO Water System | 2Set |
| Blow Moulding Machine | -- RJM 10 Automatic P.E.T Blow Moulding Machine | 9Set |
| Filling Machine | --Hot Filling Line | 3Set |
| | --CSD Filling Line | 3Set |
| | --Water Filling Line | 3Set |
| | --Air conveyor | 3Set |
| | --Unscrambler | 3Set |
| Conveyor System | --Bottle Conveyor System | 3Set |
| | --Case Conveyor System | 3Set |
| Packing Machine | --Labeller(Shrink) | 3Set |
| | --Labeller(Roll) | 2Set |
| | --Shrink Wrapper | 3Set |
| | --Wraparound | 3Set |
| | --Robot | 3Set |
| Engineering Service | --Engineering Plan | |
| | --Installation and Test | |
| | --Spare Parts | |
| | --Operation and Repairing Training | |
| | | |

Source: Tech-Long TONY CHEN



Background Information of SMC

San Miguel Corporation is the biggest list company specialized in foods, beverage and packaging industry in Philippines. Established in 1890, after over 100 years of development, San Miguel Corporation has developed into the biggest in Southeast Asia, fifth biggest in the world and leading role in beverage and packaging industry.

San Miguel Corporation started from beer which was exported to Guam, Hong Kong and Shanghai since 1913. Currently, San Miguel beer possesses 13 beer factories in Pacific region with the annual output reaching 2 billion liters with 30 brands as the flagship of beer industry in Asia and top 20 beer corporations in the profession in the world.

Since the establishment, San Miguel Corporation has been dedicated to cooperating with other world famous corporations. In 1997, San Miguel established cooperation with Coco-cola Group, whose market share of carbonated beverage reaches 86% in Philippines. During 2000 to 2001, the sales volume of the company increased 37%.

Basing on favorable business, the acquisition business of San Miguel Corporation in Asia-Pacific is also steadily advancing forwards. Currently, in Asia-Pacific region, San Miguel is operating over 100 factories which are distributed in Philippines, Indonesia, Australia, Mainland China and Hong

Kong.

In Southeast Asia, San Miguel Corporation has become the biggest partner of Coco-cola.

Strategic Combination List of SMC During 1999-2005

| Year | Company | | Amount | | |
|------|------------------------------|---------|--------|---|-------------------|
| 1999 | Metri Bottled Water Corp | Plaster | 1,400 | M | Beverage |
| 2000 | Sugarland Multi-Food Corp | Plaster | 2,900 | M | Beverage |
| 2000 | J Boag & Son | USD | 96 | M | Beverage |
| 2001 | Purefoods Corp | Plaster | 8,000 | M | Food |
| 2001 | Coca-Cola Bottlers Phils Inc | Plaster | 60,000 | M | Beverage |
| 2002 | Cosmos Bottling Corp | Plaster | 14,100 | M | Beverage |
| 2002 | Kinrin Brewery | Plaster | 27,880 | M | Investor |
| 2002 | Pacific Flour | Plaster | 400 | M | Food |
| 2003 | TTC Vietnam | USD | 35.5 | M | Food |
| 2004 | Thai Amarit Brewery | USD | 102 | M | Beverage |
| 2004 | Berri Ltd | USD | 120 | M | Beverage |
| 2004 | JV with Super Coffeemix | | | | Beverage |
| 2004 | JV with Thai Life | | | | Beverage |
| 2005 | National Foods | USD | 1,400 | M | Food & Beverage |
| 2005 | Del Monte Pacific | USD | 400 | M | Fruits & Beverage |

Through purchasing of the group, the capital of San Miguel Corporation is instantly expanding. San Miguel Corporation has a target which is named as "BIHAG" and means a grand and brave target — the annual income of the group reaches USD10 billion in 2007.

Source: San Miguel Corporation
Edited and Translated By: Anya/Chorma Xiao

San Miguel Corporation

Global Development Plan



The president, vice chairman and chief executor of San Miguel Corporation — Mr. Ramon S. Ang

“We want to be the biggest”

When establishing in 1890, the market value of San Miguel Corporation only reached USD1.7 billion. At present, the market value of San Miguel Corporation reaches USD4 billion. During the course of developing, San Miguel Corporation has successfully purchased such corporation as Wilkins, Sugarland and James Boag who feature outstanding potential in water, fruit juice and beer fields. San Miguel Corporation keeps eternal management: friendly, transparent and directional. It has perfectly explained the confidence and trust of investors to San Miguel Corporation that the share Japan Kirin Brewery Company increased from 15% to the biggest shareholder of San Miguel Corporation.

San Miguel Corporation has developed into a group corporation with very steady development and without any risk.

The president, vice chairman and chief executor of San Miguel Corporation — Mr. Ramon S. Ang has clearly presented the target and direction of San Miguel Corporation:

“We want to be the largest company with \$10-billion in sales revenue by the year 2007. It's a do-able goal. We will achieve it by one, through organic growth of existing businesses and two, acquisitions so we can expand quickly. We are expanding our existing businesses—beer, non-alcoholic beverages, hard liquor, food processing, poultry and piggyery, packaging.

Our target is build revenue on all businesses by growing at 30% per year in sales revenue.”

*Source: San Miguel Corporation
Edited and Translated By: Anya*

SMC Production Value of Products

During 6 years from 1998-2003, the income and profit of San Miguel Corporation is more than the total income of past 10 years (1988-1997). The followings are the proportion of products of San Miguel Corporation in 2003:

(Unit: Million Piaster, 1 USD = 50 Piaster)

Sales Income -----148,590
Operating Income -----14,360
Net Income -----7,373

[LINK](#)

San Miguel Corporation possesses over 100 products in Asia-Pacific, including 13 beer factories with the annual output exceeding 20 million liters and more than 30 brands. San Miguel Corporation has developed into the top 20 beer factories in Asia.

Factories of San Miguel Corporation in Southeast Asia:

● Vietnam:

- 1 Brewery
- 1 Glass plant
- 1 Crown plant
- 1 Hog & Feeds

● Indonesia:

- 1 Brewery
- 1 Glass plant
- 1 PET plant

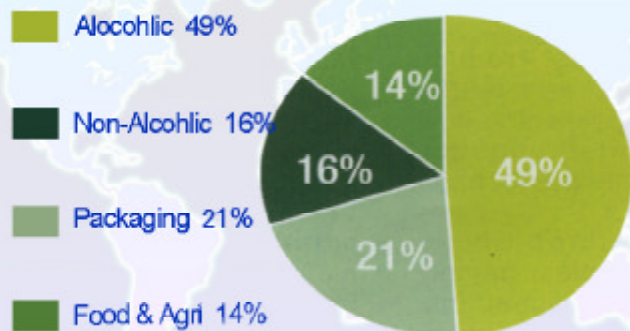
● China (Including Hong Kong):

- 4 Breweries
- 1 Glass plant
- 1 Crown plant

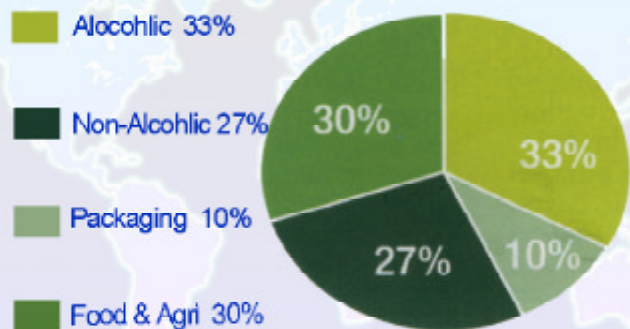
● Philippines:

- 5 Breweries
- 4 Liquor plants
- 1 Alcohol distillery
- 1 Jelly plant
- 34 Softdrinks plants
- 5 Water plant
- 3 Ready-to-drinkBottle Juice plants
- 2 Powdered juice plants
- 14 Packaging plants
- 2 Piggeries
- 1 Meat slaughtering plant
- 2 Processed meat plants
- 6 Feed mills
- 3 Poultry hatcheries
- 1 Poultry dressing plant
- 1 Butter/margarine/cheese plant
- 2 Flour mills

Operating Income Percentage (2003)



Sales Income Percentage (2003)



Source: San Miguel Corporation
Edited and Translated By: Anya

Put Dream into Reality with Green

Cooperation between Tech-Long and SMC



On May 28th, 2005, Tech-Long and Philippines San Miguel Corporation (referred to as SMC hereafter) signed the contract on ordering whole factor equipment, which is a new milestone with historical significance to both Tech-Long and Chinese beverage packaging equipments industry, Tech-Long thoroughly showed how to put dream into reality with profession and strength.

■ Origin

In August, 2003, at a casual chance, Tech-Long started in engaging the project of SMC, the personnel who participated into the project for the first time including General Manager of Tech-Long International Sales Department — Xing Haibin, General Manager of Tech-Long Sales Department — Kong Xiangjie and Sales Engineer who takes charge of Southeast Asia Market — Tang Fei.

In order to make SMC thoroughly know the products and service of Tech-Long, General Manager of Tech-Long Sales Department — Kong Xiangjie went to SMC headquarter in Manila in September, 2003 for introducing the project, which makes SMC to basically know Tech-Long with deep impression, and both parties established the intention of cooperation. After returning China, General Manager Kong started to constitute SMC Project letter.

In order to know more about Tech-Long equipments and comprehensive strength, SMC dispatched technicians to visit Tech-Long Guangzhou Production Base in November, 2003 for the first time. And Tech-Long also carefully arranged the reception, conference and visit route, after visiting, SMC technicians were very surprised that Tech-Long developed from a small factory in 1999 into the leading role in beverage packaging equipments in China in several years, and expressed

that they are confident for the development potential of Tech-Long.

In the next 6 months, SMC dispatched 5 batches of technicians to visit Tech-Long and communicate with our engineers and technicians and primarily confirmed that Tech-Long was the reliable partner. Later, these 5 batches of technicians went to Wuhan Pepsi, Chengdu Luke, Chengdu Runtian and Guangdong Swire Coca-Cola to investigate the running condition of Tech-Long equipments. The outstanding performance of Tech-Long equipments in diversified beverage factories powerfully improved the confidence of SMC to Tech-Long.

Additionally, during the 6 months, Tech-Long also dispatched engineering and technical staff to SMC headquarter in Manila of Philippines for 15 times, and provided detailed information on Tech-Long equipments and product line to the engineering and technicians of SMC, both parties held detailed technical communication which set favorable foundation for the smooth cooperation in the project.

■ Dedicatedly Create Outstanding Project

In January, 2004, SMC formerly invited Tech-Long to bid for whole factory packaging equipments for San Miguel (Guangdong) Foods & Beverage Co., Ltd. Tech-Long formally introduced the project in SMC Manager Conference in Manila on January 15th, other multi-national corporation in the profession also participated into the bidding.

After formal bidding, Tech-Long established the San Miguel Project Team led by General Manager of Research Institute — Wu Changhua and General Manager of International Sales Department — Xing Haibin, and organized the main engineers and relative sales to improve the project letter in details, including: equipment layout, factory structure, water, power and air consumption of the whole factory, labor consumption forecasting, autoimmunization level evaluating, single machine

data and energy consumption, packaging materials, assistant equipments and layout, production security, environmental protection, pipes and wiring, pretreatment technique drawings and configuration and water treatment drawings and configuration etc. Additionally, Tech-Long also provided powerful support for the project from capital, spare parts, production and logistic. General Manager of Sales Department — Kong Xiangjie also powerfully supported the project in dispatching labors, the whole project team work to 3:00-4:00 am for discussing the bidding documents for assuring complete project.

In order to meet the general plan of SMC to Shunde Factory, Tech-Long invited the experts from Guangzhou Light Industry Design Institute as the consultant of SMC Shunde Factory, which powerfully assured that the project is feasible. In March, 2004, Tech-Long answered over 100 technical enquiries in written format and received three SMC senior officers including SMC president to visit Tech-Long Guangzhou Production Base, the conference of both parties powerfully supported the steady development of the SMC Project. During this period, the project teams of both parties, after several times of communicating, has gradually confirmed different details, and modified the layout drawings and configurations, and investigated the SMC Shunde Factory and designed the appearance of the buildings.

During August to September, 2004, Tech-Long answered over 100 technical enquiries in written format for several times, and went to SMC Headquarter for confirming the technology. Tech-Long SMC Project Team went to Philippines for final statement and fulfilled sharp technical discuss with competitor and thoroughly beat the competitor with competitive and feasible whole factory matching project and achieve key victory. On May 18th, 2005, Tech-Long and SMC formally signed the RMB150 million contract on ordering whole factory equipment, Tech-Long reconstructed the SMC Project Team according to



General Manager of International Department — Xing Haibin

the actual condition of the project and powerfully assure the smooth implementation of SMC Project.

■ Acclaim Achievements, Share Feelings

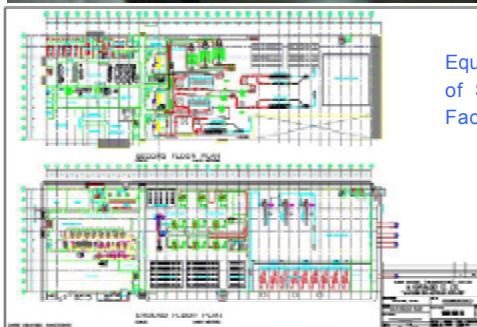
General Manager of International Department — Xing Haibin said after signing the contract: “during the course of SMC Project, I realized unprecedented pressure, our competitors are not only the most outstanding corporations at home but also at abroad, our most advantage for achieving success is that we not only provide equipments but also the configuration service for whole product line as well as Tech-Long professional service philosophy. We hold the opinion that what clients want is what we shall do, which is the foundation for confidence and cooperation. We have saved a lot of purchasing cost for clients, which is powerful for the success of this project. In this project, the wisdom and team work spirit of all Tech-Long people are also unprecedented”.

Through competing with the competitors (KRONES, KHS, SIG, BC, SIPA and SODEL etc.) in the project and cooperating with other professions (Chen Hsong Group, Guangdong Petrochemical Construction Corporation and Guangzhou Light Industry Design Institute), we have obtained precious experiences which make us realize the development of Tech-Long in the future: we have known the significance of “sincerity” to a successful international corporation, the response to problem also directly influences the development of the project; in our opinion, it is a complicated engineering to create exquisite product which require strict requirements in design, plane layout, logistic direction, production technical parameters and constant improving and innovation of products and technology, carefully standardize every procedure, which are extremely important; we have also clearly known that the professional project is the key for achieving success; and customer service is not only for buying and selling, under the environment of market economy, we shall focus on the requirements of users, cooperate with users and create high value for users.

Today, Tech-Long has put the dreams into reality with wisdom and courage, but there's still difference for domestic corporation to walk out of the country and compete with international competitors in management, sales mode, expression, vocational spirit, investment strategy, talents and concept. In the future, Tech-Long will develop together with users with global thought, international standard and complete plan.



In June, 2005, SMC Project Engineers and Tech-Long Project Team were communicating the technologies.



Equipments Layout of SMC Shunde Factory

Here, please allow us to extend our gratefulness to:

- Powerful support and assistant of Mr. Tetsuya Minagawa from Philippines TCT ALLIANCE INEERNATIONAL INC in the aspects of business arrangement with SMC!
- Suggestions of Project Engineer Chen Jianbei from Pepsi
- Suggestions of Guangzhou Light Industry Design Institute in the whole factory design of SMC Shunde Factory

Text: Tech-Long David/Mukee
Picture: Tech-Long Hao Tao/Mukee

市场资讯 MARKET INFORMATION



Market Information: Group Photo of Sales Market President of Swiss EUGENSEITZ — Mr. Marcel Meier (right), Chief Representative of EUGENSEITZ Shanghai Office — Hou Min (middle) and President of Tech-Long Zhang Songming (left) in front of Tech-Long exhibition booth.



Germany, April 26th local newspaper — "MISSE TODAY" reported that Tech-Long signed USD1.5 million contract in this exhibition, and published the photo of General Manager of Tech-Long International Department — Mr. Luo Wenhai.

Tech-Long participated into the Germany Dusseldorf INTERPACK Exhibition and obtained outstanding achievements

During April 21st -27th, 2005, the 7-day long "Germany Dusseldorf INTERPACK Exhibition" held in Germany Dusseldorf Exhibition Center. INTERPACK is the biggest professional packaging machines exhibition in the world and held once every 3 years with a history of over 40 years. The exhibition composed of 18 halls with the net exhibition area reached 160,000M² with altogether 176,000 visitor times from 106 countries.

Altogether 2,668 packaging machine exhibitors participated in this exhibition, including such international famous corporations in beverage packaging industry as KRONES, KHS and SIDEL. With very professional visitors, about 65% came to search for packaging machines and equipments.

In 2005, Tech-Long focus on developing international market, it will benefit Tech-Long to develop the global market to participate into INTERPACK Exhibition. Tech-Long Booth, located in the eye-catching position of Chinese Exhibition Area occupied an area of 20M² and attracted a lot of visitors from Europe, Middle East, Africa, Asia and America who extended high interest to Tech-Long and Tech-Long equipments. General Manager of International Department — Luo Wenhai and Vice General Manager — Zhang Sheng presented detailed introduction for visitors in the exhibition.

The exhibition also brought direct benefit for Tech-Long, Czechoslovakia E.K s.r.o. Company, after visiting Tech-Long Guangzhou Headquarter after the exhibition, purchased a set of RJM14 fully automatic rotary bottle blowing machine; Singapore C.P Group is also intended to establish partnership with Tech-Long after visiting Guangzhou Headquarter after the exhibition; Visitors from such countries and regions as Syria and Egypt were planning to visit Guangzhou Headquarter for establishing partnership....

In the INTERPACK Exhibition, Tech-Long won a lot of effective clients. Currently, Tech-Long is advancing towards the rank of famous brand in world beverage packaging industry with brand new attitude.

Text: Tech-Long Grace/Mukee
Picture: Tech-Long Grace

Design

Complete consideration for clients

...

The cooperation of Tech-Long and San Miguel Corporation applies the most advanced design and technology of Tech-Long and domestic industry, improves the confidence of the multinational corporation — San Miguel Corporation to purchase in China, and Tech-Long also obtained precious experience through the cooperation, and constructed a new platform for the development in the future.

San Miguel Project selected Tech-Long water treatment system, pretreatment system, bottling system, bottle blowing system, conveying system and packaging system.

Water Treatment System

Water Treatment system in SMC Project provides water for materials (pure water), water for washing bottles, water for cooling equipments and water for boiler for bottling finished products for three beverage production lines; assures the safe run and high performance of single equipment. The technique, layout and design of it directly influence the quality, production capacity and efficiency of three production lines of the whole factory.

The water treatment system includes main water treatment technique and equipments in foods industry: treatment technique includes chemical treatment, mechanical filtering, membrane desalination, ion exchange softening, ozone sterilizing and UV sterilizing; equipments includes medicine feeding device, sand filter, carbon filter, precise filter, reverse osmosis main unit, softening machine, water tank, ozone mixing tower and overflow UV sterilizing lamp etc.

To the key purchased parts, Tech-Long applies domestic and foreign quality products, for example, water tank applies Germany WILO and Denmark GRUNDFOS, reverse osmosis membrane applies Hydranautics CPA Series low pressure and high desalination membrane; monitoring instruments apply U.S +GF+ online instruments, Harbin ROPV pressure containers and Shanghai YuanAn stainless steel pipes and valves for assuring high performance and high quality.

To the design of water treatment system for SMC Project, Tech-Long Bottling Technical Center Fluid Department, in order to save cost and reduce energy consumption for clients, designed according to the following principles:

-- Select reasonable treatment technique according to the water quality, water amount and water input pressures for different water consumption points, improve water utility of the whole system, reduce water consumption and drop the running cost of the system;

— Design reasonable production line plane layout according to the actual condition of workshop and the requirements of other systems, make the production technique route of the whole line simpler and more effective; therefore, the utility of workshop and energy is higher;

— In design, apply universal parts for the system, which is convenient for mass production or purchasing, thus dropping manufacturing cost and shortening manufacturing cycle; what is more important is to make it easier for maintenance with lower cost in the future;

— Focus on the treatment of connection with other systems and the control on key points of the whole line, consider the buffer, adjustment and match of water treatment for whole factory production, improve stability and universal of water supply and production efficiency of the whole line to the max.

Pretreatment System

Water Treatment System

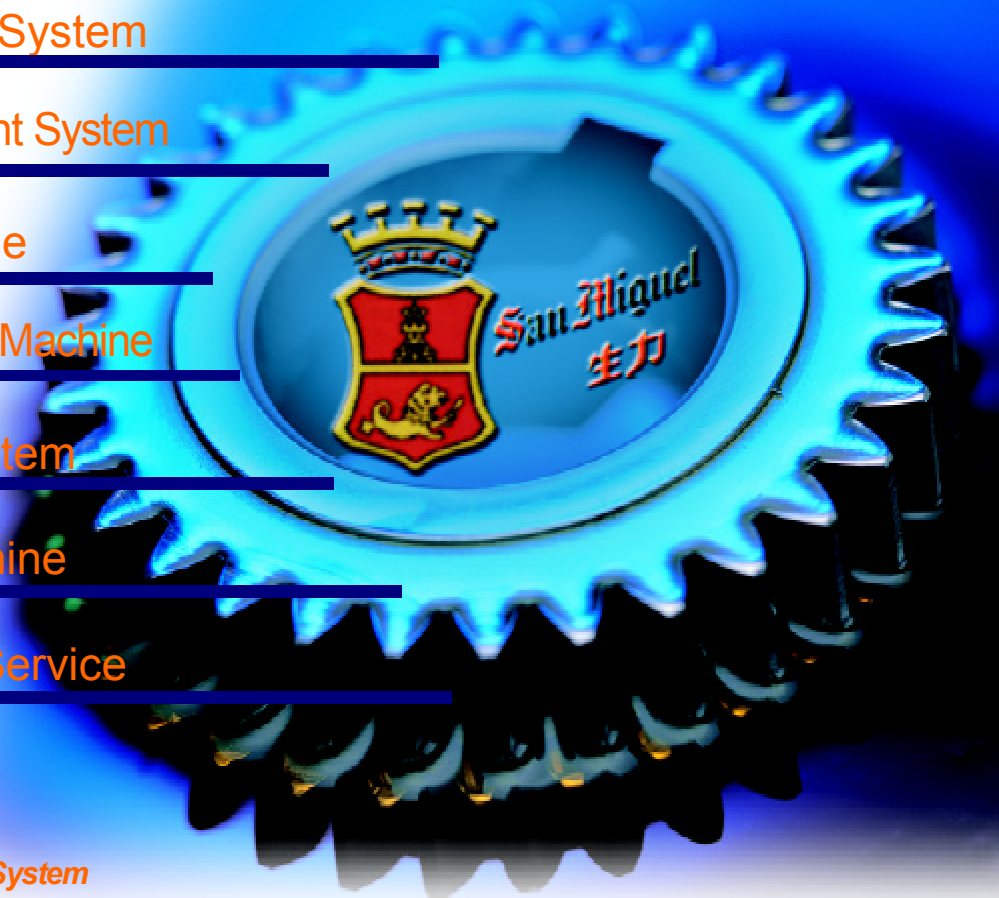
Filling Machine

Blow Moulding Machine

Conveyor System

Packing Machine

Engineering Service



Water Treatment System

Pretreatment products for SMC Project include mixing machine, CIP system, hot water system, online deoxidation system, monosaccharide system, delactosed system, assistant materials system, mixing system, syrup pasteurized system which are made by our company, and Rile instantaneous ultra high temperature sterilizing machine (UHT), online continuous sugar dissolving system. Therefore, the whole pretreatment technique procedure is perfectly optimized with hot bottling line and CSD bottling line.

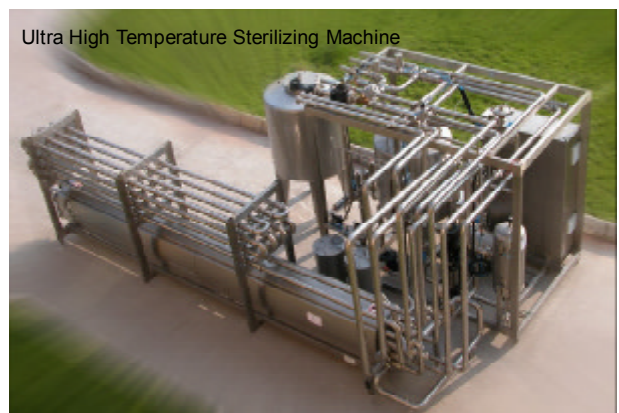
When designing SMC Project, Tech-Long has strived for achieving precise and reasonable with professional experience and technical advantages in the profession.

-- In the Aspect of Tank

We design, make, inspect, package, store and transport strictly following foods and beverage stainless steel thin wall container standard, and take the technique condition into consideration, select reasonable ratio of height to diameter and accessories for tank, container which contact with product is made of 316L stainless steel; in terms of making, we keep the original color and roughness of cold rolled 2B stainless steel plate on the interior and exterior surface of the tank, the Roughness of the surface and interior welding gap doesn't exceed 0.8 mm. The bottom and cap applies folding edge structure for assuring flat connection, apply interior edging technique for making holes on the tank. After making, acid wash, passivation and water wash treatments are implemented for the welding gaps, and then test the leakage by containing water. Package it into protective film before transporting, and place it onto special saddle style shelf with soft materials, tightly bind it for preventing scratches.

-- In the Aspect of Technique Control

Every system is tailored for clients, when designing technique, we will take the followings into consideration: how to improve client's benefit to max, most reasonable cost investment and equipment plane layout drawings, improve the normal production times and production efficiency of the equipments. We completely utilize the circulated water through installing one recycling water tank when designing CIP system; in heat exchange system, we apply heat recycling design for reducing steam consumption for reducing energy consumption for the whole pretreatment technique procedure. All centrifugal pumps, plate heat exchanger, CIP tube heat exchangers which contact with the product are imported from Rile. In terms of control equipments, we apply Siemens PLC and E+H, Krohne controlling instruments and sensors, which largely improved the performance and efficiency of the whole procedure.





Tech-Long R&D Team for SMC Project are discussing technology

Filling Machine

SMC Project includes three independent PET bottle beverage bottling lines: 80-80-18 hot bottling, 80-80-18 CSD bottling, 70-70-18 water bottling, whose production capacity reaches or exceeds 30000 BPH(500ml), and can meet the requirements that hot bottling and CSD bottling lines simultaneously implement water bottling under normal temperature.

In the design of 3-in-1 machine, we have applied a lot of new techniques and new structures, when assuring high performance, we focus on simple operation and safety for achieving perfection. Therefore, the technical performance, quality and appearance of the product reach world top class as the flagship product for Tech-Long even domestic bottling



3-in-1 Bottling Clamp

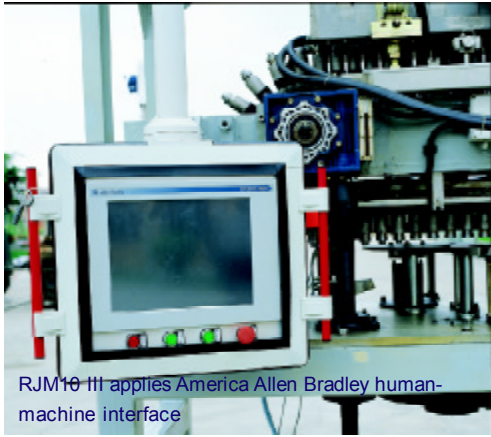
equipment industry.

3-in-1 machine applies one high power main motor (SEW) and drives through gear and coupling, assures absolutely synchronous parts and reliable connection; apply the transmitting mode of clamping bottles with mechanical arm, it assures stable transmission of PET bottles under high speed, and the connection with bottle washing machine, bottling machine and capping machine more reliable and protecting the bottle from damages; it can also largely shorten the time for replacing bottles, it can replace the type of bottles within 20 minutes, thus improving the work efficiency for users. Bottling machine applies loop can bottling and is supported with big swing bearings for assuring stable running and bottling. In SMC Project, we also applied the newly optimized bottling valve for assuring better sanitation and higher bottling speed.

In terms of materials selection, the parts which directly contact with beverage are made of food class stainless steel 316L and rubber sealants and pipes which have passed FDA certification; the electric parts are such domestic and foreign quality products as SMENS, DAFORES and ABB etc.

Blow Moulding Machine

It just cost 3 years for Tech-Long fully automatic rotary bottle blowing machine from research to launch into the market, from



t h e
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s i m p l e
b o t t l e
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L o n g
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developing history of Tech-Long bottle blowing machine. Tech-Long fully automatic rotary bottle blowing machine is one of the main equipments for Tech-Long, and has manufactured the RJM16 series and the output capacity reaches 20,000BPH. SMC Project selected the RJM10 III series fully automatic rotary bottle blowing machine whose production capacity reaches 12000BPH, and features the following advantages:

High Effect

Since it applies more imported electric and mechanical parts, it features higher stability when running at high speed, and reliably assure the online bottling. The application of new technology + reasonable application of mechanical kinematics + precise control system makes bottle blowing machine can stably blow bottle when rotating at high speed. The bottle blowing moulds which is designed by applying modern PRO-E system and can complete cutting and processing in DMA process center imported from Germany, it only requires 5 minutes/chamber for replacing. The application of Human Ergonomics make engineering technicians to easily access the main parts of the equipments, central automatic lubricating system can achieve automatic lubricating on control panel, maintenance won't be a trouble any more.

Los Cost

As the deep research to PET material and technique, new generation bottle blowing machine which is made by applying more precise technique procedure can reduce the weight of bottle and rate of waste. Technical cooperation with such world famous corporation as NORGREN, SEW, PHILIPS, BM, SIEMENS and NSK makes us to largely drop the energy consumption of whole machine. The safety device for machines assures that it won't cause dead machine as a result of poor bottle quality and temperature rising, thus preventing energy and materials consumption. Stable online bottling also reduces the investment in other equipments and infrastructure

Safety

Human-oriented design thoroughly show the culture philosophy of Tech-Long, for example: shut all doors and windows before starting the machine, the machine will immediately alarm and stop running if the doors and windows are open. Main electric parts are imported and have passed CE certification, which powerfully assures safe running. Sensors are installed in several parts of the equipments for protecting key parts, for example: slipper rollout and sensor are installed at the output end of main motor reducer, bottom mould protection sensor, clamping protection sensor, sealing protection sensor and bottle arranging protection sensor etc.

Conveying System is the bridge for connecting single equipments in bottle blowing, bottling unit, packaging systems in the beverage production line, and has the functions of conveying, connecting, balancing, buffering and adjusting in the single equipments. The layout and design directly influence the production capacity and efficiency of the whole line. SMC Project conveying system includes most conveying equipments for small bottles production line, such as air duct, bottle unscrambler, bottle chamber, cap supply conveyer, bottle conveying chain, PET bottle vertical lift machine, bottle conversion sterilization chain, bottle warming machine, bottle cooling machine, air dry machine, buffering platform, belt conveyer and drive roller etc. In SMC Project, Bottling Technical Center Conveying System Team designs the product mainly according to the following principles:

● Draw detailed and reasonable production line plane layout according to the actual condition of workshop and client's requirements, make the production technique route more advanced and effective with higher workshop and energy utility.

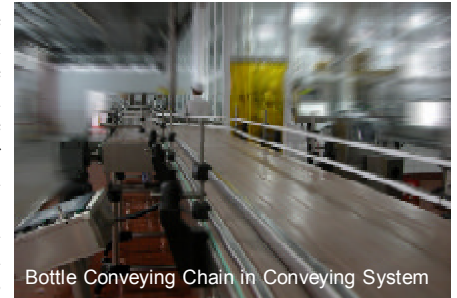
● Analyze and find the key and difficult points of the whole lines, discuss and research the key and difficulty problems, absorb and learn advanced production lines from foreign partners, invest more for assuring to settle key and difficult problems.

● Absorb advanced technology and design from domestic and foreign partners, collect the experience of the company in designing previous production lines, guide the design of whole line conveying equipments for SMC Project with most matured and complete technologies of the company.

● Implement modularization and standardization design, some conveying products applies mass production for dropping manufacturing cost, shortening manufacturing cycle and improving the universal of parts and making maintenance more convenient.

● We select domestic and foreign famous brands which feature stable work and long life for dropping the maintenance cost for clients.

● Focus on the treatment of connection with other systems and the control on key points of the whole line, consider the buffer and match of high speed production line, improve stability and universal of the whole line to the max.



Engineering Service

Engineering Service is undertaken by Tech-Long Engineering Department who is capable of providing complete engineering plan and assisting clients to install and test the equipments, timely meeting client's requirements on spare parts, providing trainings on equipment operation and repairing, and periodically perform client satisfaction investigation and analysis, and constantly improves the service.

In front of achievements, we select to constantly improve, we believe that complete matching service is the foundation for steady development.....

Text: Tech-Long ShenXiPeng/LuJinNian
/FanDi/GaoJie/HeLing

Picture: Tech-Long Hakim/Mukee

Conveying System

Industry Dynamics

Coco-cola "Olympia" production line was installed in Beijing

Coco-cola installed the 0.5L PET bottle production line whose production capacity reaches 36,000 bottles of Kronen in Beijing in Spring, 2005. It is the third product line following the current PET line and pop can line and the preparation of Coco-cola Beijing Factory for greeting 2008 Olympic Games.

This Kronen production line includes the whole set of equipments including empty bottle pushing machine and stacking machine and is used for bottling Coco-cola traditional creosoted beverage.

Source: "PACKAGING DIGEST CHINA" Magazine

Rile Purchased Simonazzi and Alfa

Recently, Rile Group signed the agreement with SIG to purchase Simonazzi (bottling equipment) and Alfa (labeling equipments) whose sales volume reached EUR 320 million in 2004 with about 1500 employees. The two companies will be united with Sidel Company which was purchased earlier for expanding the business in plastic packaging equipments industry.

"Through this purchasing, Sidel can perfectly respond clients in beverage bottling and labeling. Through applying Simonazzi and Alfa equipments for Sidel products, we can provide a series of complete products for clients", Chairman of Rile Group — Larry Pillard said: "this purchasing will also make Sidel enter into glass bottle and bottling beer market."

Source: "Packaging Machine"

Tycoons in the Industry Plan the Future in Beijing China Lactobacillus Beverage is Expecting Rise

Lactobacillus beverage, popular in the world but develops slowly in China, will possibly grow up and develop into the daily healthy beverage for public. Recently, Lactobacillus and Health International Semina, held by Chinese Institute of Food Science and Technology, supported by several world lactobacillus tycoons including Hunan Taizhinai Group, France Danone Group and Japan Yakult was held in Beijing. The lactobacillus corporations presented precious comments and suggestions on the development of Chinese lactobacillus industry. Experts hold the opinion, as the spread of lactobacillus health knowledge, the environment for domestic lactobacillus industry becomes better and better, and the market share of lactobacillus beverage in China will increase, and it won't be far for Chinese lactobacillus beverage industry to rise.

Source: www.chinabeverage.net

Demands on Packaging Machines in America Will Increase to USD3.6 Billion in 2008

It is revealed from the data provided by FREEDONIA whose head office is located in CLEVELAND that till 2008, the demands on packaging machines in U.S. will increase at 5.1% each year (including price index) and reach USD3.6 billion.

The growth comes from the rise of demands on healthy foods and instant foods. Additionally, it is discovered from population statistics: such changes as the size of family becomes smaller, increase of age of unit population and increase of family income will generate positive influence to consuming market, particularly, the demands on instant foods will largely increase.

Source: "Packaging Machine"

Wine PET Bottle Packaging Rises

In the shelf of Chinese supermarket, wine packaged in big PET bottles is launched for consumers who have high faithfulness and are sensitive to price.

It breaks the limit in content of glass and ceramic bottle after wine is packaged in plastic bottles, drops the unit cost, and largely reduces the proportion of package for products, which is very convenient for transportation and carrying. What's more, it is safer than glass bottle and ceramic bottle, drops the rate of breaking during production and transportation. Products with high content package can also drop the risk of conversing brand and prolong the life of products, and make corporations with high reputation to expand the market share with high credit of original products.

Source: "International Plastic Information"

Biggest Outdoor Advertisement of Pepsi Appears in Chongqing

Recently, Pepsi created the Guinness Record. The three-way outdoor advertisement with the total area reaching 1,600m² shows Pepsi's confidence and decision in West China even whole China.

President of Pepsi China Area — Zhu Huaxue expressed that as one of the most successful consumables brands in the world, Pepsi constructed the "World Top" in the most flourish area in Chongqing to show the confidence and decision of it to invest in West China, and hoped to reinforce the powerful status with the effect of "First of the World". Think highly of Chinese market, Pepsi company will strengthen the investment in China, and will invest USD80 million in mainland. On June 28th, two Pepsi factories in Zhanjiang and Jiedong of Guangdong put into production, at the end of this year, three factories will be put into construction. In the coming 5 years, Pepsi will construct 7-10 factories in mainland.

Zhu Huaxue revealed that in the past 7-8 years, the sales volume of Pepsi in China increases at two-digit, it is estimated that the sales volume of beverage this year will reach 450 million standard boxes (24 cans for every standard box). The market share of "Gatorade" sports beverage reaches 85% in USA.

Source: China Beverage Industry Association

Tech-Long Have Earned Highly Praise from Relative Provincial Officers in Intellectual Property

On July 7th, The 1st Guangdong Province Intellectual Property Conference was held in Guangzhou Zhudao Hotel. The conference was held by the vice chief secretary of Guangdong Province People's Government — Jiang Haiyan, Vice Governor Song Hai attended the conference and gave a speech. Main officers from Provincial Development & Reform Commission, Provincial Economy & Trade Commission, Department of Science and Technology of Guangdong Province, Department of Personnel of Guangdong Province and Guangdong Province Intellectual Property Bureau attended the conference. The conference mainly summarized the intellectual property work and deployed the work in the future. Additionally, the conference also awarded the 2005 Guangdong Province patent awarded units, 2004 Guangdong Province Intellectual Property Experimental Area and 2004 Guangdong Province Outstanding Intellectual Property Corporations. As the only corporation awarded the 2004 Guangdong Province Outstanding Intellectual Property Corporation, Tech-Long has earned highly praise from relative provincial officers.

The 3rd Member Meeting of China Beverage Industry Association was held in Beijing

The 3rd Member Meeting of China Beverage Industry Association was held in Beijing on August 15th. The meeting completed the recycling work with significant and special reports, and awarded relative personnel in promoting health development.

Such meetings as 2005 China Beverage Industry Association Technical Work Committee Annual, 2005 China International Beverage Industry Seminar on Science & Technology, 14th IFU Meeting, China Beverage Industry Association Mineral Water Branch Annual and 2005 China International Beverage Industry Exhibition on Science & Technology were held simultaneously.

Source: China Beverage Industry Association

Tech-Long & SMC

Milestones

On May 18th, 2005, Tech-Long and SMC formally signed the RMB150 million contract on whole factory equipments, the contract signing site is shown below:

Front, Left: Mr. TETSUYA MINAGAWA Philip
pines Agency
Front, Right: Mr. Philip Jayson C. Go from San
Miguel Corporation Purchasing
Department
Rear, First Right: General Manager of Tech-Long
International Sales Department
— Xing Haibin
Rear, Second Right: Tech-Long President Zhang
Songming
Rear, Third Right: Mr. GEORGE L. ALASTRE from
San Miguel Corporation Pur
chasing Department
Rear, Fourth Right: Vice General Manager of
Tech-Long Bottling Affairs
Department — Su Jihui



2003.8 Tech-Long formally engaged in San Miguel Project;

2003.9 Tech-Long presented the project letter and quotation for San Miguel Corporation in Manila for the first time;

2003.11 San Miguel Corporation Philippines Headquarter dispatched technicians to visit Tech-Long Guangzhou Production Base;

2004.1 San Miguel Corporation formally invited Tech-Long to bid for the whole factory packaging equipments in San Miguel (Guangdong) Foods and Beverage Co., Ltd.;

2004.1 the first proposal of Tech-Long was introduced in San Miguel Managers Conference in Manila;

2004.2 Tech-Long established the San Miguel Project Team and invited the experts from Guangzhou Light Industry Design Institute as the consultants for whole factory design;

2004.3 Tech-Long received the investigation of San Miguel China Project and Engineers and answered over 100 technical enquiries in written format;

2004.5 Tech-Long and San Miguel Corporation formally signed the Equipments Purchasing and Selling Contract in Shenzhen.

