

达意隆致力于未来饮料包装设备行业
的技术先驱和领航者

Tech-Long is dedicated to developing into technical founder and
leading role in future beverage packaging equipment industry



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Runs for you!

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以客户的成功，衡量我们的成功
Measure our success with client's success

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Tech-Long has become the first Chinese equipment supplier of Coca-cola

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Story of Tech-Long and Zhongfu

寄语达意隆

Word to Tech-Long

达意隆成为首家进驻太古可口可乐的国内制造商

Tech-Long has become the first Chinese equipment supplier of Coca-cola

2004年7月6日，广东太古可口可乐饮料有限公司（以下简称广可）安装的达意隆公司PET瓶碳酸饮料灌装生产线（广可第八号生产线）正式启用。香港太古饮料在广可四楼生产现场举行了隆重的新线启用仪式。香港太古饮料CEO Mr.John Slosar和广可总经理费致修为第八号生产线按下了启动按钮。这标志着达意隆设备具备了与国外先进同类产品竞争的實力，达意隆的技术及服务得到了饮料行业巨头的认可。

July 6, 2004 has witnessed the start operation of PET CSD bottling production line in Guangdong Swire Coca-cola Beverage Co. Ltd. This is the No.8 production line of Guangdong Swire Coca-cola and is supplied by Tech-Long. The opening ceremony was held in the workshop of Guangdong Swire Coca-cola. The start button was pressed down jointly by John Slosar, CEO of Hong Kong Swire Coca-cola, and Fei Zhixiu, GM of Guangdong Swire Coca-cola. This event is of great significance, signifying that production lines made by Tech-Long have possessed the capability to compete with those made by overseas manufacturers, and that the expertise as well as service provide by Tech-Long has been recognized by Coca-cola, the world beverage giant.

作为我国最著名的饮料生产企业之一，广可在此之前采用的全部灌装设备都由美国或德国等设备供应商提供，他们对设备的品质要求非常严格，而达意隆设备经受住了考验，与美国World Packaging Company公司合作开发的灌装阀流速可达到200ml/s，是目前国内流速最快的灌装阀，使生产线具有很高的生产效率；在灌装净容量、二氧化碳饱和量、旋盖扭力、白利糖度等指标的CPK值测试中满足了可口可乐的品控要求。达意隆因此成为首家进驻太古可口可乐公司的含汽灌装线的国内设备供应商，同时也大大推进了国际饮料巨头在中国设备采购本地化进程。

As the best known beverage company in China, Guangdong Swire Coca-cola has always set a very high standard for the quality of the bottling production lines. All of them are supplied by manufacturers from the United States or Germany before cooperation with is established with Tech-Long. The velocity of flow of the bottling valve developed jointly with the World Packaging Company in the United States has reached 200ml/s, making the production line a highly efficient one. The line has met the requirements for quality control of Coca-cola on aspects including net bottling capacity, carbon dioxide saturation capacity, capping torque and CPK value test for sugar content. Tech-Long has become the first Chinese CSD bottling production line supplier for Guangdong Swire Coca-cola, and has accelerated the beverage giant's



至今已风行全球110多年的可口可乐公司是全球最大的饮料公司，世界第一大饮料品牌，也是软饮料销售市场的领袖和先锋。可口可乐进入中国市场70余年，在中国人眼中也成了美国文化的代名词。今天，可口可乐已经成为中国家喻户晓的品牌，中国也成为可口可乐全球第五大市场。可口可乐诸多的成功经验早已被世人所津津乐道。然而，它在中国的所思、所做、所追求似乎更应给我们启示，引我们深思。其中，可口可乐“植根本地化”的商业战略给了我们最深刻地体会。

Coca-cola is the biggest beverage company in the world, with more than 110 years' history. It is the No. 1 beverage brand, as well as the leader in sales volume in the beverage market. Coca-cola came to China market more than 70 years ago and had become a symbol of American culture among Chinese people. Nowadays, Coca-cola has become a well-known brand in China, and China has become the fifth largest market for Coca-cola.

The success achieved by Coca-cola has been well talked about, but we shall learn more from what it has been planning, implementing and seeking in China. The localization strategy of Coca-cola is meaningful for us.

process of localization of equipment procurement.

参加这次剪彩仪式的嘉宾还有：香港太古饮料技术部经理蔡志勇先生、王国才先生，达意隆集团张颂明董事长、王忠副总裁、中国区销售总经理孔祥捷以及来自可口可乐系统的国内多家装瓶厂的专家和代表。

The ceremony was also attended by the following honorable guests: Cai Zhiyong and Wang Guocai, manager of Technical

Department of Hong Kong Swire Coca-cola, Zhang Songming, chairman of the board of Tech-Long Group, Wang Zhong, vice-president of Tech-Long Group, Kong Xiangjie, sales director of China Region of Tech-Long Group, as well as specialists and representatives from other bottling factories of Coca-cola.

Text by Tech-Long Johnson
Picture by Tech-Long Hakim

历史一刻



2004年7月6日，广东太古可乐四楼生产现场，达意隆张颂明董事长(左)和香港太古饮料CEO Mr. John Slosar(右)在第八号生产线剪彩仪式后，双方握手庆贺。

On July 6, 2004, Mr. Zhang Songming (Left), the chairman of the board of Tech-Long is shaking hands with Mr. John Slosar (Right), CEO of Hong Kong Swire Coca-cola on the opening ceremony for the No.8 production line on the 4th floor of the production site in Guangdong Swire Coca-cola.

香港太古饮料CEO Mr. John Slosar和广东太古可乐总经理费志修先生为第八号生产线剪彩

Mr. John Slosar, CEO of Hong Kong Swire Coca-cola and Mr. Fei Zhixiu, general manager of Guangdong Swire Coca-cola on the opening ceremony of the No.8 production line.



来自可口可乐系统参加剪彩仪式的嘉宾

Guests from Coca-cola system for attending the opening ceremony



第一条含汽灌装线 首战告捷

The successful installation of the first CSD bottling line by Tech-Long



■溯源

2002年，达意隆凭着高速五加灌装设备（1200桶/小时），开始了与香港太古可口可乐的第一次合作，此后的一年里，达意隆的产品成功地销往可口可乐在香港、广东、上海、杭州的四个工厂。同年5月，达意隆集团应邀参加了太古可口可乐在杭州举行的“可口可乐系统的品控及供应链会议”，这意味着达意隆产品得到了太古可口可乐系统的初步认可。

2003年10月下旬，香港太古可口可乐公司CEO Mr. John Slosar到达意隆广州总部进行实地考察；2003年12月，达意隆集团公司与香港广东太古集团正式签订合同，为广东太古可口可乐提供第一条达意隆PET瓶碳酸饮料灌装线（360BPM，1.25L）；2004年1月，香港太古可口可乐公司与达意隆正式签订《战略合作伙伴商务协议》。

■Beginning

In the year 2002, with its high-speed 5 gallons bottling equipment (with capacity reaching 1200 barrel/per hour), Tech-Long established cooperation with Hong Kong Swire Coca-cola for the first time. A year later, equipment made by Tech-Long was sold to four factories of Coca-cola in Hong Kong, Guangdong, Shanghai and Hangzhou. In May of the same year, Tech-Long was invited to “Seminar on Quality Control and Supply Chain” sponsored by Coca-cola, signifying that the products of Tech-Long had gained initial recognition from Coca-cola.

In late October, 2003, John Slosar, CEO of Hong Kong Swire Coca-cola came to visit the headquarter of Tech-Long in Guangzhou; In December, 2003, a contract was signed between Tech-Long and Hong Kong Swire Coca-cola for Tech-Long to supply a PET CSD bottling production line (360BPM, 1.25L). In January, 2004, the Agreement of Strategic Partnership was signed between Tech-Long and Hong Kong Swire Coca-cola.

■突破

达意隆主管工程师程文杰在三合一的设计方面有着丰

富的经验，在与美国WPC公司INDE先生共同工作的日子里，在短时间内掌握了含汽灌装的设计要点。INDE先生毫无保留地传授CSD设备原理及调机技巧，使达意隆在设备调试方面积累了宝贵的经验，少走了许多弯路。经过精心设计和周密组织，达意隆第一台PET瓶碳酸饮料灌装线在出厂前一次性试机成功，在打压试验、机器精度、灌装阀流速等测试中满足了客户的高要求。达意隆漂亮地完成达意隆历史上又一个“零的突破”。

■Breakthrough

Chen Wenjie, the chief engineer of Tech-Long, has rich experience in the designing of three-in-one system. During the process of project development with Inde from WPC Inc., he had mastered the main points of design for PET CSD bottling within a short period of time and had led the team through the CSD project. Mr. INDE has carefully taught the principle of testing technique of CSD equipment, which makes Tech-Long accumulate precious experience in equipments test. After precise design and organization, the test running for the first PET CSD bottling machine was completed successfully. Customers' requirements have been totally met in the test, including withstanding test, precision and valve velocity of flow. And Tech-Long has perfectly achieved the “Breakthrough of Zero” in the history.

■合作

2004年2月，三合一机进入安装阶段。香港太古王国才先生、蔡智勇经理和达意隆装配小组成员在工程进行及设备调试整个过程中一直奋战在一起，他们的工作作风和专业精神给达意隆人留下了深刻的印象。

■Cooperation

In February, 2004, the three-in-one machine came into the installing stage. During the whole process of manufacturing and debugging, Wang Guocai from Hong Kong Swire Coca-cola,

Manager Cai Zhiyong and Tech-Long Assembly Team worked together, and Tech-Long people are deeply impressed by their dedication to work.

■收获

含汽生产线于5月3日安装工程完毕到5月13日成功地灌出了第一瓶1.25升PET瓶可口可乐产品仅仅用了10天时间。6月6日，达意隆生产线试生产得到了广可高层的初步认可。

从2003年8月开始进行设计到2004年7月6日广可第八号生产线正式投入使用，达意隆出色地完成了第一条碳酸饮料灌装线的研制、开发、生产、调试、正式投产的整个过程，在不到一年的时间内，我们完成通常业内人士认为需要用5年完成的任务，成为国内首家进入太古可口可乐的PET碳酸饮料设备供应商，同时也使中国的饮料包装行业的格局有了新的变化。

与客户携手共创辉煌 Hold hands to explore bright future

可口可乐新战略-采购本地化

2000年太古可乐香港有限公司与达意隆达成了46吨RO水处理设备的合作关系，从此达意隆先后与上海申美可口可乐有限公司、杭州中萃、东莞可乐、广东太古可乐等等的生产商进行了水处理、旋转五加仑灌装机、小瓶灌装机、含汽灌装等一系列包装设备的合作。达意隆的设备比进口的同等设备节省了1/3以上的成本，这大大降低了饮料企业的投资成本。可口可乐充分体会到了本地化采购的优势。

Purchase localization a new strategy of Coca-cola

In year 2000, Swire Coca-cola (Hong Kong) Co., Ltd. established cooperation with Tech-Long for 46 ton RO water treatment equipment. Ever since then, Tech-Long started cooperation with Shanghai Shenmei Coca-cola Co., Ltd., Hangzhou Zhongcui, Dongguan Coca-cola and Guangdong Swire Coca-cola in packing equipment including water treatment, rotating five-gallon bottling machine, small bottling machine and CSD bottling machine. Compared with imported equipment, Tech-Long equipment is more than 1/3 cheaper. This will greatly reduce the amount of investment of the beverage enterprises. Coca-cola knows well about the advantages of localization in purchasing.

■ Harvest

From May 3 when the installing of the production line was completed, to May 13 when the first 1.25 PET bottle of Coca-cola had come off the production line, it took only 10 days. On June 6, the trial production in the Tech-Long production line had achieved initial recognition from the top management of Coca-cola.

The designing started in August, 2003, and the production started on July 6, 2004, the No. 8 production line of Guangdong Swire Coca-cola is the first CSD bottling production line developed, manufactured and debugged by Tech-Long. The process took less than one year, but normally it would take five years. Tech-Long has become the first Chinese PET CSD bottling equipment supplier for Coca-cola, and this had changed the Chinese beverage packing industry.

Text: Tech-Long Cheng Wenjie/Mukce
Picture: Tech-Long Hakim



可口可乐多元化的发展 给予达意隆无限商机

随着可口可乐逐步向多元化产品发展的趋势，可口可乐已由单一的碳酸饮料向其它的各类软饮料产品全面进军，目前已成功推出“天与地”、“QOO”等水、果汁等料的新产品，并很快地占领了市场。可口可乐产品多元化的快速发展，也给达意隆带来了前所未有的发展机会，达意隆一系列的产品-上瓶平台、输送系统、糖房、UHT、冷却隧道等其它辅助设备被可口可乐多个工厂和OEM厂商所订购和使用。这对于达意隆的各类产品技术和服务水平的迅速提升提供了一个广阔的平台。

The policy of diversified development of Coca-cola has given Tech-Long boundless business opportunities

With the trend of diversified development, Coca-cola is aiming at other categories of soft drinks based on CSD. By now, new products such as Tian Yu Di, QOO water or juice drinks have been launched to the market and have enjoyed great popularity. The rapid diversified development of Coca-cola products has given Tech-Long enormous business opportunities. Tech-Long

equipment has been widely applied in many Coca-cola plants and OEM factories, such as bottling platform, conveying system, sugar workshop, UHT, cooling channels and other auxiliary equipment. This has given Tech-Long much space in rapidly improving manufacturing technology and services.

可口可乐的高要求促进了达意隆的持续发展

没有技术的不断创新，就没有企业的持续发展。可口可乐的高技术、高质量、高服务的要求对达意隆的成长和发展是一个巨大的促进和推动。达意隆成功研发了第一条30000瓶/小时的含汽灌装生产线并成功进入了可口可乐系统后，又成功地研发了36000瓶/小时的小瓶灌装生产线，标志着达意隆已达到饮料灌装设备的国际领先水平。

The strict requirements of Coca-cola have facilitated the sustainable development of Tech-Long

An enterprise will have no sustainable development without technological innovation. The strict requirement of Coca-cola in technology, quality and services has greatly facilitated the growth of Tech-Long. The development of 36000 bottles/

hour small bottle bottling production line after successfully developing the first 30000 bottles / hour CSD bottling product line which has been successfully applied in Coco0cola system indicates that Tech-Long is keeping in line with the international level in beverage bottling equipment.

携手并进，共创辉煌

正是可口可乐共同发展合作关系的战略，增强了达意隆的市场竞争力，达意隆与太古可口可乐公司在2004年1月1日签订了《战略商业协议》，这将是达意隆与可口可乐合作的又一个新的起点。

Making advancement together

The Coca-cola's strategy of joint development has strengthened the competitiveness of Tech-Long. On January 1, 2004, Tech-Long and Swire Coca-cola signed the Agreement of Strategic Partnership, which is a new starting point for the cooperation of Tech-Long and Coca-cola.

Text by Tech-Long Mandy/Mukce
Picture by Tech-Long Hakim

用绿色成就梦想 记达意隆与生力集团的合作之路 Realize dream with green Cooperation between Tech-Long and SMC

2005年，达意隆与生力集团项目负责人在深圳签约现场合影留念

In 2005, Tech-Long and San Miguel Corporation Project Chief are having photo in the signature site in Shenzhen



2005年5月28日，达意隆与菲律宾生力集团（以下简称SMC）正式签订了整厂设备订单，这无论对于达意隆还是整个中国饮料包装设备行业来说，都是一个具有历史意义的新里程。

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.

源起

2003年8月，一个偶然的机会，达意隆开始介入SMC的这个项目，达意隆销售部总经理孔祥捷在2003年9月亲自前往菲律宾马尼拉的SMC总部为SMC做项目阐述，使SMC对达意隆有了一定的了解，双方有了初步的合作意向。

为了对达意隆的设备及综合实力有更深层的了解，SMC从2003年11月后的六个月内第曾先后有6批人员到达意隆广州生产基地进行考察，和达意隆的工程师与技术人员进行了多次的技术交流，之后，这6批人员分别到武汉乐百氏、成都绿科、成都润田、广东太古可口可乐等公司考察达意隆设备的运行状况。同时，在这6个月的时间里，达意隆也先后派出工程、技术人员前往SMC菲律宾马尼拉总部共计15次之多，将达意隆的设备和配线情况对SMC的工程和技术人员进行进行了技术交流和探讨。

Beginning

In August, 2003, at a casual chance, Tech-Long started in engaging the project of SMC, 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.

In order to know more about Tech-Long equipments and comprehensive strength, SMC dispatched 6 teams of technicians to visit Tech-Long Guangzhou Production Base within 6 months since November, 2003, and communicated with our engineers and technicians. Later, they went to Wuhan Pepsi, Chengdu Luke, Chengdu Runtian and Guangdong Swire Coca-cola to investigate the running condition of Tech-Long equipments. 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.

用心铸造精品项目

2004年1月，SMC正式邀请达意隆参加对生力（广东）食品饮料有限公司的整厂包装设备的投标。此时参与投标的还有几家行业内的跨国公司。

为了配合SMC对顺德厂的整体规划，达意隆邀请了广州轻工设计院的专家为SMC顺德厂作整厂顾问，有效地保证了整厂方案的可行性。

2004年3月,达意隆书面回答了SMC提出的100余项的技术质询，并接待包括SMC总裁在内的三位SMC高层对达意隆广州生产基地的来访。

2004年8月到9月期间，达意隆又数次书面回答SMC的技术质询，并多次前往SMC总部进行技术答辨。达意隆SMC项目小组成员前往菲律宾做最后的陈述并和最后入围的竞争对手进行了针锋相对的技术辩论，取得了关键性的胜利!

2005年5月18日，达意隆和SMC正式签订了高达1.5亿元的整厂设备订单。

Dedicately 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. Other multi-national corporation in the profession



生力集团公司是菲律宾最大的一家从事食品、饮料及包装工业的上市公司。生力集团创立于1890年，经过一百多年的发展，它目前已成为东南亚最大、世界第五大食品、饮料及包装行业的领跑者。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.

自成立以来，生力集团始终致力于与其他国际知名公司合作。1997年与可口可乐集团建立了合作关系，其经营的公司在菲律宾碳酸饮料市场占有86%的份额。2000年到2001年间，公司营业额由此剧增了37%。Since the establishment, San Miguel Corporation has been dedicated to cooperating with other world famous corporations. In 1997, San Miguel established cooperation with Coca-cola Group, whose market share of carbonated beverage reaches 86% in Philippines. During 2000 to 2001, the sales volume of the company increased 37%.

在现有业务呈现良好的势头的基礎上，生力集团在亚太地区的并购业务也不断向前发展。目前在亚太地区，生力经营的工厂数量超过100家，分布在菲律宾、印尼、澳大利亚、中国大陆和香港。

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.

通过集团公司的并购业务，生力集团的资本规模在进行迅速的扩张。生力集团有一个名为“BIHAG”的目标，意思是指一个远大的，不简单而大胆的目标，那就是到2007年，实现集团年收入达到100亿美元。

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.

also participated into the bidding.

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.

During August to September, 2004, Tech-Long answered diversified 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.

喝采成就，分享感受

达意隆国际部总经理邢海滨在合同正式签订后曾经说过：“在SMC整个项目的进行过程中，我感到前所未有的压力，我们面临的竞争对手不单只是国内最优秀的企业，还有来自全世界最优秀的同行，我们取得胜利的最大优势就是为客户提供的不仅仅是单一设备，还有整线的配置服务,以及达意隆专业的服务理念，我们一直都认为，客户需要的，就是我们要努力去做的，这是信赖与合作的基础。我们为客户节约了大量的采购成本，对这个项目的成功有很大的影响，在这个项目中，全体达意隆人所表现出来的智慧和团队合作精神是也是前所未有的”。通过SMC项目中与竞争对手的较量以及和其他的同行的合作也让我们得到了许多宝贵的经验，使我们对今后的发展有了新的认识：我们更加懂得了“诚信”对于一个成功的国际化企业的重要性；对于问题的反应速度也直接影响项目的每一步发展；我们更清楚的知道，一份经得起推敲和考验的专业方案是取得胜利关键所在；而客户服务应该不只是简单的买与卖，在市场经济环境下，我们应该更着重于时刻关注用户多方面的需要.....

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 in the project and cooperating with other professions, 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; 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....

虽然今天的达意隆用智慧和不断进取的勇气已经成就了一个又一个的梦想，但国内的企业要迈出国门，与国际上的对手竞争，在管理模式、销售方式与表述方式、职业精神、投资战略、人才招聘、思想观念等方面仍有很大的差距；明天，达意隆将用国际标准全方位的规划向前发展的道路，与用户共同进步!

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.

Text/Picture by Tech-Long David/Mukee

达意隆与中富的故事

Story of Tech-Long and Zhongfu



上图：2005年9月1日，珠海中富董事长一行到达意隆，在参观完工厂后，当天签订10台RJM10系列全自动旋转式吹瓶机的订单

Photo above—on Sept.1, 2005, Chairman of Zhuhai Zhongfu visited Tech-Long and placed an order of 10 sets of RJM10 automatic blow moulding machines

珠海中富从2003年底到2005年上半年，在短短的一年半时间内，在达意隆购买了18000-30000BPH瓶装水线共13条及600-1200BPH桶装水线9条，已成为拥有达意隆最多瓶装水线的客户，并且将陆续在今后更多的项目中和达意隆合作。

Zhuhai Zhongfu, from late 2003 to early 2005, within short one and a half years, has purchased thirteen 18000-30000BPH bottle water product lines and nine 600-1200BPH barrel water product lines from Tech-Long, and has become the clients who have most bottle water product lines, additionally, the company will cooperate with Tech-Long in more projects.

中富作为中国最大的专业制瓶厂，在订购达意隆吹瓶设备之前，从来没有使用过国内的吹瓶设备。“一不小心就成了第一！”这是中富董事长黄乐夫先生在签订吹瓶机合同时对水线合作的一个简洁风趣的总结。在签订10台全自动吹瓶机合同后，珠海中富又成为达意隆在灌装设备之后吹瓶机设备到目前为止的最大的买



珠海中富实业股份有限公司是广东省高新技术企业，为美国“可口可乐”、“百事可乐”两大国际饮料公司在中国的灌装厂，以及国内名牌饮料厂家提供食品饮料容器包装，是目前中国生产设备最齐全、技术最先进、规模最大的PET瓶专业生产企业。产品指定为美国“可口可乐”、“百事可乐”两大公司的饮料提供包装材料。中富实业股份有限公司生产厂房总面积为114675.8平方米，年生产能力：PET汽水瓶、矿泉水、纯净水、蒸馏水瓶50亿个，PET瓶胚40亿支，（瓶用）收缩与粘贴型标签50亿张，（LDPE、LLDPE）塑料薄膜和收缩膜 3000吨，高级三坑七层包装纸箱10000万平方米.....

Zhuhai Zhongfu Industrial Group Corporation is the Guangdong Province hi-tech corporation, and is dedicated to providing foods and beverage container packaging for the bottling factories of "Coca-cola" and "Pepsi" in China, and domestic famous beverage manufacturers, and is the professional manufacturer in PET bottle industry with most complete equipments, advanced technology and biggest scale in China. The products are appointed to providing packaging materials for beverage of "Coca-cola" and "Pepsi". The total area of the workshop of Zhongfu Industrial Group Corporation reaches 114,675.8m2, and the annual output: 5 billion PET soda water bottles, mineral water, purified water and distilled water bottles, 4 billion PET bottle moulds, 5 billion (bottle) shrink and adhesive labels, 3000 ton of (LDPE, LLDPE) sheet film and shrink film, 100 million square meters of high grade 3-hole 7-layer packaging cartoon.....



家。

Zhongfu, as the biggest professional bottle manufacturer in China, before ordering Tech-Long bottle blowing equipments, has never applied domestic blow moulding equipment. "It becomes the first without any intent!", it is the brief and interesting summary of President of Zhongfu Mr. Huang Lefu to water product line when signing bottle blowing machine contract. After signing the contract to order 10 fully automatic blow moulding machines, Zhuhai Zhongfu has become the biggest buyer of Tech-Long in blow moulding machines followed by bottling equipments.

达意隆的全自动旋转式吹瓶机问世之前，国内的吹瓶机制造业还停留在半自动的“土炮机”阶段，从产能、机械效率、成本核算、废品率控制等各方面都无法满足中富这种专业制瓶厂的高要求，但这种状况被达意隆全自动吹瓶机的上市给打破了。

Before Tech-Long fully automatic rotary blow moulding machine is launched into the market, domestic bottle blowing machine making industry still remained half automatic "local machine" phase, and can't meet the high requirements of such professional bottle manufacturers as Zhongfu in output capacity, mechanical efficiency, cost and waste rate control etc. But it was broken by Tech-Long after launching fully automatic blow moulding machine.

2000年，达意隆已意识到全自动吹瓶机在国内及国际均有极大的市场，并开始拿出专项资金及人力潜心开发在国内尚属空白的全自动旋转式吹瓶机。

In 2000, Tech-Long has realized that fully automatic blow moulding machine will have extremely big market at home and abroad, and started to develop fully automatic rotary blow

moulding machine which was still blank at home with special investment and labor.

2002年，当达意隆第一台旋转式全自动8头吹瓶机RJM8在广州工厂内诞生并成功试吹时，在国内包装业引起了轰动：中国人终于拥有了自己生产并可以和进口设备进行竞争的吹瓶设备！当时，国内各吹瓶厂也都非常关注全自动吹瓶机的情况，并时刻留意着达意隆的发展和吹瓶机的各项技改状况。

In 2002, when the first Tech-Long rotary fully automatic 8-head blow moulding machine RJM8 was made in Guangzhou and successfully tested the blowing, it has aroused the stir in domestic packaging industry: China has developed blow moulding equipment which is made by Chinese and can compete with imported equipments! At that time, domestic blow moulding factories attached high attention to fully automatic blow moulding machine, the development of Tech-Long and technical reform of blow moulding machine.

2003底，中富开始为可口可乐等国际国内饮料厂商提供代工业务，与达意隆进行了初次合作，并陆续向达意隆购买了大量的水线设备，成为拥有达意隆最多瓶装水线的客户。在双方的合作过程中，中富时时密切关注着达意隆全自动吹瓶机技术的发展。

In late 2003, Zhongfu started to provide OEM business for such international domestic beverage manufacturers as Coca-cola, and started the first cooperation with Tech-Long and purchased a lot of water product line equipments from Tech-Long, and became the client who possessed most Tech-Long bottle water product lines. During the course of our cooperation, Zhongfu attached high attention to the technical development of Tech-Long fully automatic blow moulding machine.



图一：达意隆工程师曹达柏在中山富山清泉安装1200BPH桶装水线现场

Photo 1: Engineer of Tech-Long Cao Dabai is installing 1200BPH five gallon line for Zhongshan Fushan Clear Spring Drinks Company

图二：统一LEAU水品牌，由新疆中富采用达意隆30000BPH水线，中山富山采用达意隆24000BPH水线进行灌装。

Photo 2: President LEAU Water Brand is filled by Xinjiang Zhongfu 30000BPH water filling line and Zhongshan Fushan 24000BPH water filling line.

2004年，经过一次次的改进，达意隆第二代吹瓶机RJM10 Series II 在北京国际啤酒饮料展上展出，现场吹瓶取得空前成功。中富公司领导也到达意隆展台前参观了吹瓶机现场吹制情况，并对达意隆取得的进步和改进速度进行了肯定。同

时，达意隆第二代吹瓶机也得到了可口可乐公司的认可，并将RJM10 Series II 成功销往香港太古可口可乐。

In 2004, after constant improving, Tech-Long Generation II blow moulding machine RJM10 Series II was exhibited in Beijing International Beer Beverage Exhibition, and the blow moulding on site achieved outstanding success. Zhongfu leadership also visited the site blowing of blow moulding machine in Tech-Long booth, and high praised the progress and improvement of Tech-Long. Additionally, Tech-Long Generation II blow moulding machine has also achieved acceptance from Coca-cola, and RJM10 Series II was successfully exported to Hong Kong Swire Coca-cola.

2004年底，达意隆和瑞士EUGENWEITZ公司开始高压吹气阀的合作，开发出新一代吹瓶机RJM10SeriesIII，吹瓶效率提升到1400瓶/腔。与此同时，达意隆瓶装水线已在珠海中富全国十多个分厂内高速运行，中富原有的吹瓶机产能已不能满足水线的要求。在此情况下，达意隆与中富的吹瓶机的合作事宜也提上了日程。

In late 2004, Tech-Long started to cooperate with Swiss EUGENWEITZ Corporation in high pressure air blowing valve, and developed the new generation blow moulding machine. The blow moulding efficiency of RJM10 Series III has been improved to 1400bottles/chamber. Additionally, Tech-Long bottle water product line has been used in over 10 branches of Zhuhai Zhongfu, the output of original blow moulding machines can't meet the requirements of water product line any more. Under this condition, the cooperation on blow moulding machine between Tech-Long and Zhongfu is also put in the agenda.

2005年9月1日，珠海中富黄乐夫董事长及许征经理一行到访达意隆，在参观完工厂后，黄董对达意隆的产品和发展表现出极大的认同，并在当天就将10台RJM10III系列全自动旋转式吹瓶机订单全部签订，并对达意隆以后的吹瓶及灌装领域提出更广泛的合作意向，这标志着达意隆的吹瓶设备已成功进入中国专业制瓶行业，达意隆将在这一领域绘制出一幅更美好的蓝图！

On September 1st, 2005, Board Chairman of Zhuhai Zhongfu Mr. Huang Lefu and Manager Xu Zheng visited Tech-Long, after visiting the factory, Chairman Huang expressed high interest to the products and development of Tech-Long and signed the contract to

order 10 RJM10III series fully automatic rotary blow moulding machines, and presented wider cooperation intent to Tech-Long in bottle blowing and bottling fields, which is the symbol that Tech-Long blow moulding equipment has successfully launched

into China professional bottle making industry, and Tech-Long will draw and better blueprint in this field.

Text by Tech-Long Li Youhua
Picture by Tech-Long Li Youhua/Gao Jie

链接资料

Links >>>

珠海中富集团下属企业多达八十余家，目前正在使用达意隆提供的设备的企业主要包括：Zhuhai Zhongfu Group possesses over 80 subsidiaries, currently, such corporations are using Tech-Long equipments--

- 青岛中富联体容器有限公司
Qingdao Zhongfu In-line Container Co., Ltd.
- 新疆天山一号冰川水饮料发展有限公司
Xinjiang Tianshan No.1 Glacier Water Beverage Development Co., Ltd.
- 沈阳中富瓶胚有限公司
Shenyang Zhongfu Preform Co., Ltd.
- 长沙中富容器有限公司
Changsha Zhongfu Preform Co., Ltd.
- 郑州富田食品有限公司
Zhengzhou Full-Tin Foods Co., Ltd.
- 成都中富瓶胚有限公司
Chengdu Zhongfu Preform Co., Ltd.
- 西安中富热灌装容器有限公司
Shanxi Zhongfu In-line Packaging Container Co., Ltd.
- 中山富山清泉饮料有限公司
Zhongshan Fushan Spring Water Beverage Co., Ltd.
- 昆山中富容器有限公司
Kunshan Zhongfu Container Co., Ltd.
- 海口富利食品有限公司
Haikou Zhongfu Container Co., Ltd.
- 北京中富热灌装容器有限公司
Beijing Zhongfu Hot Filling Container Co., Ltd.
- 兰州中富容器有限公司
Lanzhou Zhongfu Container Co., Ltd.
- 太原中富联体容器有限公司
Taiyuan Zhongfu In-line Container Co., Ltd.
- 长春中富容器有限公司
Changchun Zhongfu Container Co., Ltd.
- 长沙富田食品有限公司
Changsha Full-Tin Foods Co., Ltd.

寄语达意隆.....

Word to Tech-long

达意隆在短短的六年，取得了高速发展，主要得益于他们脚踏实地、务实创新、长远结合、志存高远的理念和经营作风。我们寄希望于达意隆在“十一五”期限间，以追赶国际先进水平为己任，为中国及世界的饮料工业做出新贡献。

中国饮料工业协会
常务副理事长 秘书长 赵亚利

In the short 6 years, Tech-Long has achieved rapid development owing to its sincerity, renovation, philosophy and excellent work style. We hope that during the “Eleventh Five Years” period, Tech-long will advance to international level so as to make contributions for China and world soft drinks industry.

China Soft Drinks Industry Association
Standing Vice Director, Secretary-General Zha Yali

达意隆在激烈的市场竞争中，采用增值战略夺取先机，在饮料机械制造行业成就卓越。祝达意隆再创辉煌！

北京中轻合力机械设备有限公司
总经理 蔡娥娥

Facing the severe competition in the market, Tech-Long has made outstanding achievements in drinks machinery manufacturing industry with the increment strategy of catching the opportunity. Wish Tech-Long a more brilliant future!

Beijing ZQHL Machinery Equipment Company
General Manager Cai E E

与达意隆第一条含汽灌装线的合作，真正地体现了“团结就是力量”的合作精神，希望双方能继续保持良好的合作关系，共创双赢！

广东太古可口可乐有限公司
供应链总监 赵英

The cooperation with Tech-Long in the first gas containing bottling product line represents the spirit of “Union is Power”, and we hope the good cooperation will continue to create double-win.

Guangdong Swire Coca-cola Co. Ltd.
Supply Chain Supervisor Zhao Ying

在与达意隆的合作中，我们看到了她在不断地进步与成长，技术也在不断提高，祝愿达意隆品牌能够为客户提供更好的世界品质！

百事饮料（广州）有限公司
经理 刘洪钧

In the cooperation with Tech-Long, we have seen the continuous progress and development of Tech-long, and we hope she will provide more excellent quality products to customers.

Pepsi Co. Inc (Guangzhou)
Manager Liu Hongjun

隆冬时节，沈阳中富容器有限公司十周年庆典晚会在鲜花和笑语声中胜利闭幕，由衷地感谢达意隆对我公司此次庆典晚会的支持，你们的支持，为我们的晚会增添了无限光彩。祝达意隆生意兴隆，财源广进！

沈阳中富容器有限公司
总经理 周建华

In the depth of winter, Shenyang Zhongfuhr Container Co. Ltd. has successfully concluded its 10th Anniversary Ceremony Party in flowers and joys, and we sincerely thank the support by Tech-long for this party. May your business bring your great wealth!

Shenyang Zhongfuhr Container Co. Ltd.
General Manager Zhou Jianhua

强强联手、加强沟通、提高服务、做强做大！

椰树集团 海口椰树矿泉水有限公司
董事长 潘汉清

Strong Cooperation, Good Communication, Better Service and Higher Strength!

Yeshe Group Haikou Yeshe Mineral Water Co. Ltd.
Chairman Pan Hanqing

吴太心想饮料祝愿达意隆不断创新，提供更好的设备，服务于饮料行业。

吉林省吴太威康药业有限公司
总经理 吴玉芳

Wutai wishes that Tech-Long will continuously make renovation, provide better equipments and more excellent service in beverage industry.

Jilin Province Wutai Gankang Pharmacy Co. Ltd.
General Manager Wu Yufang

作为达意隆产品在北京的第一家用户，在与达意隆公司合作的数年中，深深感受到了达意隆公司迅猛发展和不断壮大，并为我们正确地选择了达意隆企业及产品而深感欣慰，愿与达意隆公司携手并进并成为永远的朋友。

北京香山御泉矿泉水有限公司
总经理：康伟

As the first user of Tech-Long products in Beijing, and in the long-time cooperation with Tech-Long, we feel that Tech-Long is developing rapidly and expanding greatly, and we feel gratified for the right choice of Tech-Long Company and its products. We are looking forward to further cooperation with Tech-Long and being forever friend!

Beijing Xiangshan Spring Mineral Water Co. Ltd.
General Manager Kang We

希望达意隆能够提供更多的新技术、新产品、更加稳定的质量、更完善的售后服务，让饮料企业受益，让更多的用户选择达意隆。

四平宏宝莱股份有限公司
副总经理：郝永久

We hope Tech-Long will provide more new technologies and products with more stable quality and more excellent after service to customers so as to benefit soft drinks industry and hope more customers will favor Tech-Long.

Siping Hong Bao Lai Group Co., Ltd
Vice General Manager Hao Yongjiu

经过这么多年来密切合作，我们已经深深地认识和了解了达意隆的优良的产品和及时到位的服务，并因此结下了深厚的友谊，双方已经不仅仅只是简单的生意上的合作者，更是伙伴和朋友，谨在此向达意隆对我们多年来的帮助和支持表示深深的感谢，也希望在今后的合作中还能一如既往的给与我们大力的帮助和支持！

普利恩矿泉水有限公司
副厂长 孙大军

After years of close cooperation, we have got to know the excellent products and good service provided by Tech-Long. Owing to close relationship, we are not only partners in business but also friends in work. We'd like to deliver great thanks to Tech-Long for their help and support to us, and also hope that it will provide more help and support to us as usual.

Pulisi Mineral Water Co. Ltd.
Vice Factory Director Sun Dajun

祝贺达意隆的生产线在达能AQUA投产。希望达能AQUA能从达意隆得到很好的支持，并且希望能与达意隆成为饮料界的成功的合作伙伴”

印尼AQUA
设计发展部经理 Mr.Adjiwibowo Suharso

Congratulations on the successful operation of the product lines from Tech-Long in AQUA. We hope that AQUA will obtain more support from Tech-Long and also wish that we will become successful partners with Tech-Long in beverage industry.

Indonesia AQUA
Design & Development Department Manager Mr. Adjiwibowo Suharso

达意隆的迅猛发展不仅得益于国内外饮料企业行业的需求，更在于公司领导的高瞻远瞩和全体员工的不懈努力。拥有55年历史的中机公司在与年轻的达意隆国际市场上的合作，使双方都获益良多。在新的一年里，我希望达意隆能够不断开发新产品，努力开拓国际市场，争当中国包装机械行业最新最强的代表。预祝达意隆公司和中机公司合作愉快！

中国机械进出口（集团）有限公司
副总裁 秦瑞娟

The rapid development of Tech-Long is resulted from the requirement of domestic and foreign beverage industry and also from the good leadership in the company and hard work of all staffs. China National Machinery Imp & Exp Corp, with 55 years of history, has benefited a lot from the cooperation with Tech-Long in the international market. In the coming New Year, we hope that Tech-Long will continuously develop new products, make great efforts to explore the international market, and try to become the strongest one in China package machinery industry. Wish a successful cooperation with Tech-Long!

China National Machinery Imp & Exp Corp.
Vice President Qin Ruijuan

值此新年来临之际，武汉紫泉饮料工业有限公司向达意隆致以诚挚的问候，愿我们与达意隆在新的一年里合作更上一个台阶，也祝达意隆生意兴隆，财源广进！

武汉紫泉饮料工业有限公司
生产经理 廖德健

In the approaching New Year, Wuhan Ziquan Beverage Industry Co. Ltd. extends sincere regards to Tech-Long, and wishes a better cooperation with Tech-Long. May your business bring your great wealth!

Wuhan Ziquan Beverage Industry Co. Ltd.
Production Manager Liao Dejian



产品不断创新，与世界水平同步 Products are constantly innovating, keeping pace with the world

达意隆含汽灌装设备，凭借技术领先，不断提升客户价值

Tech-Long CSD bottle equipment, owing leading technology, constantly improve value for clients

梦想无极限，不断发展的PET吹瓶技术

A dream boundless, developing PET bottle blowing technology

达意隆全自动旋转式PET吹瓶机，不断创新的精心之作

Tech-Long fully automatic rotating PET bottle blowing machine, dedicated work with constant innovation

饮料包装设备发展新概念—吹灌旋一体机

New concept of beverage packaging equipment development--blow-fill-cap 3 in 1 Combi Line

达意隆含汽灌装设备

凭借技术领先，不断提升客户价值

Tech-long CSD Bottling Equipment

Elevating Customer Value Through Technological Enhancement

质量就是生命，达意隆集团一直非常重视产品研发，致力于不断用心提升产品品质，为客户提供全方位的服务，努力为客户创造价值并和客户共同进步！含汽装设备是达意隆2003年年底研发成功的新产品，目前已顺利投放市场。

Quality is life, Tech-Long Group focuses on products R&D and is dedicated to improving product quality, providing considerate service for clients, increasing value for clients and improving together with clients. CSD bottling equipment is the new product developed by Tech-Long in late 2003 and has launched into the market currently.

CSD是Carbonated Soft Drink的英文缩写，意为碳酸软饮料。达意隆的CSD设备研发过程中融合了国外多家知名公司的同类产品的优点，并结合我国的具体国情和市场状况，进行了全新的技术改造，目前这项技术在国内同行中处于领先地位。

CSD is abbreviated for Carbonated Soft Drink. During the developing process of Tech-Long CSD bottling equipment, advantages from products made by renowned companies abroad had been integrated in the equipment, and actual application condition in China had been taken into consideration. By integrating technical innovation into the production line, it is in the leading position in China.

达意隆的碳酸饮料灌装机可拆成三大部分，便于运输；出瓶输送链高度可调；空瓶通过风道，由星轮夹瓶头先后送至洗瓶机、灌装机、旋盖机，最后经出瓶输送链送出。在灌装作业中不需要输瓶螺杆，在整个过程中设有多处卡瓶、缺瓶、缺盖、过载等保护报警装置，能及时发现及排除灌装中的故障，性能非常可靠，生产自动化程度高，操作简便，工艺流程科学，能够完全保证灌装过程中的安全与卫生。适合水、热灌装、碳酸等各类软饮料的灌装。

The CSD bottling machine can be knocked down to three parts and so it's convenient for transportation. The height of the bottle conveying chain is adjustable. First, the empty bottles go through the air passage. Then they are transferred to the bottle washing machine, the bottling machine, the capping machine and finally come off the production line via bottle conveying chain. Bottle conveying screws are unnecessary during the bottling operation. Alarming devices are installed at several places to indicate bottle blocking, bottle absence, cap absence and overloading, so as to shoot troubles occurring during the bottling process. The production is reliable, highly automatic and convenient for operation. It has a reasonable technical procedure, conforming to sanitation conditions set up by national standard, ensuring absolute safety and sanitation for the bottling operation. This production line is applicable to bottling for various types of soft drink including water, hot bottling and carbonated.

目前达意隆含汽灌装设备主要包括DQS40×40×12、DQS50×50×12、DQS60×60×15、DQS72×72×18、DQS80×80×18、DQS120×120×28等几个机型，最高产能可以达到48000瓶/小时。

At present, Tech-Long CSD bottling machines mainly consist of DQS40×40×12, DQS50×50×12, DQS60×60×15, DQS72×72×18, DQS80×80×18 and DQS120×120×28, and the maximum production capacity reaches 48000 bottles/per hour.

Text by Tech-Long Mukee
Picture by Tech-Long Hakim

含汽灌装设备工作流程 The working process of CSD bottling



梦想无极限

不断发展的PET吹瓶技术

A dream boundless

The PET bottle blowing technology keeps improving

在液态食品和其他的包装领域上，PET瓶占据举足轻重的地位，广泛应用于盛载各类饮料，如水、果汁饮料、茶饮料和乳饮料以及医药、化妆品等行业，这就决定了PET吹瓶机广阔的市场前景。

In packing for liquid foodstuff, PET bottles play a critical part and have been widely applied in containing drinks such as water, fruit juice, tea and milk, as well as medicines and cosmetics. Therefore, PET bottle blowing machines have an enormous market potential.

中国的PET吹瓶机的发展经历了半自动吹瓶机和全自动吹瓶机两个阶段，PET吹瓶机的研发设计人员充分结合不断进步的吹瓶技术，完成了一次又一次地飞跃。以下我们结合中国目前的吹瓶机发展状况谈谈吹瓶机的几个发展阶段：

The development of PET bottle blowing machines in China has gone through two major phases: semi-automatic bottle blowing machines and fully-automatic bottle blowing machines. The R&D personnel have accomplished one achievement after another by adopting the ever developing bottle blowing technology in the development of PET bottle blowing machines. We will give a brief introduction to the history of bottle blowing machines by looking at the present situation of bottle blowing machines in China--

半自动吹瓶机 Semi-automatic blow moulding machine



structure of two machines in one casing, being simple in structure and highly reliable in performance. By adopting perfect PET processing technology, more flexibilities and conveniences are given to the equipment. Reliable temperature control function makes pet bottle temperature setting more accurate and makes the material distribution in the process of pet bottle blowing more reasonable.

达意隆集团为适应不同客户的需要，一直保留生产半自动吹瓶机，该型机以其物美价廉深受用户喜爱，目前生产的半自动吹瓶机有CP18、CP22、CP24与其配套的加温机有JW20、JW22。

半自动吹瓶机为一箱两机式，结构简单，性能可靠。结合完美的PET加工技术，使设备更加灵活方便。可靠的温度调节，使各种瓶坯温度的设定更为精确，使瓶坯在吹制过程中的物料分配合理，从而保证了瓶子的质量，降低了成本。

To meet various demands from customers, Tech-Long never gives up the production of semi-automatic bottle blowing machines. This model has the feature of low-cost and high reliability and so enjoys great popularity among users. Presently, the models of semi-automatic bottle blowing machines made by Tech-Long include CP18, CP22 and CP24, as well as heating machines JW20 and JW22. They

Automatic blow moulding machines employ the

have formed a complete series of the production lines.

CP系列半自动吹瓶机
CP series semi-automatic blow moulding machine

锁模力大，可以从5吨~30吨调整；模具安装方便，不需要调整模厚；采用低压合模、高压锁模，确保安全和保护模具；采用德国、日本高压吹气阀，吹气压力达3.0MPa，开合模速度快，而且运行平稳，无振动现象；大部分零配件采用国际名牌产品（PLC、操作面板选用日本产品，中间继电器选用马来西亚产品），确保吹瓶机性能稳定，具有可靠性高、寿命长等特点。

CP series have strong mold locking force, adjustable between 5 tons to 30 tons. They are convenient in installation and there is no need to make adjustment in mold thickness. Security is ensured and mold is protected by adopting the method of mold mounting with low pressure and mold locking with high pressure. High pressure purge valves made in Germany and Japan are used, with the purging pressure reaching 3.0MPa. It has the feature of high mold mounting and mold dismounting speed, stable operation and is free of any vibration. In order to ensure reliable performance and long application life cycle, most of the components adopted are products of famous brands such as PLC, operating panels made in Japan and intermediate relays made in Malaysia.

与CP系列半自动机配套的加温机为JW系列半自动加温机，其能适应长度150mm以内、壁厚达4.5mm的瓶胚加温。

The heating machines coming together with CP series semi-automatic bottle blowing machines are JW series semi-automatic heating machines, applicable to heating for pet bottles with length within 150 mm and thickness reaching 4.5 mm.

JW系列加温机
JW series heating machines

变频调速，均匀旋转加温；独特螺口保护装置，保证螺口不变形；8段独立控温，容易控制瓶胚温度，自动稳压，自动控温系统；性能稳定，确保瓶胚加温一致；变频器采用日本进口产品，确保机器稳定耐

用。
JW series adopt the techniques of frequency variable adjusting speed and even rotating heating. The special screw protective function can prevent any deformation from occurring on the screws. The eight-session independent temperature control function can perform pet bottle temperature control, automatic pressure regulating and automatic temperature control. It has stable performance and so can ensure consistent pet bottle heating. The frequency transformers are made in Japan, ensuring good satiability and endurance of the machine.

由于半自动吹瓶机在使用过程中，需要人全程操作，直接影响到生产效率、生产成本、产品的卫生性，而全自动吹瓶充分利用机械性能，大大提升了生产效率，降低了生产成本，在食品安全方面相对于半自动吹瓶机有了极大的改善，更适合大规模高产量的生产。

During the whole process of production with semi-automatic bottle blowing machines, manpower is required. This has caused some impact on production efficiency, production cost and product sanitation. On the other hand, fully-automatic bottle blowing machines have fully utilized the mechanical functions and have greatly improved production efficiency and reduced production cost. Compared with semi-automatic bottle blowing machines, the foodstuff safety in fully-automatic bottle blowing machines have been greatly improved and so are more suitable for large-scale mass production.

全自动吹瓶机
Fully-automatic blow moulding machine



全自动吹瓶机安全、卫生、整线的成本低、占地面积小、生产效率高、易于管理，目前正广泛地应用在饮料包装、化妆品包装、药品包装等领域。

Fully-automatic blow moulding machine are

瓶胚+加温处理+拉伸+吹塑=PET瓶

PET preform + heating treatment + stretching + blowing = PET bottles



widely applied in packing for drinks, cosmetics and medicines due to their safety, sanitation, low-cost in production line, small size, high production efficiency and easy maintenance.

全自动吹瓶机分旋转式和步进式两种类型：步进式在小容量、多规格、低产量的制瓶行业应用广泛，如药品、化妆品、食品包装等，并可以吹制多种材料的瓶子，如PET、PEN、PP、PC等。旋转式相对步进式的更为突出的优点是单机产量大并且可以连线吹瓶灌装，而不需要配套中间环节的相关设备，这样就节约了设备投资，而且单位产量的设备占地面积要小很多，又减少了基建投资。由于旋转式吹瓶技术运用的优异表现，在今天的饮料行业有85%的瓶子是由二步法旋转式吹瓶机吹制的，并且在其他行业中的使用比例也逐年增加。

Fully-automatic blow moulding machine can be put into two categories: rotating machines and stepping machines. Stepping machines are widely applied in production for bottles with small capacity, multiple specifications and low production volume, including packing for medicine, cosmetics and foodstuff. It can also blow bottles of various materials such as PET, PEN, PP and PC. Compared with stepping machines, the advantages of rotating machines is that the production capacity per machine is large and they are capable of performing continuous bottle blowing and bottling, not requiring supplementary equipment. Therefore, the investment in equipment is reduced, the space required by equipment of unit production volume is decreased and the investment

in capital construction is minimized. Due to the excellent performance of the rotating bottle blowing technology, 85% of the bottles in the beverage industry are made by using two-step rotating blow moulding machine, with the proportion of application in other industries increased year by year.

达意隆一直致力于全自动吹瓶机的研发和创新，不断地提高吹瓶机的性能，经历过半自动、步进式、旋转式三个发展阶段，并在2002年成功的推出了全自动旋转式吹瓶机RJM系列，目前，RJM10（Ⅲ）全自动旋转式吹瓶机的产量由原来每腔每小时1200提高至每腔每小时1500个。改进后的RJM10（Ⅲ）比第一代机具备明显的优点：

Tech-Long has been dedicated to the development of fully-automatic blow moulding machine and has been working to improve their performance. It has gone through three phases including semi-automatic, stepping and rotating, and by year 2002 it has successfully launched the RJM series fully-automatic rotating bottle blowing machines. The production capacity of RJM 10 (III) fully-automatic rotating blow moulding machine has been increased from 1200 pieces per cabinet per hour to 1500 pieces per cabinet per hour. Compared with the first generation, the improved RJM 10 (III) possesses more advantages, which are described below--

增加了机器的动力
The driving power of the machine is increased

机器的动力增强主要目的是为提高瓶子的产量并确保机器稳定性创造必要的先决条件，RJM10（Ⅲ）主电机采用德国SEW带斜齿减速产品。主轴轴承采用国内知名品牌产品，在未降低机器精度的情况下采用高精度的导轨式机械手。从RJM10（Ⅲ）开始，主要传送轮都配备独立的进口过载保护限扭器，因此更易于调节，提高了机器的承载力，且更具有整机保护性。

The main purpose of increasing the driving power of a machine is to increase production volume and to ensure machine stability. The main motor of RJM 10 (III) adopts decelerating products with helical gears made by SEW in Germany. The bearings for the principal shaft are products of famous Chinese brands. High-precision rail-type robotic arms are used on condition that the machine precision is not decreased. From RJM 10 (III) up, main conveying wheels are equipped with imported independent overload protection torque limiting devices, which will make adjustment more convenient, increase machine loading capability and provide better protection for machines.

改进后的吹气和拉伸杆系统
The improved blowing and stretching bar system

全新的拉伸系统为优化后的机械式拉伸，有效控制拉伸速度，使瓶胚拉伸比例更合理，壁厚均匀程度更适合客户要求。瑞士欧根赛驰高压吹气阀、进口名牌减压阀和安全阀、新式回收废气气路、压缩空气循环利用使其更有益于用户。

The improved stretching bar system can effectively control the speed of stretching, making the pet bottle stretching proportion more reasonable and making the evenness of the bottle wall thickness meeting customer requirements. The application of high pressure purging valves made by Eugen Seitz in Switzerland, imported pressure relief valves of famous brands, safety valves, new-type waste gas recycling circuits and compressed air recycling can bring more values to customers.

优化后的风扇冷却控制
optimized fan cooling control function

可控温风循环系统优化了瓶胚的热调质工艺，优化红外线加热灯管的位置分布及功率分布，在提高吹瓶质量的同时也使吹瓶范围更加广，红外线测温计可在任何

时间测量瓶胚表面实际温度。如有必要，可相应调整风扇马达转速，使胚管和胚口达到理想的设定温度。单元式加温系统，加热灯箱可向外侧翻转90°，方便更换灯管；采用涂层式加热灯管，热效可提高20~30%。

The temperature control air circulating system has improved the thermal regulating techniques of the pet bottles and the location and power distribution of the infrared heating lamp tubes. The blow moulding quality is improved and the scope of application is expanded because the infrared temperature detector can measure the surface temperature of the pet bottles any time. If necessary, the rotating speed of the fan can be adjusted to make the temperature on the body and on the mouth of the pet bottles reach the pre-set level. In unit-type heating system, the heating lamp box can be turned outwards for 90°for convenient replacement of lamp tubes. Application of coated heating lamp tubes can increase the heat availability by 20-30%.

综合性能提高
Integrated performance

由分散式手工加油改为部分集中润滑，小容量模具由整体式改为快换式（模套和模芯），模具更换方便快捷。冷却水管接头更改为快换插接头。旋转式锁模机构，模具开合噪音低，外形更加美观。

Separate manual oil supplementing function is changed to partial concentrated lubricating function, and mold of small capacity is changed from integrated type to fast replacing type (mold sleeve and mold nest), making replacement more convenient. The cooling water pipe joint is changed to fast replacing joint. The rotating mold locking structure reduces the noise incurred from the mold mounting and mold dismounting, giving it a better look.

电控系统
Electrical control system

触摸屏改用功能更强大的工控电脑做主控制机，对机器的吹瓶压力、模具温度、产能、安全性进行综合监控，可全面保证瓶胚加温的稳定，使其不受环境温度变化的影响。PLC改为美国Allen Bradley的PLC及控制模块。改进通讯方式，使系统的反映速度由百分秒级提高到千分秒级。线路所有接口为快插式，重要的电气元件

达意隆全自动旋转式PET吹瓶机
不同阶段的产能比较

Fully automatic rotating blow moulding machine
Chart of production capacity comparison--

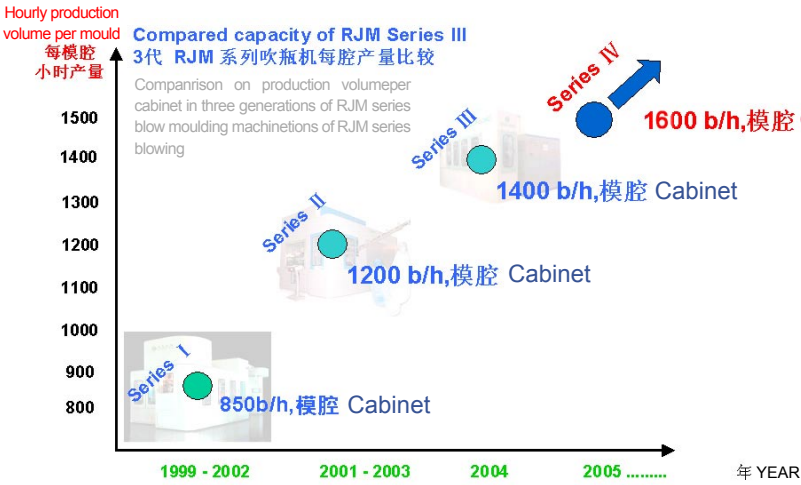
均为进口CE认证的名牌产品。

Powerful industrial personal computer is used in the machine. Through the touch screen, comprehensive monitoring is implemented on the bottle blowing pressure, mold temperature, production capacity and safety of the machine, ensuring stable heating of the pet bottles, avoiding any influence from the change of the ambient temperature. PLC is changed to PLC and control module made by Allen Bradley in the United States. The method of communication is improved, increasing the speed of response in the system from 0.01 second to 0.001 second. All interfaces in the circuit are fast plugging type, and major electrical components are imported products of famous brands with CE approval.

**全自动吹瓶机，
不断创新的精心之作**
Fully automatic blow moulding machine,
A masterpiece originated from persistent innovation

全自动旋转式PET吹瓶机的研发成功，无论是对于达意隆还是对于中国饮料包装行业来说，都具有一定的历史意义。达意隆吹瓶机的发展历史可分为三个阶段,每个阶段都有具有代表性的机型出现，开创了中国全自动吹瓶机替代进口的崭新局面。

The successful development of fully automatic rotating PET blow moulding machine is of great significance to Tech-Long as well as Chinese beverage packing industry. The development of Tech-Long bblow moulding machine can be divided into three phases, with representative models at each phase. It has changed the situation of this field, and blow moulding machine made in China is replacing



importedblow moulding machines.

第一阶段: 1999-2002年 RJM-8 Series I
Phase One: 1999-2002, RJM 8 Series I

1999年，达意隆基于PET包装的良好发展趋势及全自动旋转式PET吹瓶机的广阔市场，这是世界上最先进的制瓶设备领域之一，达意隆集团投入大量的资金研制开发全自动旋转式PET吹瓶机，经过三年不懈的努力，公司的第一台，也是中国第一台全自动旋转式PET吹瓶机RJM 8在2001年成功诞生了！

Based on the forecast for the great market potential for fully automatic rotating PET blow moulding machine and the PET packing which is one of the most advanced bottle making equipments fields in the world, in 1999, Tech-Long decided to invest heavily in the development of fully automatic rotating PET blow moulding machine. After three years' efforts, the first model of Tech-Long, also the first model in China was made in year 2001.

它高起点的设计以及领先的技术达到了国际先进水平，这项技术属于国家火炬计划项目，RJM 8的成功研发填补了这个领域中国市场的空白，结束了我国全自动吹瓶机长期以来全部依赖进口的历史。RJM8的采用了旋转式的机械原理，有效地减少了中间环节的传接，提高了生产效率，降低了原有步进式吹瓶工艺所产生的中间环节的损耗，连续的加温工艺在降低能耗的同时，保证了加温的一致性。

The designing and the technology employed have reached the international level. This machine is included in the National Torch Program. The

emergence of RJM 8 has filled the gap in this field in China, signifying the end of a period for import of fully automatic blow moulding machine.

第二阶段: 2001-2004年 RJM-10 Series II

Phase Two: 2001-2004, RJM 10 Series II

随着RJM8的开发成功, 达意隆及时把握机遇, 继续深入探索这项领先的技术, 2001年开始研发RJM10, 到2003年初, 在短短的两年间完成了RJM8升级换代产品RJM10的研发工作。
RJM10相对于RJM8增加了两个吹瓶模腔, 单腔的产量也由原来的850BPH升至1200BPH, 设备的整机控制系统有明显提升, 安全运行时间有明显增加, 能源的消耗进一步降低。

With the success with RJM 8, the development for RJM 10 started in 2001. By the beginning of 2003, RJM 10, the upgraded version for RJM 8 was made.
Compared with RJM 8, two more blow moulding cabinets are supplemented in RJM 10. Moreover, the production capacity of single cabinet has increased from 850 BPH to 1200 BPH, the control system of the machine is greatly improved, the safe operation time is extended and the power consumption is further reduced.

第三阶段: 2004年 RJM-10 Series III

Phase Three: 2004, RJM 10 Series III

RJM10的研发成功, 在中国市场引起强烈反响, 获得业界的一致好评, 也极大地增强了达意隆不断创新的决心。2004年, 达意隆在和可口可乐公司的共同努力下, 完成了RJM10 Series III的改进和升级, 吹瓶单腔产量提高到1400BPC, 高效电磁阀的应用节约了压缩空气的消耗, 精确的控制了吹塑过程, 多点监控的设计, 保证了生产的连续性, 极大的降低了废品率。新型的模套、模具、加温头的设计, 缩短了更换模具的时间, 这些技术上的改进和提升, 使达意隆全自动旋转式PET吹瓶机设备在世界饮料包装领域处于领先水平, 该设备在海外市场也具备了一定的竞争力, 达意隆已逐步成为饮料包装行业高端客户群体的龙头企业。

The success with RJM 10 has caused great response from the market, receiving positive comments from the industry. Tech-Long resolved to continue the renovation process. In year 2004, cooperated with Coca-cola, Tech-Long completed the upgrading for RJM 10 Series III. In this model, the production capacity in one cabinet has been increased to 1400 BPH, the application of highly efficient electromagnetic valve has reduced the consumption of compressed air, the blowing process is controlled precisely, the design of multi-point monitoring has ensured continuity of production, and the rate of rejection has been greatly decreased. New design in external form, mould and heating head has shortened the time required for mould changing. The improvement in technology has made Tech-Long fully automatic rotating PET blow moulding

machine stay in the leading position in the field of beverage packing. The products of Tech-Long have gained certain competitiveness in overseas market. Tech-Long has gradually become the leading supplier for high-end customers of the beverage packing industry.

发展方向
Trend of development

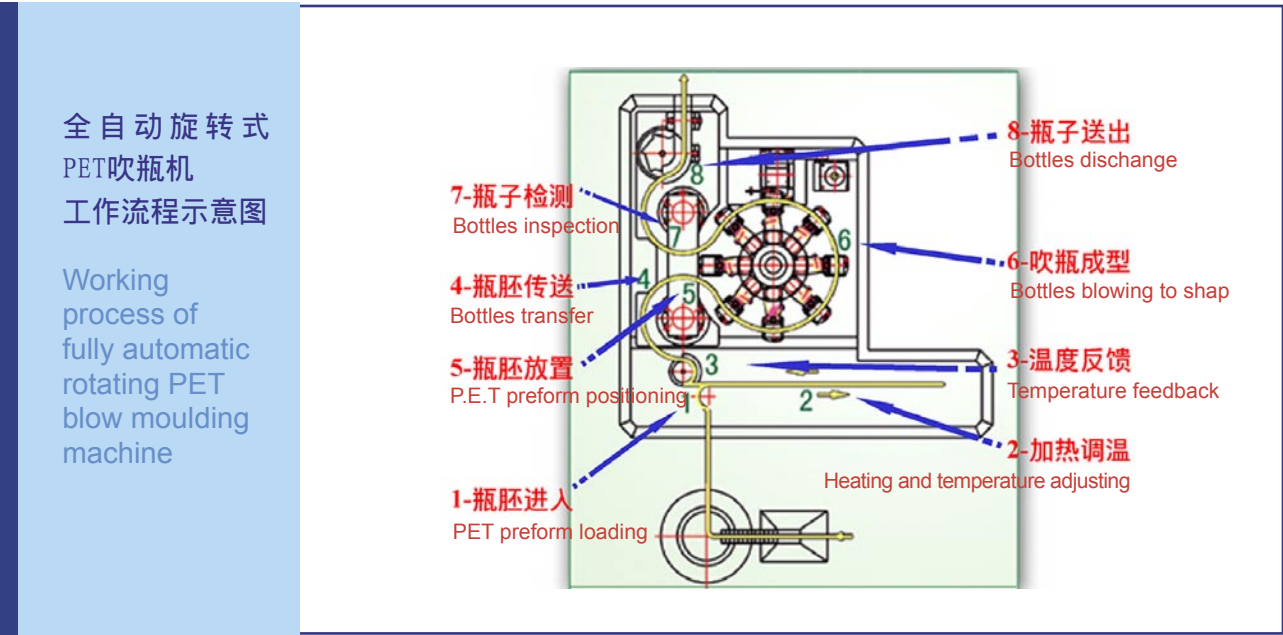
达意隆相信梦想无极限, 吹瓶机向前发展的脚步不会停歇, 目前已经问世的新产品有RJM12、RJM14、RJM16, 正在研发RJM20, 今后的发展方向是: 吹、灌、旋一体机, 将吹瓶机和三合一灌装机完美结合, 向多品种、高效、高产、高速、节能、电动化、网络诊断智能化不断发展,

赶超世界先进水平。

Tech-Long believes that there is no bound for imagination, and so the development of bottle blowing machines will never stop. RJM12, RJM14 and RJM16 have been launched, and RJM20 is under development. The trend of development is one single machine combining the function of blowing, bottling and capping, integrating blow moulding machine and three-in-one bottling machine. The trend of development is multiple models, high efficiency, high production volume, high speed, energy-saving, power-driven and intelligent network diagnosis.

Text by Tech-Long Nie Wuhai/Mukee/Gao Jie
Picture by Tech-Long Hakim Mukee

RJM系列吹瓶机工作流程 >>>
Working procedure of RJM Series blow moulding machine



饮料包装设备发展概念

吹灌旋一体机

New Concept of Beverage Packaging
Equipment Development

Blow-Fill-Cap 3 in 1 Combi Line

目前，国际上的的矿泉水、茶和果汁饮料、碳酸饮料等饮料市场发展迅猛，有专家预测，灌装水每年的平均增长率达到9%，灌装水的消费量将在2008年达到约2060亿升，比2003年增加约500亿升。其中五分之一的增长出现在北美，五分之二出现在亚洲。在包装方面，PET瓶占据全球包装水市场约80%的份额。

Currently, beverage markets such as mineral water, tea and fruit juice beverage, carbonated beverage are developing fast in the international market. It is estimated by expert that the average annual growth of bottling water will reach 9%, the consumption of bottling water will reach 206 billion liter in 2008, about 50 billion liter more than 2003. Among which, 1/5 growth will appear in North America, 2/5 in Asia. In terms of packaging, PET bottle occupies 80% in global packaging water market.

面对庞大的市场空间和激烈的市场竞争，饮料企业更多的考虑到的是如何提高生产效率和降低成本，以及如何确保设备的稳定性，而设备供应商也因此面临了更多的挑战。

Facing the wide market and sharp competition, beverage corporations take more consideration on how to improve production efficiency and drop cost and how to assure stable equipments, therefore, the equipments suppliers are facing more challenges.

在 市场发展的要求下，达意隆在历经了五加仑灌装设备到全自动旋转式吹瓶机几个阶段的发展后，已经计划发展新一代的产品：把灌装生产线形成一个整体的吹灌旋一体机，这是一项灌装和包装领域的革命性的技术创新。这一设计理念也使达意隆又向世界领先的饮料包装技术迈进了一大步。

As the developing of the market, Tech-Long, after the development from five gallon bottling equipments to fully automatic rotary bottle blowing machine, is planning to develop new generation products: develop bottling product line into a whole blowing, bottling and capping integration machine, which is a revolutionary technical innovation in bottling and packaging field. And the design thought also makes Tech-Long advance a big step to world leading beverage packaging technology.

达意隆致力于倡导世界先进的饮料包装技术，已在不同阶段创造了一个又一个的奇迹，吹灌旋一体机是达意隆不断超越自我的又一挑战，我们相信，只要有不断创新的勇气和信心，一切都有可能。

Tech-Long is dedicated to promote world advanced beverage packaging technology, and has created one and another miracle in different phases, blowing, bottling and capping integration machine is another challenge for Tech-Long to constantly surpass, we believe that everything is possible once we have the courage and confidence for constant innovation.

通过解决关键环节设备之间的协调与平衡来提高整线效率，这是达意隆设计的初衷。吹灌旋一体机大大提高了设备的整线效率：

Improve the efficiency of whole product line through achieving harmony and balance in key equipments, which is the original intention of Tech-Long design. Blowing, bottling and capping integration machine can largely improve the efficiency of whole product line:



当各环节能保持高效（>95%），
整线效率的计算可套用：
整线效率＝关键设备1效率×关键设备2效率×关键设备3效率×…

If the procedures keep effective (>95%),
The efficiency of whole product line can be counted with the following formula::
Whole product line efficiency = efficiency of key equipment 1 × efficiency of key equipment 2 × efficiency of key equipment 3 ×...

整线的高效率和关键是保证其中的关键设备的高效运行，而吹瓶机和灌装机是其中最为关键的设备。

The high efficiency and key of whole product line is to assure effective run of key equipments, bottle blowing machine and bottling machine are key equipments.

达意隆吹灌旋一体机的主要构成：
Structure of blowing, bottling and capping integration machine:

- 二步法吹瓶机 2-step method blow moulding machine
- 瓶输送星轮 Bottle convey starwheel
- 灌装机 Filling machine
- 封盖机 Capping machine

我们认为，提高整线效率的三个关键问题在于：

- 整线的理念和设计
- 各个设备的质量可靠性
- 各环节设备之间的协调和平衡

In our opinion, key factors for improving efficiency of whole product line lie in: most significant factors
n Thought and design of whole product line
n Quality and reliability of equipments
n Harmony and balance of equipments

由于对市场竞争的考虑，降低成本已成为饮料灌装的重要任务。通过提升整线效率，可以降低设备投资成本，厂房的投资成本、运行成本.....现在，让我们进一步了解吹灌旋一体机能为我们提供哪些方面的改善——

wFor improving competitive force in the market, it has become the significant factor for beverage bottling to reduce cost. It can reduce the equipment and workshop investment cost and run cost through improving efficiency of whole product line.....Now, let's know which improvements can blowing, bottling and capping



integration machine provide for us --

● 操作简单:

中央式操控台控制两台设备操作，人员对整线的主要生产情况一览无遗，只需一名操作人员；

Simple Operation:

Central operation station can control two equipments, operator may clearly master the main production state of whole product line, only one operator is required;

● 瓶子输送:

瓶子输送通过瓶颈环完成，瓶子与瓶子之间很少发生接触，完全避免了划痕；

Bottle Convey:

Convey bottles through bottle neck ring, bottles won't contact each other, thus completely prevent scratches;

● 维护减少:

设备更加的简化,无风送滤芯的更换、卡瓶处理减少等；

Less Maintenance:

Equipment becomes more simplified, it has no need to replace wind filter core, reduce bottle jam;

● 机械安全提高:

完全采用瓶颈处理技术、设备与瓶子无接触过程简单、卡瓶等现象减少

Improve Mechanical Safety

Apply bottle neck treatment technology, equipment won't contact the bottles, simple process, reduce bottle jam

● 卫生安全可靠:

整个过程在几乎密封的空间完成,降低交叉污染;

Healthy, safe and reliable:

The whole process is completed in nearly closed space, reduce crossed pollution;

● 设备投资成本降低:

吹灌旋一体机无需配置风送道和洗瓶机;

Reduce equipment investment cost:

It has no need to install ventilation path and bottle washing machine for the blowing, bottling and capping integration machine;

● 厂房投资降低:

设备占地面积大大减少，仅为原有模式占地面积的35%；

Reduce workshop investment cost in:

Largely reduce the occupation area of the equipment, which is only 35% of original mode;

● 运行成本降低:

只需要一名操作人员，由两台设备两次启动变为一次启动，降低了启动损耗，没有风送能耗、卡瓶损耗，无需冲瓶，瓶子重量可进一步降低。

Reduce cost:

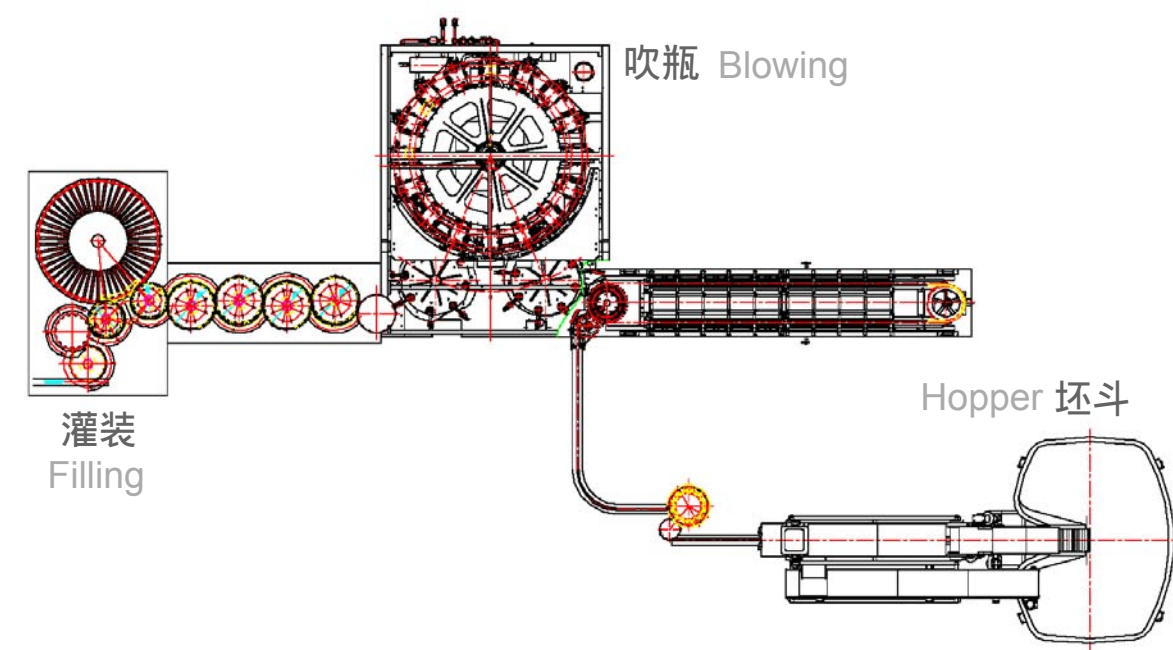
Only one operator is required, it requires once start from twice starts with two equipments, reduce start loss, without ventilation energy consumption, bottle jam consumption, it has no need to flush the bottles, thus reducing the weight of bottles.

● 通过为客户提供方案设计, 还可以为客户进一步优化性能价格比。

Improve performance and price ratio through providing project design.

Text/Picture by Tech-Long Hakim/Mukee

吹灌旋一体机的平面布置图 Layout of Combi Line





**选择优秀供应商，
为产品品质提供可靠保证**
Select outstanding suppliers,
Provide reliable assurance for product quality

利乐为达意隆灌装设备提供完善配套方案

Tetrapak provides complete matching project for Tech-Long bottling equipments

广船国际为达意隆灌装设备提供加工精良的备品备件

Guangzhou Shipyard International Company Limited provides precise parts for Tech-Long bottling equipments

SEW达意隆传动设备的专业顾问

SEW is the professional consultant for Tech-Long driving equipments

罗克韦尔自动化帮助达意隆集团在开发新一代吹瓶机上获得成功

Rockwell Automation assist Tech-Long Group to achieve success in developing new generation bottle blowing machine

西门子全集成自动化在达意隆吹瓶机上的创新应用

Innovative application of Siemens fully integrated automation in Tech-Long bottle blowing machine

诺冠公司与达意隆公司建立战略合作伙伴

Norgren Company has set up strategic partnership with Tech-Long

欧根赛驰专业电磁阀为达意隆创造更大客户价值

Eugen Seitz professional solenoid valve creates higher value for Tech-Long clients

利乐为达意隆灌装设备 提供完善配套方案

*Tetrapak provides complete matching project
for Tech-Long bottling equipments*

达意隆集团在茶、果汁加工领域融合利乐的关键技术，开创国内该领域的新空间，并可把利乐的流体工程技术应用在热灌装、纯水、及其它技术领域.....

Tech-Long Group has integrated key Tetrapak technologies in tea and fruit juice processing fields and developed the new space at home, and is capable of applying Tetrapak fluid engineering technology in hot bottling, pure water and other technical fields.....

双方合作的基石

Foundation for cooperation

可以随时进行广泛的市场信息共享, 合作让双方的市场份额同时变大

Share market information widely at any time, increase the market share of both parties

利乐公司为达意隆提供以下设备及配套方案:

Tetrapak Company provides following equipments and matching projects for Tech-Long:

流体设备 Fluid equipment

热交换器 Heat exchanger

茶及果汁分离机 Tea and fruit juice separator

利乐+达意隆UHT主件 Tetrapak +Tech-LWong UHT components

均质机 Homogenizer

其他单机设备和部件 Other equipments and parts



瑞典利乐（TetraPak）是世界上牛奶、果汁、饮料和许多其它产品包装系统的大型供货商之一。1991年，利乐的生产延伸至液态食品加工设备、厂房工程及干酪生产设备。今天，它是世界上能够提供综合加工设备、包装和分销生产线，以及为液态食品生产厂提供设计方案的国际性公司。

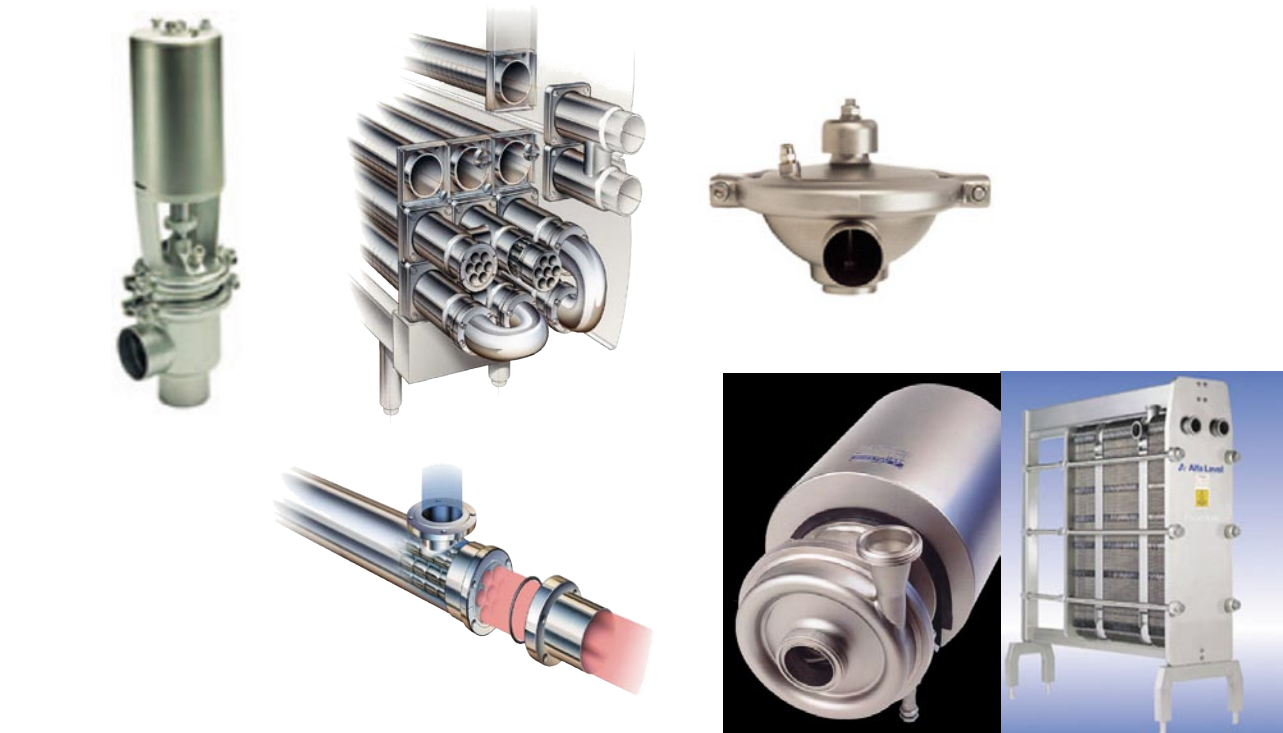
利乐的产品在超过165个市场上销售。在2002年，公司共生产了980亿件包装，为全球消费者提供了560亿升的液态食品产品。

Sweden Tetrapak is one of the big suppliers of packaging systems for milk, fruit juice, beverage and many other products in the world. In 1991, Tetrapak expanded the business to liquid goods processing equipments, workshop engineering and cheese production equipments. Today, it is the international company which is capable of providing comprehensive processing equipments, packaging and distributing product lines and providing design project for liquid foods factories.

Tetrapak products are sold well in over 165 countries. In 2002, the company produced 98 billion packages and provided 56 billion of liters of liquid foods for global consumers.

主要合作产品
Main products

离心泵 Centrifugal pump
座阀及蝶阀 Base valve and butterfly valve
板式热交换器 Panel heat exchanger
CIP管式热交换器 CIP pipe type heat exchanger
消毒机管式热交换器 Disinfecting machine pipe type heat exchanger
均质机 Homogenizer



未来合作方向
Cooperation direction in the future

利乐与达意隆双方都相信，合作中的任何一个细节都十分重要，沟通和信任是成功的基石，下一步双方的合作项目包括防混阀、管件、罐体设备、茶分离机等设备上合作，在未来，双方将携手共同在产品与技术上不断改进创新，为中国及下全球的饮料工厂提供世界品质的设备，打造行业旗舰！

Both Tetrapak and Tech-Long believe any detail in cooperation is important, communication and trust are the foundation for success, the next cooperative projects for both parties include anti-mix valve, pipes, bottle equipment, tea separating machine etc. In the future, both parties will constantly improve and innovate in terms of products and technologies, and provide world class equipments and develop the flagship in the industry for Chinese and global beverage factories.

Source by Tech-Long Xu Junfeng

广船国际为达意隆灌装设备 提供加工精良的备品备件

Guangzhou Shipyard International Company Limited
provides precise parts for Tech-Long bottling equipments

双方合作基础
Foundation for cooperation

为提高灌装速度、提升灌装品质、充分满足用户需求，达意隆不断研发和设计更符合用户需求的新型灌装设备，这就对机械零部件的加工提出了更高的要求，而广船国际让达意隆的这一想法得以实现。

In order to improving bottling speed and quality and meet user's requirements, Tech-Long is constantly developing and designing new type bottling equipments according to client's requirements, which presents higher requirements for the processing of mechanical parts, Guangzhou Shipyard International Company Limited make Tech-Long to put the ideal into reality.

广船国际为达意隆提供大型机械加工、大型铆焊件，主要包括：
Guangzhou Shipyard International Company Limited provides following mechanical processing and big riveting and welding parts for Tech-Long:

- 环形罐 Circular tank
- 安装环 Installation ring
- 底板架 Back plane frame
- 旋转支架 Rotating support

广船国际的机加工优势
广船国际拥有各种先进的大型机械加工设备：大型产式车床、德国进口数据落地铣镗床，大型龙门铣床，大型辊板机、先进的造船用焊接设备等，同时拥有一批经验丰富的技师以及技术力量雄厚的工程师队伍，对加工工艺细心编制，严格控制各工序质

量，为达意隆精心打造精密、质量可靠的零部件。

Advantages of Guangzhou Shipyard International Company Limited in mechanical processing--
Guangzhou Shipyard International Company Limited possesses of diversified advantaged big mechanical processing equipments: big lathe, numerical floor milling & boring machine imported from Germany, big planer milling machine, big plate rolling machine, advanced ship-making welding equipments etc. Additionally, the company possesses of experienced technicians and engineers with precise processing technique and strict quality control, and is providing precise and reliable parts for Tech-Long.

双方合作方向

在以往合作的基础上，双方将不断加强技术交流，充分发挥广船国际在机械加工与制造方面的优势，不断提高达意隆灌装设备的品质，为广大灌装设备用户提供性能更加稳定的机械备件。

Cooperation direction
Basing on precious cooperation, both parties have constantly strengthened the technical exchange and thoroughly exerted advantages of Guangzhou Shipyard International Company Limited in mechanical processing, and constantly improving the quality of Tech-Long bottling equipments, and providing mechanical parts with more stable performance for bottling equipment users.

Source by Tech-Long Meng Lei



广船国际股份有限公司成立于1954年，是中国船舶工业集团公司属下的华南地区最大的现代化造船综合企业，中国最大的500家工业企业之一。

多年来，广船国际坚持以市场变化趋势和客户需求为导向，并通过产品设计、建造加工质量和生产效率的不断优化为客户提供卓越的产品。

Guangzhou Shipyard International Company Limited was set up in 1954 and is the biggest and modern ship making corporation in South China under the leadership of China State Shipbuilding Corporation and one of top 500 industrial corporations in China.
For years, Guangzhou Shipyard International Company Limited insists on market trend and client's requirements and is dedicated to providing outstanding products for clients through constantly optimizing product design, processing quality and improving production efficiency.

SEW

达意隆传动设备的专业顾问

is the professional consultant for Tech-Long driving equipments

SEW在传动领域为达意隆提供优质的技术和服 务，达意隆在SEW国内饮料行业中的市 场的影 响力是不可估量的，双方将携手共同在产品与技术上不断改进创新，为国内外食品饮料行业 提供世界品质的设备。

SEW provides advanced technology and considerate service in driving field for Tech-Long, and Tech-Long has immeasurable market influences in SEW domestic beverage industry, both parties are constantly improving and innovating in products and technologies and providing world class equipments for domestic and foreign foods and beverage industry.

达意隆选用SEW的产品

- 代表了全球驱动系统最高的制造水平R系列，S系列减速电机，
- 膜包机领域的提供成套的软硬件解决方案
- 世界最尖端制造水平的SEW伺服减速电机、编码器、变频控制器
- SEW的软件系统

Tech-Long selects following products from SEW:

- R-series and S-series deceleration motor which represent world top level in driving system
- Set of hardware solution in film packaging machine field
- World top SEW server deceleration motor, coder and frequency inverter
- SEW software system

SEW的产品优势

- 拥有多种电机组合、安装位置和结构方案
- 能耗低、性能优越，减速器效率高达95%，振动小、噪音低
- 齿轮传动的完美组合：高钢性铸铁机箱、表面经过渗碳硬化处理的斜齿结构、精确的轴平 行度及定位精度

Advantages of SEW products

- Possess diversified motor combination, installation position and structure projects
- Low energy consumption, outstanding performance, the efficiency of decelerator reaches 95%, low vibration



SEW成立于1931年，总部在德国巴-符州的Bruchsal。能够为用户提供种系列的电机、减速机 和电子产品，技术水平和市场占有率均居世界领先地位。并且，SEW以全新的“模块组合”概 念，为机电电子一体化的发展提供了更加广阔的空间。

目前SEW在全球拥有9000名雇员，并独资拥有9大制造中心，座落在德国、法国、芬兰、美国、 巴西和中国天津。SEW拥有56个组装厂、200多个销售和服务办事处，遍布全球各地。让我们的 用户感到“SEW就在我身边”。

and noise

- Perfect combination of gear drive: high rigidity casting case, bevel teeth structure with carburizing hardening treatment for surface, precise shaft parallel and high position precisio

双方合作方向

达意隆和SEW都相信强强联合能为双方带来的市场效益是巨大的，SEW愿为达意隆在饮料 行业迅速崛起成为世界知名供应商提供全方位的服务，SEW有能力在传动领域成为达意隆 的专业顾问。

Cooperation direction

Tech-Long and SEW believe that it can bring enormous benefit for both parties to cooperate each other, SEW is providing complete service for Tech-Long to developing into world famous supplier, SEW is capable of developing into the professional consultant for Tech-Long in driving field.

Source by Tech-Long Tao Wei

SEW的减速电机

SEW Deceleration Motor



SEW was set up in 1931 with the head quarter locating Bruchsal, Germany. The company is capable of providing diversified motors, decelerator motors and electronic products for users, the technology and market share remain leading in the world. Additionally, SEW provides wider space for the development of mechanical and electronic integration with brand new “Module Combination” concept.

Currently, SEW possesses 9000 employees in the world with 9 manufacturing centers which locate in Germany, France, Finland, America, Brazil and Tianjin of China. SEW has 56 assembly factories, over 200 sales and service offices throughout the world, and make users feel “SEW is beside me”.

罗克韦尔自动化帮助达意隆在 开发新一代吹瓶机上获得成功

Rockwell Automation helped Tech-Long to achieve great success in developing new generation blow moulding machine.

目前在全自动吹瓶机领域，高端机器大部分是国外的产品，这些机器价格为国产机器价格的5-10倍。如果国产全自动吹瓶机的机械水平和自动控制水平能达到或接近国外机器水平，那么国产全自动吹瓶机能的附加值就可以大大提升。我国在高速吹瓶机的研制方面，制约吹瓶机向高速发展的瓶颈是吹瓶机自动化程度。这种全自动旋转式高速吹瓶机的成功之处就是自动化控制的应用。

At present, in automatic bottle blowing machine field, most of hi-tech machines are foreign products, which cost 5-10 times higher than domestic machines. If the machinery and automatic control of domestic automatic blow moulding machines reach the level of foreign machines, then the value added of domestic blow moulding machine will be greatly increased. In developing our high-speed blow moulding machines, the choke point controlling the rapid development of blow moulding machine is the automation of blow moulding machine. The success of this kind of automatic revolving high-speed blow moulding machine lies in the application of automatic control.

主要价值驱动因素

达意隆在决定开发新一代全自动吹瓶机的时候，机械水平上提升很快，但自动控制水平还停留在以前的水准，我们需要找一家自动控制专业公司合作开发这台全新的机器，我们最终选择了罗克韦尔自动化。对达意隆来说，罗克韦尔自动化不仅能提供一流的自动控制产品，更重要的是设在深圳的OEM应用开发中心能帮助我们开发出这台机器所需要的可以达到甚至超过国外同类机器的功能，因此达意隆的全自动吹瓶机越来越多的被跨国集团公司购买用于他们在国内开设的工厂，达意隆的全自动吹瓶机也越来越多的走向国际市场

Major value driven factor

When Tech-Long determined to develop new generation of automatic blow moulding machine, the machinery level is highly increased, but automatic control level is not improved, so we need to cooperate with an automatic control company to develop this machine, and finally we chose Rockwell Automation. Tech-Long chose Rockwell

Allen Bradd的PLC



Automation not only because it can provide first class automatic control products, more importantly, the OEM Application Center established in Shenzhen will help us in developing the functions necessary for this machine and even superior to the functions of foreign machines. Therefore, Tech-Long automatic blow moulding machine have been more and more purchased by transnational corporations and used in their factories in their own countries, and more and more automatic blow moulding machines are entering international market.



作为工业自动化行业中最值得信赖的品牌之一，罗克韦尔自动化公司所属的A-B从1993年诞生以来已经赢得了广泛的国际声誉，他们可以向用户提供高品质的可靠保证。

达意隆选用的这些小巧的控制器体现了罗克韦尔对于产品在稳定可靠、技术创新和性能卓越等方面，按照最高标准进行设计和制造承诺。

通过合作需要达到的目标:
提高吹瓶机的产量和自动化程度。

Aims through cooperation:

Increase the capacity and automation of blow moulding machine

罗克韦尔与达意隆合作找到解决方案的目标

吹瓶机PLC控制系统分为主站和从站，其中从站位于旋转工作站，主站要和旋转的从站之间进行通讯，通讯的速率和稳定性都不太好，他们希望得到更快和更稳定的通讯效果。

吹瓶工艺分为的启动停止要从时间控制改为角度控制，增加吹瓶工艺的单模测试，预吹瓶测试，效果瓶测试
温度控制需要集成在PLC系统内。
吹瓶机的产量要达到1400瓶/模/小时。
变频器采用网络控制。

Rockwell cooperated with Tech-Long and found the target of solution

Blow moulding machine PLC control system is divided into main station and sub station, among which subordinate station locates in revolving work station, and communication is necessary between the main station and the revolving subordinate station. Since the speed and stability of communication is not so good, they hope to achieve faster and more stable communication.

The start and stop of blow moulding machines will be controlled by angles instead of by time, so the simple module test, the bottle pre-blowing test and effect bottle test of blow moulding technique will be reinforced.

The temperature control shall be integrated within PLC system.

The output of blow moulding machines will reach 1400 bottles/ module/ hour

Transducer will be controlled by network.

达意隆选择罗克韦尔自动化产品和服务的原因

罗克韦尔自动化的Logix平台基于标签的编程方式，用户自定义结构体，数组等功能非常适合吹瓶机的开发工作。
罗克韦尔自动化设在深圳的OEM应用开发

中心是专门帮助OEM客户进行机器开发，这就完全解决了达意隆公司在产品技术支持上的后顾之忧。

The reason for Tech-Long to Rockwell Automation products and service

Rockwell Automation's Logix platform is based on the program of labels, and the user-defined structure and array functions are very suitable for the research and development of blow moulding machine.

OEM Application Center established by Rockwell Automation in Shenzhen is specialized in helping OEM users to develop machines, which will completely solve all the troubles of Tech-Long Company in products technical support.

这个项目完全获得了成功

证明该项目成功的关键指标由以下这些:
吹瓶机的生产能力达到1400瓶/模/小时，比以前的机器提高了30% 以上。

由于使用了预定义结构体和数组，并采用集成通讯架构，系统编程调试时间减少了1/3以上。不仅如此，在以后对吹瓶机的功能进行升级时，只需花费极少的时间就可以完成。

由于增加了吹瓶效果测试功能，对终端客户来说，机器在启动初期大大减少了瓶胚的浪费，同时还缩短了机器从启动到正常工作的时间。

The project has achieved complete success.

It shows that the key factors for the success of this project lie in the following:

The capacity of blow moulding machine reaches 1400 bottles/ module/ hour, increased by 30% as compared with former machines.

Owing to the user-defined structure and array, and the adoption of integrated communication structure, the time for system programming and debugging is reduced by 1/3. Moreover, the upgrading of blow moulding machine will be completed in extremely little time.

Thanks to the blow moulding efficiency test function, the machine will reduce the waste of bottle preform at the beginning of startup, and shorten the time from startup to operation.

Source by Tech-Long Yan Xiaoping



As one of the most reliable brands in industrial automation industry, A-B affiliated with Rockwell Automation Company have won high fame in the world since 1993, and they will surely provide reliable and high quality products.

The exquisite controller chosen by Tech-Long represents that Rockwell is designing and manufacturing its products according to the highest criterion in the stability, technology and performance.

西门子全集成自动化在达意隆 吹瓶机上的创新应用

Innovative application of Siemens fully integrated automation in Tech-Long blow moulding machine

西门子全集成自动化（TIA）

TIA开放的设计理念使它能够集成企业未来的拓展，从而保护用户的投资。全集成自动化集高度的集成统一性和前所未有的开放性于一身，标准化的网络体系结构，统一的编程组态环境和高度一致的数据集成，使TIA为企业实现了横向和纵向信息集成；领先的数据标准，基于组件的自动化技术，PC自动化解决方案和IT集成，使TIA对整个自动化市场的产品和服务范围真正开放。

Siemens fully integrated automation (TIA)

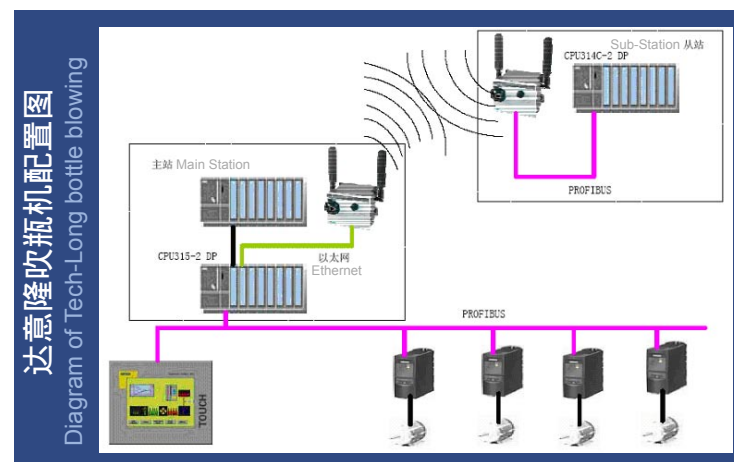
TIA allows the expansion of the corporation with open design, thus protecting user's investment. Fully integrated automation features consolidated integration and openness, standard network structure and consistent data integration, which makes TIA to achieve horizontal and vertical information integration for corporation; leading data standard, component-based automation technology, PC automation solution and IT integration make TIA to be actually open to the products and service of whole automation market

西门子达意隆的合作

从饮料的前处理，灌装到二次包装的整线及单独设备，西门子为达意隆提供了丰富的自动化控制产品和全方位的服务。服务范围包括产品培训、自动化设计理念和解决方案的指导、实施和调试，还有售后服务等诸多方面。

Cooperation between Siemens and Tech-Long

From beverage pre-treatment and bottling to the whole and independent equipment for secondary packaging, Siemens provides rich automation control products and complete service for Tech-Long. The service scope covers products training,



automation design thought and solution instructions, implementation and test, as well as after service etc.

最近，达意隆与西门子自动化和驱动集团及其合作伙伴通力合作，成功地将西门子全集成自动化解决方案应用在新开发的RJM高速全自动吹瓶机上，该机器应用了西门子新一代电气控制技术和产品，如S7-300系列PLC，MicroMaster 440标准变频器，Profibus高速现场总线，TP270高性能彩色触摸屏。尤其值得一提

的是，在RJM高速全自动吹瓶机上，西门子最先进的SCALANCE W无线以太网技术取代了传统的机械滑环，从而保证了整机的高速可靠运行。

Recently, Tech-Long has powerfully cooperated with Siemens automation and drive group and partners, and has successfully applied Siemens fully integrated automation solution into new developed RJM high speed fully automatic blow moulding machine which applies Siemens new generation electric control technology and products, including S7-300 series PLC, MicroMaster 440 standard frequency converter, Profibus high speed site bus and TP270 high performance color touch screen. What shall be mentioned is, in RJM high speed fully automatic blow moulding machine, traditional mechanical slip-ring is taken placed by Siemens most advanced SCALANCE W wireless Ethernet technology, which powerfully assure reliable run at high speed.

全系统包括主机柜的PLC主站 S7315-2DP，旋转机架上的PLC从站S7314C-2DP，主站和从站通过无线以太网链接，而MicroMaster 440 标准变频器直接控制主传动系统和输送传动系统。所有传动系统都通过现场总线PROFIBUS-DP链接至PLC。

The whole system includes PLC main station S7315-2DP, PLC sub-station S7314C-2DP in rotating frame, the main station and sub-station are connected with wireless Ethernet, MicroMaster 440 standard frequency converter directly control the main drive system and convey driving system, all drive systems are connected with PLC through site bus PROFIBUS-DP.

采用西门子全集成自动化解决方案的优势:

Advantages of applying Siemens fully integrated automation solution:

组态和可视化: 更快捷、更有效

统一的系统组态工具STEP7的应用，使所有数据、参数和系统都保存在一个项目文件中，可以节约大量组态、启动和维护费用；显示界面采用TP270高性能彩色触摸

屏，该触摸屏具有丰富的图形和文本显示功能，同时还设有丰富的故障诊断及处理画面；利用PROFIBUS，可以直接访问驱动系统，监控系统状态；故障追踪系统，及时显示所有故障信息，大大方便了用户的设备维护工作。

Faster and Configuration and visualization more effective

The application of united system configuration tool STEP7 makes all data, parameters and system store in one project file, thus saving configuration, start and maintenance cost; display interface applies TP270 high performance color touch screen which features rich functions in displaying graphic and text with fault diagnosis and treatment pictures; with PROFIBUS, operator may directors visit driving system, monitor the system state; fault track system can timely display all faults, which is very convenient for users to maintain the equipment.

通讯: 无拘无束

主机柜里的PLC主站和旋转机架上的PLC从站通过无线以太网高速、安全地传递数据，解决了以往数据传输的瓶颈，极大的加强了机器的可拓展性。采用无线通讯，直接取代滑动触点和拖缆，节省空间，实施高度灵活，通讯网络安装工作量减少，缩短项目周期，旋转及移动设备或工厂部件无磨损...

Frdd Communication

PLC main station in main unit cabinet and PLC sub station in rotating frame transit data safely through the wireless Ethernet at high speed, which settle the bottleneck of data transmission and powerfully improved the expandability of the machine. Apply wireless communication instead of slip contact point and towing line, save space, flexible implementation, reduce the world load for installing communication network, shorten the project cycle, and assure no abrasion for rotating and moving the equipment or factory parts...

Source by Tech-Long Yan Xiaoqing

SIEMENS

西门子——一个全球公认的名字。它代表着改革创新、面向客户和在全球的竞争实力。它不仅拥有400,000员工和几百万客户，还在超过190个国家内有成千上万的供应商和合作伙伴。

西门子自动化与驱动集团（A&D）在全球70多个国家有超过50,000员工，是西门子股份公司最大的集团之一。作为在自动化和驱动领域的技术和市场的领导者，我们在此领域中始终保持领先，并不断地提出行业标准。

SIEMENS

Siemens-----the world recognized name, represents reform, innovation, client-orientation and global competitive force. It not only possesses 400,000 employees and millions of clients but also has thousands of suppliers and partners in 190 countries in the world.

Siemens automation and drive Group (A&D) has over 50,000 employees in over 70 countries, and is one of the biggest groups of Siemens Corporation. As the leading role in technology and market of automation and drive field, Siemens keeps leading and is constantly presenting new standard.

诺冠公司与达意隆公司

建立战略合作伙伴

Norgren and Tech-Long set up strategic partnership

达意隆选择诺冠的原因-世界级的产品及全球技术支持网络

诺冠的使命是让其客户的生意更成功，这个使命让诺冠发展了可靠，耐用，安全的气动产品及系统解决方案。诺冠的产品以耐力强、能发挥最大极限而获得信赖，许多项产品因杰出品质及耐用获得世界级的口碑。在Webber和FAS加入以后，诺冠在微型电磁阀更是具有全球领先的实力。

在世界的任何一个角落，都可以透过诺冠涵盖世界75个国家的行销公司及独立经销商的全球网络得到产品及技术支持。

The reason for Tech-Long selecting Norgren – world class products and global technical support network

Norgren insists on the mission of “making clients success” which makes Norgren to develop reliable, durable and safe pneumatic products and systematic solution. Norgren products have earned high confidence since they have high durability and can exert highest performance, many products have earned world class renown owing to outstanding quality and durability. With Webber and FAS, Norgren has world leading strength in micro solenoid valve industry.

In any corner in the world, you may obtain products and technical support through the global network including marketing corporations and independent distributors which covers 75 countries.

诺冠全球重点行业 – PET 吹塑

在PET吹瓶领域，诺冠是全球领先的供应商，拥有超过16年的PET行业经验；独特的定制解决方法，特别是在吹瓶成形和吹瓶机械上具有高压系统方面的超强优势；全系列的产品供应，不断推出的具有优良品质的产品。

Norgren Global Key Industry --- PET blowing

In PET blow moulding industry, Norgren is the world leading supplier and possesses over 16 years of experience in PET industry;

Unique and customized solution, particularly super advantages in high pressure system for bottle shaping and bottle blowing machine;

Full series of products, constantly promote quality products.

诺冠气动元件提高了机器效率和使用寿命并创造出领先的竞争优势

诺冠凭借在全球最为成熟的吹瓶机专用高压电磁阀技术，在帮助达意隆提高吹瓶机的吹瓶速度的同时进一步巩固它的稳定性；诺冠提供给达意隆的拉伸气缸，紧跟世界最新技术，从节能的角度出发，最大限度的降低能源的损耗！

Norgren pneumatic parts have improved the efficiency and life of the machine, and brought leading competitive advantages

Norgren, owing to world most mature high pressure solenoid valve technology for blow moulding machine, has assisted Tech-Long to improve the blowing speed and powerfully improved the stability of bottle blowing machine; Norgren extension cylinder tightly follow the world latest technology and can powerfully reduce energy consumption.

诺冠为达意隆提供的主要产品

诺冠供给达意隆公司的全系列的产品包括：

气缸

控制(调节)阀

气源处理装备

气管及接头等

Main products provided by Norgren

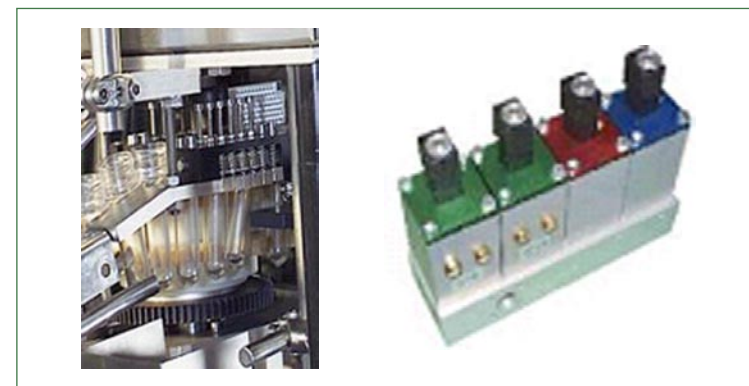
Norgren provides following products to Tech-Long:

Cylinder

Control (Adjustment) Valve

Air Source Treatment Equipment

Air Pipe and Joints etc.



诺冠与达意隆的战略合作

诺冠与达意隆公司自合作以来，关系不断深入。2004诺冠的全球4P行业总裁访问达意隆，为双方的进一步合作奠定了很好的基础。2005年4月，诺冠集团副总裁在德国与达意隆总裁张颂明先生进行了会晤。随后达意隆集团吹瓶事业部副总邹大群先生和研究所所长吴昌华先生对诺冠集团瑞士Balterswil工厂进行技术访问，双方就进一步的合作方面达成协议。

Strategic Cooperation of Norgren and Tech-Long

Since starting cooperation, Norgren and Tech-Long have deepened the relationship. Norgren global 4P industry president visited Tech-Long in 2004 and set the favorable foundation for the cooperation of both parties. In April 2005, Vice President of Norgren Group met President of Tech-Long Mr. Zhang Songming in Germany. Later, Vice General Manager of Tech-Long Bottle Blowing Department Mr. Zhou Daqun and Chairman of Research Institute Mr. Wu Changhua visited Norgren Group Swiss Balterswil Factory, and both parties have reached the agreement on further cooperation.

诺冠公司与达意隆公司致力于建立战略的合作伙伴公司，在新技术研发，新产品应用方面进行紧密的合作，为双方的发展共同努力。

Norgren Company and Tech-Long are devoted to setting up strategic partnership, and have fulfilled close cooperation in terms of new technology R&D and new products application, and are making effort for the development of both parties.

Source by Tech-Long Xu Junfeng



诺冠是一个领先世界的气动产品制造商及全球供应商。它被认为是欧洲第一的气动公司，诺冠开发了一系列创新的气动控制和自动化部件，诺冠的产品由于质量好、性能好及可靠性而闻名于世。诺冠拥有超过16年的PET行业经验，作为OEM和最终用户的可靠伙伴，诺冠为其用户创造了更大的竞争优势。



Norgren is the world leading pneumatic products manufacturer and global suppliers and is looked as the first pneumatic company in Europe, Norgren has developed a series of innovative pneumatic control and automatic parts, and Norgren products are famous in the world owing to high quality, high performance and high reliability. Norgren possesses over 16 years of experience in PET industry, as the reliable partner for OEM and final user, Norgren has created higher competitive advantages for users.



欧根赛驰专业电磁阀

为达意隆创造更大客户价值

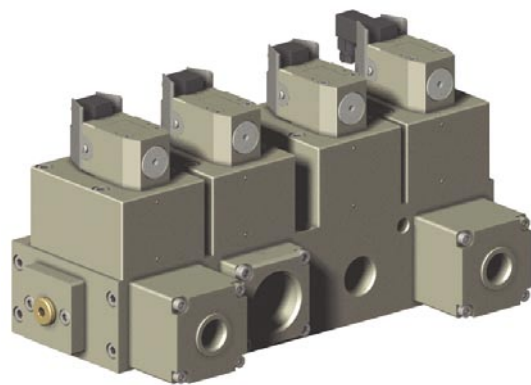
Eugen Seitz professional solenoid valve
creates higher value for Tech-Long clients

欧根赛驰 (Eugen Seitz) 的产品广泛应用于气吹成型设备制造业 (PET)、石油化工、海运船舶柴油机、核电站 (核岛内)、高压天然气等领域; 欧根赛驰对PET吹瓶技术在电磁阀及相关领域的应用积累了丰富的经验, 贴近不断发展的应用要求, 最大程度为客户创造价值, 是欧根赛驰一贯的原则。

Eugen Seitz products are widely used for such fields as blowing shaping equipments manufacturing (PET), petrochemical, ocean ship diesel engine, nuclear power plant and high pressure natural gas etc. Eugen Seitz has rich experience in applying PET blow moulding technology in solenoid valve and relative field. It is the eternal principle of Eugen Seitz to constantly meet the developing requirements in application and create value for users to the max.

欧根赛驰PET电磁阀为达意隆带来的技术性能优势:

- 高电磁阀重复反应精度: $\pm 1.0\text{ms}$, 为吹瓶机精确吹瓶成型、控制克重、提高成品率供至关重要的前提;
- 长寿命: 无间断开关次数, 最低款 2500 万次, 最高款 3200 万次, 大大降低在生产旺季停机检修之忧, 带来更大的性价比;
- 高速高效: 大大提高吹瓶机单模产量;
- 活塞部分无软密封 (即全硬密封结构), 无阀内零件颗粒或密封磨损造成瓶子污染;
- 易损部分无污染, 所有易损部件均通过FDA-H1 认证。(条件: 压缩空气质量保证)
- 具有FDA-H1 认证



欧根赛驰公司 (Seitz) 为享誉世界的高端电磁阀制造商。公司成立于1958年, 定位于高性能要求行业。自成立以来, 公司密切关注客户应用特点及其不断发展的要求, 并凭借对新技术特有的敏感, 以及瑞士一流的精加工和质量控制管理技术, 立足于世界高端电磁阀行业之首。

- 能耗低、经济高效
 - 采用紧凑的电磁阀整体组件结构, 将气体死区降到最小(< 80 cm³); 通常每减少1 cm³可节省 250 RMB/年;
 - 回收气阀, 压缩空气再利用(30% 的废气回收, 意味着每年数十万元的电能源节省), 在能源紧张的今天,给最终用户带来终身的受益;
 - 高操作安全性: 阀组有安全保护自动关闭功能, 吹瓶时万一掉电或先导失压, 电磁阀会自动关闭, 形成保护, 真正使”安全第一”落在实处;
 - 维修更换方便: 所有易损件集中在一个单元, 直接更换该单元即可。

Eugen Seitz PET solenoid valve provides following technical advantages for Tech-Long:

- High solenoid valve repeat reaction precision: $\pm 1.0\text{ms}$, it is the important precondition for blow moulding machine to precisely blow bottle, shape, control weight and improve rate of finished product;
- Long life: uninterrupted on/off, 25 million times for the lowest, and 32 million times for highest, which largely prevent the trouble of checking and repairing machine in peak time, and brings higher performance-price ratio;
- High speed and high effect: largely improve the output of blow moulding machine;
- Piston is non-soft seal (fully hard seal structure), prevent to pollute bottles caused by parts in valve or seal abrasion;
- Consumable part is free of pollution, all consumables have passed FDA-H1 certification. (condition: compressed air quality assurance)
- With FDA-H1 certification
- Low energy consumption, economic and effective
 - Apply compact solenoid valve integrated component structure, reduce the air dead zone to lowest level (< 80cm³), generally speaking, it can save RMB250/year by reducing 1cm³;
 - Reclaiming air valve, compressed air can be re-utilized (reclaim 30% waste gas, save power consumption by hundreds of thousands of yuan each year) thus eternally benefit users;
 - High operation safety: valve has safe protection and automatic off function, solenoid valve will automatically turn off in case of power supply when blowing bottles, thus achieving “safety first”;
 - Convenient repairing and replacing: all consumables are installed in one unit, directly replace this unit for removing troubles.

欧根赛驰与达意隆的合作方向:

站在世界PET吹瓶电磁阀技术的前端, 欧根赛驰的PET专家们随时关注着PET技术发展和应用的动向及与其它行业新技术的融合, 为达意隆提升更大的发展空间。

Direction for the cooperation between Eugen Seitz and Tech-Long:

With leading technology in world PET blow moulding solenoid valve industry, Eugen Seitz PET experts have paid high attention to the development and integration of PET technology with new technologies in other industries, thus improving the developing space for Tech-Long.

Source by Tech-Long Zou Daqun



Seitz Company is the world renowned top solenoid valve manufacturer. The company was set up in 1958 and is oriented in the industry with high requirements on performance. Since the establishment, the company has paid much attention to client's application features and the requirements of constant development, owing to the sensitivity to new technology and top precise processing and quality control technology in Swiss, the company ranks leading in world top solenoid valve industry.



达意隆历史大事记

Tech-Long Big Events

2005年中国酿酒. 饮料机械行业大事记之达意隆专题
Memorabilia of 2005 China Brewing and Beverage Machinery Industry, Tech-Long Special Topics

达意隆与可口可乐
Tech-Long & Coca-cola

达意隆与中富集团
Tech-Long & Zhongfu Group

达意隆与达能集团
Tech-Long & Danone Group

达意隆与生力集团
Tech-Long & San Miguel Corporation

达意隆吹瓶机大事记
Memorabilia of Tech-Long bottle blowing machine

2005年中国酿酒. 饮料机械行业大事记

Memorabilia of 2005 China Brewing and Beverage Machinery Industry

之达意隆专题

Tech-Long Special Topics

可口可乐 Coca-cola

2005年5月，达意隆提供给香港太古可口可乐公司的RJM10第三代全自动旋转式吹瓶机成功投产，并一次性通过了连续72小时无故障验收测试，产品完全通过了可口可乐的品质认证，这是达意隆主要产品与可口可乐系统的又一次重要合作，使双方的战略伙伴关系更加紧密，同时也确立了达意隆吹瓶机的重要市场地位。

In May, 2005, the RJM10 generation III fully automatic rotating bottle blowing machine provided to Hong Kong Swire Coca-cola was successfully put into production and passed the test without fault for continuous 72 hours, and the product completely passed the quality certification of Coca-cola, which is another significant cooperation for Tech-Long products and Coca-cola group, and make the strategic partnership of both parties closer, and confirmed the important status of Tech-Long bottle blowing machine in the market.

生力集团 San Miguel Corporation

2005年5月18日，达意隆与菲律宾生力集团正式签订了含汽灌装线、热灌装线、水灌装线三条整线的订单，总金额达人民币1.5亿元。本订单创造了中国饮料包装设备供应商的单笔最高成交额，与生力公司的合作，进一步提升了达意隆在国际饮料包装行业的地位和影响力，开创了中国饮料包装设备走向世界的新里程。

On May 18th, 2005, Tech-Long and Philippines San Miguel Corporation formally signed the contract for three turn key lines: CSD bottling line, hot bottling line and water bottling line, and the total value reached RMB150 million. This order was the highest one for Chinese beverage packaging equipments suppliers. The cooperation with SMC company has further improved the status and influence of Tech-Long in international beverage packaging industry, and set the new milestone for Chinese beverage packaging equipment to launch into the world market.

荣誉 Honors

2005年7月7日，达意隆集团获得由广东知识产权局颁发的“广东省知识产权优势企业”荣誉证书和奖牌，达意隆是广州市唯一一家获得此荣誉的企业。

On July 7, 2005, Tech-Long Group awarded the certificate and medal of “Guangdong Province Intellectual Property Advantaged Corporation” issued by Guangdong Intellectual Property Bureau, Tech-Long is the only corporation in Guangzhou which awarded this honor.

吹灌旋一体机 Combi Line

饮料包装设备发展新概念

2005年8月，达意隆完成饮料包装设备发展新概念——吹(瓶)灌(装)旋(盖)三合一机的全部研发和前期准备，近期内推出市场。依靠自身在吹瓶和灌装上的技术优势，达意隆研究所在极短的时间内将二步法吹瓶机技术、瓶输送技术、旋转灌装技术、封盖技术完美的结合，形成吹灌装统一体的新一代PET瓶生产灌装系统，为真正的无菌灌装技术国产化迈出了坚实的一步。

New concept of the development of beverage packaging equipment

In August, 2005, Tech-Long completed the R&D and preparation for the new concept of development of beverage packaging equipment – blowing, bottling and capping integrated machine which is to be put into the market recently. Owing to the technical advantages in bottle blowing and bottling, Tech-Long Research Institute has perfectly combined the 2-step method bottle blowing machine technology, bottle convey technology, rotating bottling technology and capping technology, and has developed the new generation PET bottle production and bottling system with the combination of blowing, bottling and capping, which has advanced a solid step for domestic aseptic bottling technology.

印尼达能 Indonesia Danone

AQUA公司

2005年9月，达意隆提供给印尼达能AQUA公司的2条”脉动”生产线顺利投入生产，这是达意隆继紫江、日之泉等之后在大产量饮料生产线上吹瓶与灌装联线的又一次重大突破。印尼AQUA公司隶属于达能集团，拥有目前全球最大的水厂。这是达能集团首次在中国以外区域选用中国的吹瓶机和灌装机整线，达意隆公司印尼达能AQUA”脉动”生产线的成功也标志着达意隆正成为全球饮料灌装生产线的最具竞争力的供应商。

AQUA Corporation

In September, 2005, two Tech-Long hot filling line were smoothly put into production in Indonesia AQUA corporation, which was another significant breakthrough to jointly use blow moulding and bottling for beverage product in line with high production following Zijiang and Sunraycave. Indonesia AQUA Corporation belongs to Danone Group and possesses the biggest water factory in the world. It was the first time for Danone Group to select Chinese blow moulding machine and bottling product line outside China, the success of Tech-Long Company Indonesia Danone AQUA “Mizone” product line also signified Tech-Long was developing the most competitive supplier in global beverage bottling product line.

珠海中富 Zhuhai Zhongfu

2005年9月1日，珠海中富集团与达意隆集团一次性签订了10台RJM14系列全自动旋转式吹瓶机的订单。该十台吹瓶机将在珠海中富用于为国内外名牌饮料厂家提供饮料容器包装，这也是中富集团首次采用国产高速吹瓶机。中国最大的PET瓶供应商大量选用达意隆吹瓶设备证明了达意隆吹瓶机在技术，品质和竞争力上的优越性。

On September 1, 2005, Zhuhai Zhongfu Group and Tech-Long Group signed the contract for ten RJM14 series fully automatic rotating blow moulding machines which would be used for providing beverage container

packaging for domestic and foreign famous brand beverage producers, which was also the first time for Zhongfu Group to apply home made high speed blow moulding machine. It powerfully proved that Tech-Long blow moulding machine features outstanding advantages in terms of technology, quality and competitive force for the biggest Chinese PET bottle supplier to apply Tech-Long blow moulding equipments.

RJM14吹瓶机 RJM14 blow moulding machine

亮相慕尼黑Drinktec2005

2005年9月12日-17日，第十届慕尼黑国际饮料及酿造技术博览会(Drinktec2005)，达意隆在富有现代感的140平方米的展台上，全面推出代表中国最先进吹瓶技术的RJM14全自动旋转式吹瓶机，并现场进行了不间断地吹瓶演示，引起了全球业界的高度关注。中国驻慕尼黑领事馆总领事对达意隆的本次参展给予了高度的评价，称代表了“中国装备企业的新形象”。

Munich Drinktec2005

During September 12-17, 2005, 10th Munich International Beverage and Brewing Technology Exposition (Drinktec 2005), Tech-Long exhibited the RJM14 fully automatic rotating blow moulding machine in the modern 140m2 booth which represents the most advanced Chinese bottle blowing technology and continuously demonstrated blow moulding operation on site, which aroused high attention in the industry. Chinese consul general in Munich gave high praise for Tech-Long and praised that it represented the “new image of Chinese mechanical manufacturers”.

工程技术研究中心 Engineering Technology Research Center

“技术研发中心”升级为“广东饮料包装成套设备工程技术研究中心”

2005年11月15日，达意隆“技术研发中心”正式升级为“广东省饮料包装成套设备工程技术研究中心”。本次认证是由广东省科技厅、广东省经贸委、广东省发改委联合组织的，这不仅是对达意隆技术研发成果的肯定，同时意味着达意隆在技术研发领域将会得到政府的重点强力支持，包括资金、政策、人员等资源。

“Technology R&D Center” is upgraded into “Guangdong Beverage Packaging Equipment Engineering Technology Research Center”

On November 15, 2005, Tech-Long “Technology R&D Center” was upgraded into “Guangdong Beverage Packaging Equipment Engineering Technology Research Center”. This appraisal was jointly organized by Department of Science and Technology of Guangdong Province, The Economy & Trade Commission of Guangdong Province and Development and Reform Commission of Guangdong Province, which was not only the affirmation to Tech-Long technical R&D achievements but also signified that Tech-Long would enjoy powerful support from the government in technology R&D, including capital, policy and human resource etc

四期厂房竣工 Phase IV Workshop Completed Construction

2005年底，达意隆四期厂房全部竣工。该厂房总使用面积近两万平方米，占地面积三万九千多平方米，投入使用后达意隆生产能力可提高50%。该厂房采用钢结构，为国内饮料包装企业的最大单体厂房，为达意隆在包装机械行业的战略性发展带来保障。

In late 2005, Tech-Long Phase IV Workshop completed construction. The floor area of this workshop reaches nearly 20,000m2 with the occupation exceeding 39000m2. After put into production, the production capacity of Tech-Long will improve 50%. With steel structure, the workshop is the biggest single workshop for domestic beverage packaging corporation, which can powerfully assure the strategic development of Tech-Long in packaging machine industry.

Source by Tech-Long Hakim

达意隆与可口可乐

Tech-Long & Coca-cola



香港太古饮料CEO Mr. John slosar (中)、广东太古可乐总经理费志修先生(右)、达意隆董事长张颂明为在8号生产线前。

Photo of Hong Kong Swire Coca-cola CEO Mr.John slosar (Middle), Guangdong Swire Coca-cola General Manager Mr. Fei Zhixiu (Right) and Tech-Long Chairman Zhang Songming in front of No. 8 product line.

达意隆项目经理张胜在可口可乐含汽灌装设备现场

Photo of Tech-Long Project Manager Zhangsheng in Coca-cola CSD bottle equipment site

- 2002-03

达意隆为上海申美可口可乐提供了18000瓶/小时的瓶装水生产线及900瓶/小时的五加仑生产线，开始了与可口可乐国内最大的装瓶厂-上海申美的合作
Tech-Long supplied Shanghai Shenmei Coca-cola with a bottled water production line with capacity of 18000 bottles/per hour and five gallon production line with capacity of 900 bottles/per hour. This is the first-time cooperation with the largest bottling factory of Shanghai Shenme Coca-cola in China.
- 2002-05

达意隆为广东太古可乐及杭州中萃可口可乐公司提供二套水处理设备
Tech-Long supplied Guangdong Swire Coca-cola and Hangzhou Zhongcui Coca-cola with two sets of water treatment equipment.
- 2002-05

达意隆集团高层应邀参加了在杭州举行的“可口可乐系统的品控及供应链会议”
The top management of Tech-Long was invited to “Seminar on Quality Control and Supply Chain” sponsored by Coca-cola in Hangzhou.
- 2002-08

达意隆为香港太古可口可乐公司沙田厂提供了当时全亚洲最高速的1200瓶/小时的五加仑桶装水生产线及水处理配套系统，与可口可乐公司进一步确定了合作关系
Tech-Long supplied the Shatin Factory of Hong Kong Swire Coca-cola with five-gallon barreled water production line with capacity of 1200 bottles/per hour, the most efficient production line in Asia at that time, together with the water treatment system. The partnership with Coca-cola was further strengthened
- 2003-10

达意隆为天津可口可乐饮料有限公司提供了900瓶/小时的五加仑桶装水灌装水线及水处理配套设备
Tech-Long supplied Tianjin Coca-cola with five-gallon barreled water production line with capacity of 900 bottles/per hour, together with the water treatment system.



- 2003-11

太古可口可乐CEO Mr.John Slosar 到达意隆公司广州总部考察
John Slosar, CEO of Coca-cola came to visit headquarter of Tech-Long in Guangzhou.
- 2003-12

达意隆与太古饮料正式签订了“战略合作伙伴商务协议”，确定了达意隆正式成为首家可口可乐商务战略合作伙伴
the Agreement of Strategic Partnership was signed between Tech-Long and Hong Kong Swire Coca-cola. Tech-Long became the first strategic partner of Coca-cola.
- 2003-12

广东太古可口可乐有限公司向达意隆公司订购了第一条30000BPH PET瓶碳酸饮料灌装线
Guangdong Swire Coca-cola ordered the first 30000BPH PET CSD bottling production line with Tech-Long
- 2004-02

杭州中萃食品有限公司向达意隆公司订购了第二条30000BPH PET瓶碳酸饮料灌装线
Hangzhou Zhongcui Foodstuff Company ordered the second 30000BPH PET CSD bottling production line with Tech-Long
- 2004-07

达意隆第一条碳酸饮料含汽灌装生产线在广东太古可口可乐饮料公司正式投产，这条灌装线被命名为“广东太古可口可乐第8号生产线”，太古可口可乐CEO Mr.John Slosar 亲临广州为8号线剪彩，这标志着达意隆产品全面进入可口可乐系统
the first CSF bottling production line was put into production in Guangdong Swire Coca-cola. This production line was named “No.8 production line of Guangdong Swire Coca-cola”. John Slosar, CEO of Coca-cola attended the opening ceremony in Guangzhou. This event signified that the products of Tech-Long are completely accepted by Coca-cola.
- 2004-08

达意隆和香港太古可乐签订了RJM10全自动旋转式PET吹瓶机订单
Tech-Long and Hong Kong Swire Coca-cola signed a contract for purchasing RJM 10 fully automatic rotating PET blow moulding machine.
- 2005-09

太古可口可乐CEO Mr.John Slosar 再次到达意隆广州总部，双方对以往的工作进行了总结，并确定了今后合作的方向
Swire Coca-cola CEO Mr.John Slosar visited Tech-Long Guangzhou Head Office again, and both parties summarized the work and confirmed the direction for future cooperation
- 2005-11

广东太古可口可乐惠州有限公司与达意隆签订了一条由PET及玻璃瓶两用线改造为瓶装生线的订单，此举为达意隆今后的玻璃瓶生产线投入市场奠定了良好的基础
Guangdong Swire Coca-cola Huizhou Co., Ltd. and Tech-Long signed the contract for reconstructing one PET and glass bottle product line into bottle product line, which set favorable foundation for Tech-Long to launch glass product line into the market
- 2005-12

广东太古可口可乐惠州有限公司向达意隆订购了第三条30000BPH PET瓶碳酸饮料灌装线
Guangdong Swire Coca-cola Huizhou Co., Ltd. ordered the third 30000BPH PET CSD bottling production line from Tech-Long

Text byTech-Long Johnson
Picture by Tech-Long Hakim/Anya

达意隆与 中富集团

Tech-Long & Zhuhai Zhongfu



2005年8月，珠海中富集团总部项目洽谈现场，（从左至右依次为）珠海中富技术部、生产部负责人及总裁卢焕成、董事长黄乐夫、达意隆董事长张颂明、华南区销售经理李友华。

In August, 2005, Zhuhai Zhongfu Group Head Office Negotiation Site, (from left to right): Charger of Zhuhai Zhongfu Technical Department and Production Department and President Lu Huancheng, Chairman Huang Lefu, Tech-Long Chairman Zhang Songming and South China Area Sales Manager Li Youhua.

- 2003-12

达意隆与新疆中富签订首条达意隆的30000BPH瓶装水线，与青岛中富签订18000BPH瓶装水线，与青岛、长沙中富签订2条600BPH桶装水灌装线

First 30000BPH bottle water product line, 18000BPH bottle water product line and two 600BPH barrel water bottling product lines for Qingdao and Changsha factories.
- 2004-02

达意隆与郑州富田签定达意隆的首条48X48X12新型24000PBH瓶装水线

First Tech-Long 48X48X12 new type 24000PBH bottle water product line for Zhengzhou Futian
- 2004-04

达意隆与中富沈阳、长沙、成都、西安工厂签订4条18000-24000BPH瓶装水线及

- 3条桶装水线

Four 18000-24000BPH bottle water product lines and three barrel water product line for Shenyang, Changsha, Chengdu, Xi'an factories
- 2004-09

达意隆与中山中富签订1条24000BPH瓶装水线及1条1200BPH桶装水线

One 24000BPH bottle water product line and 1200BPH barrel water product line respectively for Zhongshan Zhongfu
- 2004-10

达意隆与海口中富签订1条18000BPH瓶装水线及1条600BPH桶装水线

One 18000BPH bottle water product line and 600BPH barrel water product line respectively for Haikou Zhongfu
- 2004-12

达意隆与北京中富签定富1条600BPH桶装水线

One 600BPH barrel water product line for Beijing Zhongfu
- 2005-02

达意隆与中富兰州、长春、太原工厂签订3条18000BPH瓶装水线及1条600BPH桶装水线

Three 18000BPH bottle water product lines and one 600BPH barrel water product line for Lanzhou, Changchun, Taiyuan factories
- 2005-05

达意隆与昆山中富签订1条18000BPH瓶装水线

One 18000BPH bottle water product line for Kunshan Zhongfu
- 2005-09

达意隆与珠海中富在达意隆总部一次性签定全自动吹瓶机10台，其中7台为RJM14，3台为RJM10

Ten fully automatic blow moulding machines in Guangzhou Tech-Long factory, among which, 7 are RJM14, 3 are RJM10
- 2005-10

达意隆与南宁中富容器签订一条18000BPH瓶装水线

One 18000BPH bottle water product line for Nanning Zhongfu Container Co., Ltd.
- 2005-11

达意隆与珠海中富签订一条24000BPH瓶装水线

Tech-Long and Zhuhai Zhongfu signed the contract for one 24000BPH bottle water product line

Text/Picture by Tech-Long Li Youhua



达意隆与达能集团

Tech-Long & Danone Group



法国达能项目经理Mr.Gilles Bertheol、达意隆国际销售部Ms.Anya、印尼AQUA设计发展部经理Mr.Adiwibowo Suharso、印尼AQUA Pandaan工厂厂长Mr.Ir.Joshua Prajoga在印尼AUQA工厂留影。

Photo of France Danone Project Manager Mr. Gilles Bertheol, Tech-Long International Sales Department Ms. Anya, Indonesia AQUA Design Development Manager Mr. Adjiwibowo Suharso, Indonesia AQUA Pandaan Factory President Mr. Ir.Joshua Prajoga in Indonesia AUQA Factory.

1999-09	深圳达能益力矿泉水有限公司购进达意隆600BPH五加仑灌装线 Shenzhen Danone Yili Mineral Water Co., Ltd. ordered Tech-Long 600BPH five-gallon bottling production line
1999-05	广东乐百氏集团购进达意隆2条450BPH 五加仑灌装线 Guangdong Robust Group ordered two 450BPH five-gallon bottling production lines
2000-05	广东乐百氏集团购进达意隆5条450BPH 五加仑灌装线 Guangdong Robust Group ordered five 450BPH five-gallon bottling production lines
2000-07	广东乐百氏集团购进达意隆1条900BPH 五加仑灌装线机水处理系统 Guangdong Robust Group ordered one 900BPH five-gallon bottling machine and water treatment system
2001-05	达能集团乐百氏公司购进达意隆2条900BPH 五加仑灌装线及水处理系统 Robust Company of Danone Group ordered two 900BPH five-gallon bottling machine and water treatment syste
2001-10	达能集团乐百氏公司购进达意隆4条450BPH 五加仑灌装线 Robust Company of Danone Group ordered four 450BPH five-gallon bottling production lines
2001-10	达能集团杭州娃哈哈食品饮料有限公司购进达意隆12台12头独立旋盖机用于乳酸菌饮品的旋盖 Hangzhou Wahaha Foodstuff & Beverage Co., Ltd. of Danone Group ordered twelve sets 12-head independent capping machines to be used in capping for lactobacillus drinks
2001-11	达能集团杭州娃哈哈食品饮料有限公司购进达意隆1条450BPH五加仑灌装线 Hangzhou Wahaha Foodstuff & Beverage Co., Ltd. of Danone Group ordered one 450BPH five-gallon bottling production line

2002-09	达能集团乐百氏公司同时购进2条PET瓶热灌装饮料生产线,生产能力: 350BPM , 600ML “脉动” 这是达能集团全球首次尝试热灌装饮料产品.也是在全球首次购买热灌装生产线.在接下来的两年, “脉动” 在中国市场上取得了巨大的成功。彻底改变了以茶饮料,果汁饮料垄断市场的中国饮料格局 Robust Company of Danone Group ordered two PET hot bottling production lines with production capacity of 350BPM, 600ML. “Mizone”, Danone’s first attempt in hot bottling drink, and the hot bottling production line is the first one it purchased. In the following two years, “Mizone” achieved great success in China market, bringing total change to the Chinese beverage market which is dominated by tea drinks and fruit juice drinks.
2002-12	达能集团乐百氏公司购进达意隆1条1200BPH五加仑灌装线及水处理系统 Robust Company of Danone Group ordered one 1200BPH five-gallon bottling line and water treatment system
2003-01	达能集团乐百氏公司购进达意隆1条2000BPH一加仑灌装线及水处理 Robust Company of Danon Group ordered one 2000BPH one-gallon bottling line and water treatment system
2003-09	达能集团乐百氏公司购进达意隆1条28000BPH 热灌装线配套生产线 Robust Company of Danon Group ordered one 28000BPH hot filling line
2004-01	达能集团杭州娃哈哈食品饮料有限公司购进达意隆1条3000BPH五加仑灌装线 Hangzhou Wahaha Foods & Beverage Co., Ltd. of Danone Group ordered one 3000BPH five-gallon bottling production line
2004-07	达能集团法国总部高级工程师Mr. Pierre. Parize 来达意隆考察RJM10全自动吹瓶机 Senior engineer Pierre Parize from headquarter of Danone Group in France came to Tech-Long to inspect RJM 10 automatic blow moulding machine.
2004-09	达能集团法国总部高级工程师Mr. Pierre. Parize & Mr. Gilles .Bertheol来达意隆对RJM10全自动吹瓶机进行吹瓶测试 Senior engineer Pierre Parize and Gilles Bertheol from the headquarter of Danone Group in France came to Tech-Long to perform testing on RJM 10 fully automatic blow moulding machine
2005-01	达能集团亚太区工业总监Mr. Jean-Claude VIDAL , 达能法国总部高级工程师Mr. Pierre. Parize , 达能集团乐百氏技术总部总经理冯雷先生, 达能集团控股印尼AQUA集团技术发展部经理Mr. Adjiwibowo Suharso 来达意隆考察, 基本确立达意隆与达能双方建立战略合作关系 Jean-Claude Vidal, Industrial Supervisor in Danone Asia-pacific, Pierre Parize, senior engineer from headquarter of Danone Group in France, Feng Lei, General Manager of Technical Department from Robust Company of Danone Group, and Adjiwibowo Suharso, manager of Technical Development Department from AQUA Group in Indonesia, came to visit Tech-Long. Strategy partnership was established between Danone and Tech-Long.
2005-02	达能控股印尼AQUA集团向达意隆一次性订购2条28000BPH “脉动” 生产线, 并首次选用达意隆RJM-10全自动旋转式吹瓶机实现连线灌装 AQUA Group in Indonesia, holding company of Danone Group, ordered two 28000BPH “Mizone” production lines, and used Tech-Long RJM 10 fully automatic rotating blow moulding machines in line bottling.

Text/Picture by Tech-Long Anya

达意隆与
生力集团
Tech-Long & SMC

- 2003-08

达意隆正式涉入生力集团项目
Tech-Long formally engaged in San Miguel Project
- 2003-09

达意隆第一次在菲律宾马尼拉为生力集团做项目书和报价
Tech-Long presented the project letter and quotation for San Miguel Corporation in Manila for the first time
- 2003-11

生力集团菲律宾总部第一次派员参观达意隆广州的生产基地
San Miguel Corporation Philippines Headquarter dispatched technicians to visit Tech-Long Guangzhou Production Base
- 2004-01

生力集团正式邀请达意隆对生力(广东)食品饮料有限公司的全厂包装设备的投标
San Miguel Corporation formally invited Tech-Long to bid for the whole factory packaging equipments in San Miguel (Guangdong) Foods and Beverage Co., Ltd
- 2004-01

达意隆第一份正式的建议书在菲律宾马尼拉生力公司经理会议上进行阐述
The first proposal of Tech-Long was introduced in San Miguel Managers Conference in Manila
- 2004-02

达意隆成立了生力项目小组，并邀请广州轻工设计院的专家作整厂设计的顾问
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
- 2004-03

达意隆接街生力中国项目和工程师考查组，书面回答100余项技术质询
Tech-Long received the investigation of San Miguel China Project and Engineers and answered over 100 technical enquiries in written format
- 2005-05

达意隆与生力集团在深圳正式签订设备购销合同
In May, 2005, Tech-Long and San Miguel Corporation formally signed the Equipments Purchasing and Selling Contract in Shenzhen.

Source by Tech-Long Tony Chen/David
Picture by David/wMukee

生力集团项目介绍
Introduction to SMC Project

前处理系统 Pretreatment System	--CIP系统 CIP system --热水系统 Hot Water System --脱氧水系统 Hot Water System --饮料调配、贮藏系统 Beverage Mixing and Sorage System --混比机 Carbo-cooler	1 套 1 set 1 套 1 set 1 套 1 set 3 套 3 set 1 套 1 set
水处理系统 Water Treatment System	--软化水系统 Soft Water System --RO水系统 RO Water System	1 套 1 set 2 套 2 set
吹瓶机系统 Blow Moulding Machine	--RJM10 全自动旋转式吹瓶机 RJM 10 Automatic P.E.T Blow Moulding Machiine	9 台 9 set
灌装系统 Filling System	--热灌装线 Hot Filling Line --含汽灌装线 CSD Filling Line --水线 Water Filling Line --风送系统 Air conveyor --理瓶机 Unscramber	3 台 3 set 3 台 3 set 3 套 3 set 3 台 3 set 3 套 3 set
输送系统 Conveyor System	--实瓶输送系统 Bottle Conveyor System --箱输送系统 Case Conveyor System	3 套 3 set 3 套 3 set
后包装系统 Packing System	--贴标机 Labeller(Shrink) --套标机 Labeller(Roll) --膜包机 Shirk Wrapper --纸箱裹包机 Wraparound --机器人 Robot	3 台 3 set 2 台 2 set 3 台 3 set 3 台 3 set 3 台 3 set
工程服务 Engineering Service	--工程规划 Engineering Plan --安装调试 Installation and Test --备品备件 Spare Parts --操作、维修培训 Operation and Repairing Training	



2005年5月18日，达意隆与生力集团正式签约现场。

May 18,2005, Tech-Long and SMC Group signed contract



2005年6月，生力集团项目工程师和达意隆项目小组成员进行技术交流。

In June 2005,SMC project Engineers and Tech-Long Project teem were communicating thc technologies

达意隆吹瓶机大事记

Tech-Long Blow moulding machine big events

2000-10	第一台达意隆全自动旋转式吹瓶机问世 The first Tech-Long fully automatic rotating blow moulding machine came into being.
2002-09	八模腔全自动吹瓶机RJM8参加北京啤酒饮料展，这是国产全自动吹瓶机的第一次展出 Eight-cabinet fully automatic blow moulding machine RJM 8 was shown at Beijing Beer & beverage exhibition, the first emergence of the fully automatic blow moulding machine made in China.
2002-10	第一台八模腔全自动吹瓶机RJM8成功销往河南漯河昌达集团公司 The first Eight-cabinet fully automatic blow moulding machine RJM 8 was sold to Changda Group in Luohe, Henan Province.
2003-05	十模腔全自动吹瓶机RJM10获国家级火炬计划项目荣誉 Ten-cabinet fully automatic blow moulding machine RJM 10 was awarded as Project of National Torch Program.
2003-05	第一台双模腔全自动吹瓶机RJM2问世并进入油脂市场 The first double-cabinet fully automatic blow moulding machine RJM 2 came into being and was used in oil product industry.
2003-08	第一台十模腔全自动吹瓶机RJM10出口到中东地区 The first ten-cabinet fully automatic blow moulding machine RJM 10 was exported to the Middle-east.
2003-09	江西润田公司一次性订购十模腔全自动吹瓶机RJM10八台 Runtian Company in Jiangxi placed an order for 8 sets of ten-cabinet fully automatic blow moulding machine RJM 10.
2004-01	与香港太古可口可乐签订《战略合作伙伴协议》，优先选购包括十模腔全自动吹瓶机RJM10在内的达意隆公司产品 The Agreement of Strategic Partnership was signed with Hong Kong Swire Coca-cola, and machinery made by Tech-Long including ten-cabinet fully automatic blow moulding machine RJM 10 were sold to Hong Kong Swire Coca-cola.
2004-03	第一台十模腔全自动吹瓶机RJM10出口到东南亚地区 The first ten-cabinet fully automatic blow moulding machine RJM 10 was exported to South-east Asia.
2004-03	开始与香港太古可口可乐公司全自动吹瓶技术的全面合作 Cooperation was started with Hong Kong Swire Coca-cola in the field of fully automatic blow moulding technology.
2004-03	香港太古可口可乐公司专家进驻达意隆公司现场指导 Specialists from Hong Kong Swire Coca-cola came to Tech-Long to provide on-site guidance.
2004-06	十六模腔全自动吹瓶机RJM16完成图纸设计，正式进入制造阶段 The design drawing for sixteen-cabinet fully automatic blow moulding machine RJM 16 was completed and came into manufacturing process.
2004-06	和瑞士EUGENSEITZ公司开始高压气阀的合作，使十模腔全自动吹瓶机RJM10seriesIII单腔吹瓶效率提升至1400瓶/腔 Cooperation with Eugenseitz Company in Switzerland in the field of high-pressure air valve started, increasing the bottle blowing efficiency of single cabinet in ten-cabinet fully automatic

blow moulding machine RJM 10 series III to 1400 bottles/per cabinet.

2004-07	与香港太古可口可乐签订十模腔全自动吹瓶机RJM10购买合同，RJM10 series II 得到可口可乐公司的正式认可 Contract for ten-cabinet fully automatic blow moulding machine RJM 10 was signed with Hong Kong Swire Coca-cola, signifying that RJM 10 II was recognized by Coca-cola.
2004-07	开始与某跨国集团家庭洗涤瓶进行全自动吹瓶技术的初步合作 First stage cooperation was established with a multi-national company of home cleaning products in the field of fully automatic blow moulding technology.
2004-08	第一台双模腔全自动吹瓶机RJM2出口到美洲地区 The first double-cabinet fully automatic blow moulding machine RJM 2 was exported to South America.
2004-09	十模腔全自动吹瓶机RJM10 seriesIII在北京啤酒饮料展现场吹瓶取得空前成功 Ten-cabinet fully automatic bottle blowing machine RJM 10 SeriesIII was shown at Beijing Beer & Beverage exhibition, and the on-site demonstration for blow moulding achieved great success.
2004-09	法国达能依云矿泉水厂吹瓶技术专家到厂做吹瓶测试，对机器性能给予高度肯定 Blow moulding specialists from Evian Mineral Water Plant of Danone Group came to Tech-Long to conduct blow moulding testing, giving good comments on performance of the machine.
2004-10	在十模腔全自动吹瓶机RJM10 HR耐热瓶技术方面开始了与国内最大的制瓶厂商--紫江集团公司的全面合作 Cooperation with the biggest Chinese bottle making factory Zijiang Group on ten-cabinet fully automatic blow moulding machine RJM 10 HR started.
2004-10	聘请日本首席权威PET吹瓶技术专家福元良治为达意隆集团吹瓶机技术顾问 Fuyuan Liangzhi, the specialist in the field of PET blow moulding technology became technical consultant of Tech-Long Group
2004-12	达意隆RJM10 seriesIII出口到日本，这是目前国内同类型产品首次进入日本市场 Tech-Long RJM10 series III exported to Japan, which is the first time for similar domestic products to launch into Japanese market
2005-01	上海紫江向达意隆订购一台RJM10 seriesIII，标志着达意隆正式被中国专业制瓶行业所认可 Shanghai Zijiang ordered one RJM10 series III, which means Tech-Long has been formally accepted by Chinese professional bottle making industry.
2005-09	珠海中富集团向订购三台RJM10 seriesIII，七台RJM14 seriesIII，成为达意隆到目前为止吹瓶设备的最大买家 Zhuhai Zhongfu Group ordered three RJM10 series III and seven RJM14 series III, and become the biggest buyer of blow moulding equipments for Tech-Long.
2005-09	德国慕尼黑Drinktec 2005，达意隆展出的RJM14 seriesIII受到了全球买家的高度关注 In Germany Munich Drinktec 2005, Tech-Long exhibited RJM14 series III which earned high attention from global buyers

Text by Tech-Long Gaojie
Picture by Tech-Long Hakim





放眼全球，铺就未来之路
Perceive the global market,
Pave the road to future

着眼于未来，全力拓展国际市场
Focus on the future, powerfully expand international market

美洲、欧洲之行-考察行业商机

Journey to America and Europe --- Investigate professional opportunities

积极参加国际专业展会-有效开拓市场

Actively attend international exhibitions --- effectively develop the market

国际饮料及酿造行业的奥林匹克-达意隆RJM14吹瓶机亮相慕尼黑DRINKTEC 2005

Olympic in world beverage and brewing industry - Tech-Long RJM14 bottle blowing machine was exhibited in Munich DRINKTEC 2005

着眼于未来，全力拓展国际市场

Focus on the future,
powerfully expand international market

美洲、欧洲之行-考察行业商机

Journey to America and Europe --- Investigate professional opportunities

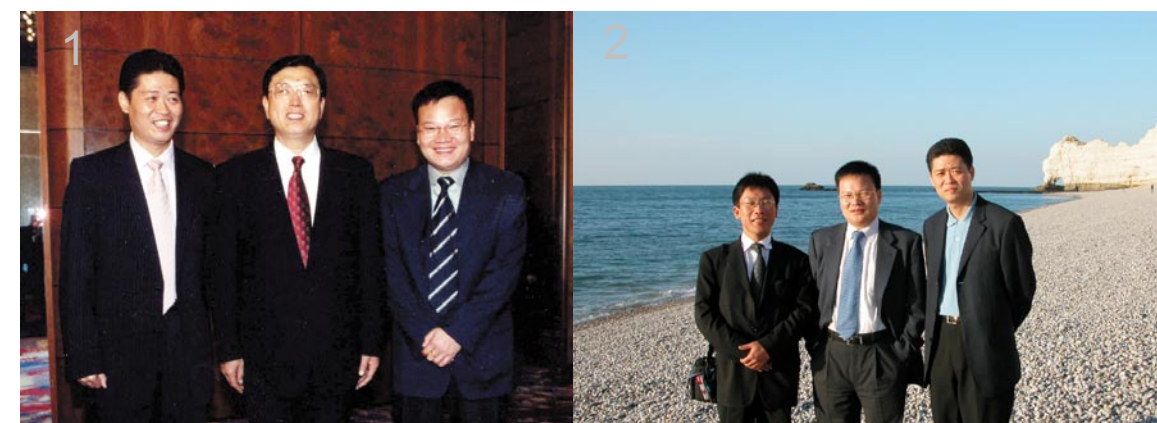


图1：2003年11月，中央政治局委员、广东省省委书记张德江（中）与张颂明董事长（右）和陈钢副董事长（左）在南美之行中的留影。

1.Photo 1: Member of Political Bureau of the CPC Central Committee and Sectary of CPC Guangdong Provincial Committee Zhang Dejiang (Middle) and Chairman Zhang Songming (Right) and Vice Chairman Chen Gang (Left) in the Journey to South America in November, 2003.

图2：2004年，达意隆董事长张颂明（中）、副董事长陈钢（右）、王忠（左）在欧洲之行中的留影。

2.Photo 2: Chairman of Tech-Long Zhang Songming (Middle), Vice Chairman Chen Gang (Right) and Wang Zhong (Left) in the Journey to Europe in 2004.

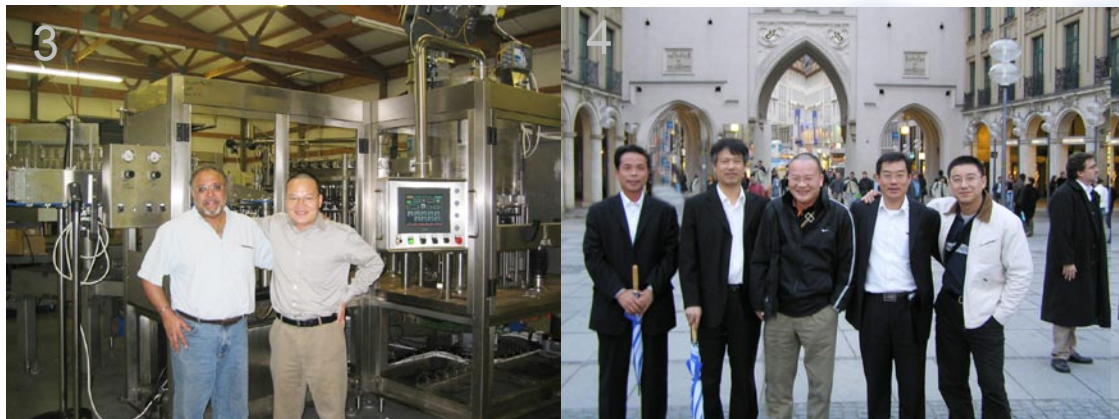


图3：2005年4月，WPC公司高级工程师Mr.INDE（左）与达意隆董事长张颂明（右）在达意隆驻查尔斯顿销售服务中心的留影。

3.Photo 3:Senior Mr. INDE (Left) of WPC Company and Tech-Long Chairman Zhang Songmng (Right) in Tech-Long Charleston Sales Center in April, 2005.

图4：2005年4月，达意隆董事长张颂明（右三）、国际销售部副总经理张胜（右一）及灌装、吹瓶事业部的主要负责人一行在德国杜塞尔多夫的留影。

4.Photo 4:Tech-Long Chairman Zhang Songmng (Right Third), Vice General Manager of International Sales Department Zhang Sheng (Right First) and the Main Charger of Bottling and Bottle Blowing Department in Germany Dusseldorf in April, 2005.

作为国内饮料包装行业的领跑者，达意隆深知要想成为国际知名企业，就必须积极推行“走出去”的战略。尽快了解国际市场、尽早建立遍及世界各地主要目标市场的销售网络、同各个国家多方面建立合作关系、提高达意隆品牌在国际上的知名度已势在必行。

As the leading role in beverage packaging industry in domestic, Tech-Long has realized that it is necessary to promote the strategy of “walk out” for developing into world renowned corporation, realize the market, set up the sales network which covers main target market in the world, and establish cooperation with diversified countries and improve the awareness of Tech-Long in the international market.

2003年至2005年间，欧洲、美洲等多个国家和地区都留下了达意隆的足迹，公司高层与当地的商界人士进行了广泛交流，部分业界人士对达意隆的设备表示了浓厚的兴趣，并同达意隆建立了合作关系。

During 2003 to 2005, several countries and regions in Europe and America have left the step of Tech-Long, our senior management have widely communicated with the local professional gentries, and some of them have extended intense interest to Tech-Long equipments and have set up cooperative relationship with Tech-Long.

通过考察使我们看到了饮料包装行业蕴藏的巨大商机，为我们提供了今后经贸往来的桥梁和良好的切入点，也为我们进一步拓展国际市场奠定了坚实的基础。

Through investigating, we have seen the enormous opportunity of beverage packaging industry, which provides the bridge and favorable opportunity for trade in the future, and set the solid foundation for us to expand the international market.

Text by Tech-Long mukee
Picture by Tech-Long Image Database

➤ 积极参加国际专业展会 有效开拓市场

Actively attend international exhibitions,
effectively develop the market

2004年，随着国际销售运营的日渐成熟，达意隆在国际销售业绩上取得了新的突破，达意隆品牌已成功进入欧洲、亚洲、中东、非洲、澳洲等45个国家和地区。达意隆也加快了开拓国际市场的步伐。

In 2004, as the maturing of international sales and operation, Tech-Long has achieved new breakthrough in international market, Tech-Long brand has successfully launched into 45 countries and regions in Europe, Asia, Middle East, Africa and Australia. And Tech-Long has also accelerate the step to developing the international market.

随着市场份额的进一步扩大，达意隆的竞争对手也在不断地变化，从最初的一些国内企业到台湾、韩国的企业，到后来越来越多地与欧洲知名品牌的竞争与较量，这对达意隆的发展提出了更高的要求，而积极参加国际专业展会为达意隆赢得了大批客户群，并对不同国家和地区的市场有了准确的了解，成为达意隆开拓国际市场的有效途径。

With the expansion of the market share of Tech-Long, the competitors of Tech-Long have been changed from domestic manufacturers, to Taiwanese manufacturers and Korean manufacturers. Nowadays Tech-Long is faced with more direct competition from well-known manufacturers in Europe. This has set higher requirements on Tech-Long. It has also make Tech-Long to win a lot of clients by actively attending professional exhibitions, and accurately know the market in different countries and regions as the effective means for Tech-Long to develop the international market.

南非. 约翰内斯堡
South Africa . Johannesburg
2004 Propak Africa



2004年3月，南非约翰内斯堡Propak展，达意隆国际销售部总经理罗文海（左）向客户介绍设备情况。

In March, 2004, South Africa Johannesburg Exhibition, General Manager of Tech-Long International Sales Department Luo Wenhai (Left) is introducing our equipments to clients.

迪拜. 阿联酋
Dubai . United Arab Emirates
GULF Print & GULF Pack 2004



2004年9月22日，迪拜海湾包装展，达意隆获得最佳展位——总统金杯奖。达意隆国际销售部总经理罗文海（左）和达意隆中东代理商Sure International L.L.C公司的Mr.jinesh Jain（右）从此次展会主席手接过奖杯。

On September 22, 2004, Dubai Gulf Packaging Exhibition, Tech-Long awarded the best Booth --- President Gold Cup Prize. General Manager of Tech-Long International Sales Department Luo Wenhai (Left) and the Agency of Tech-Long in Middle East Sure International Company Mr. jinesh Jain (Right) accept the cup from the chairman of the exhibition.

澳大利亚. 悉尼
Australia . Sydney
Auspack 2005



2005年10月11日，参展观众在达意隆展出的DS06B-16/16/6和DG01TG-120五加仑灌装机前，对达意隆的设备表示了浓厚的兴趣。

On October 11, 2005, visitors are visiting Tech-Long DS06B-16/16/6 and DG01TG-120 five gallon bottling machines and have extended high interest to Tech-Long equipments.

德国. 慕尼黑
Germany . Munich
Drinktec 2005



2005年9月2日，达意隆参展设备RJM14全自动旋转式吹瓶机进入展馆。

On September 2nd, Tech-Long equipments launched into the Munich exhibition hall.



达意隆此次展会的展位和参展的RJM14吹瓶机成为中国区中最受关注的，上图为展会现场，达意隆展位观众络绎不绝。

In the Exhibition, Vistors are crowding in front of Tech-Long .

德国. 杜塞尔多夫
Germany . Dusseldorf
2005 Interpack



2005年4月，德国杜塞尔多夫Interpack展。德国4月26日当地报纸《MESSE TODAY》报导了达意隆此次展会取得了签约150美金订单的消息，并刊登了达意隆国际销售部总经理罗文海的照片。

Germany, April 26th, local newspaper --- "MESSE 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.



2005年4月，德国杜塞尔多夫Interpack展。达意隆董事长张颂明（左）与瑞士EUGENSEITZ销售市场总监Mr.Marcel Meier(右)EUGENSEITZ上海代表处首席销售代表侯敏(中)在展位前合影。

In April, 2005, Germany Dusseldorf Interpack Exhibition, President of Tech-Long Zhang Songming (left), Sales Market President of Swiss Eugenseitz --- Mr. Marcel Meier (right) and Chief Representative of Eugenseitz Shanghai Office --- Hou Min (middle) in front of Tech-Long exhibition booth.

迪拜. 阿联酋
Dubai . United Arab Emirates
GULF Print & GULF Pack 2005



2005年12月，迪拜国际机场展览中心，达意隆展出了一台1*240BPH五加仑灌装设备和一台1*DS06B纸箱裹包机。

In December, 2005, Dubai International Airport Exhibition Center, Tech-Long exhibited one 1*240BPH five gallon bottling equipment and one 1*DS06B carton packaging machine.

美国. 芝加哥
American . Chicago
2004 Pack Expo



2004年9月，芝加哥麦考密克会展中心，达意隆展出了一台72*72*18CSD含汽灌装机，达意隆国际部副总经理张胜（右二）与美国WPC公司高级工程师Mr.Inde（右三）等在展位前合影。

Sept. 2004, McCormick Place Chicago, Tech-Long shows a 72*72*18 CSD Filler. Johnson Zhang, vice GE of International Sales Dep.(Right 2nd) and Mr. Inde Soor, WPC Senior Engineer (Right 3rd)

国际饮料及酿造行业的奥林匹克

达意隆RJM14吹瓶机亮相慕尼黑Drinktec2005

Olympic for International Beverage and Brewing Industry

Tech-Long RJM14 blow moulding machine is shown on Munich Drinktec 2005



图1：RJM14吹瓶机在展会中备受关注

Picture 1: RJM14 blow moulding machine earned high attention in the exhibition

图2：现代感十足的展台全貌

Picture 2: Appearance of our modern exhibition booth

Drinktech始于1951年，每四年举办一届，现已成为国际饮料与液体食品工业的全球峰会。它囊括了饮料行业几乎所有的制造、加工、灌装及包装方面的最新产品及技术。为了适应国际饮料和液体食品市场的发展，本届博览会将液体食品也纳入其展示范围，这样，奶制品首次与葡萄酒、茶饮料、水、以及功能饮料和健康饮品一起扮演重要的角色。同时，PETpoint展也作为一个独立的组成部分，被安置在1.1万平方米的展厅，全面展示耐热聚酯包装材料及其技术，内容包括了从原材料的颗粒物粉碎、初加工到饮料瓶生产以及包装物回收的完整过程。从而使得Drinktec在PET包装方面的内容也得以完善。

Drinktech started from 1951, and is held once every 4 years, currently, it has become the global summit for international beverage and liquid foods industry. It collects the nearly all latest products and technology in such aspects as making, processing, bottling and packaging in beverage industry. In order to meet the development of international beverage and liquid foods market, the exposition also collect liquid foods into the exhibiting scope, therefore, milk products will acts as the important role with wine, tea beverage, water, functional beverage and healthy beverage for the first time. Additionally, PET point exhibition, as an independent element, is arranged in the 11,000m2 exhibition hall for completely exhibiting the heat resistant polyester packaging materials and technologies, from raw materials grains grinding, primary processing to beverage bottle producing and packaging materials recycling. Therefore, Drinktec has also improved the content in PET packaging.

第十届慕尼黑国际饮料及酿造技术博览会（Drinktec2005）为期六天的展会于9月17日结束。

10th Munich International Beverage and Brewing Technology Expo (Drinktec2005), the 6-day long exhibition, completed on September 17th.

这届展会展位面积总计13.2万平方米，共有来自60个国家的1470家企业参展，其中德国以外的展商765家。约7万名贸易商参观了展览。

The booth area of the exhibition reaches 132,000m2, altogether 1470 corporations from 60 countries participated into the exhibition, among which, 765 corporation are not from Germany, about 70,000 traders visited the exhibition.

中国有28家公司参展，展商数在本届博览会排名第十位。参展设备受到了国际同行的高度关注。业界人士指出：经过不到十年的发展，我们利用国外的技术自行制造的设备已接近国际先进水平，在国内市场上占据绝对的优势，并开始进入欧洲等地区的国际市场。

Altogether 28 Chinese corporations participated into the exhibition, which ranked the 10 in the exhibition. The exhibiting equipments have also earned highly attention from international professions. And the professional

gentries have pointed out: after less than 10 years of development, our equipments which are developed by ourselves after absorbing foreign technologies have reached the world advanced level, and features absolute advantages in domestic market and the equipments are starting to launch into international market.

达意隆对本次展会非常重视，经过了长达五个月的精心策划及准备。本次展会，达意隆作为国内的龙头企业，展位位于中国参展团的最显著位置，参展面积为120平方米，占整个中国展团的40%。此次展出的设备为“全自动旋转式吹瓶机”，型号为RJM14，该设备总共14个吹瓶工作站，可适用于从250ml至2500ml的各种P.E.T瓶型，吹制500mlP.E.T瓶，最高产量可达19600瓶每小时，该高速全自动P.E.T.吹瓶技术全世界只有少数几家大公司能够掌握。该设备凭借着突出的性能价格比，受到了全球买家的高度关注。达意隆本次展台的设计简洁而充满时代感，主体结构为铝合金型材，配合明亮的白色金卤灯光，整体充满了现代感。展会期间，中国驻慕尼黑领事馆总领事一行莅临达意隆展台，对达意隆本次参展给予了高度的评价，称“代表了中国装备企业的新形象”。

Tech-Long has attach high emphasis to the exhibition, after 5 months of planning and preparing, as the leading role in domestic, Tech-Long booth is located at the most obvious position in Chinese exhibition group, and occupies 120m2, which occupies 40% of the whole group. Fully automatic rotary blow moulding machine, model: RJM14, was exhibited, the equipment is installed with 14 bottle blowing work stations, and is applicable for diversified 250ml-2500ml P.E.T bottles and 500ml P.E.T bottles, and the max output reaches 19600 bottle/hour, only a few big corporations in the world possess the high speed fully automatic P.E.T. blow moulding technology. Owing to outstanding performance and price ratio, the equipment has earned highly attention from global buyers. The design of Tech-Long booth is concise and modern, the main structure is made of aluminum with bright halogen light, and the whole effect is modern. During the exhibiting period, Chinese consul general in Munich visited the Tech-Long booth, and presented highly praise to us, and praised Tech-Long “show the new image of Chinese equipment corporations”.

在展馆搭建现场，张董事长亲自和参展员工一起安装机器、督导展台搭建工作。无论是展出的RJM14吹瓶机还是参展人员在展会中对客户的服务以及精神面貌，达意隆都充分体现了昂场的斗志和团队合作精神！

In the exhibiting hall construction site, Mr. Zhang the chairman installed the machines together with his staff, and inspected the construction of booth. Tech-Long has shown outstanding courage and team work spirit to both showing RJM14 blow moulding machine and the service and spirit of exhibitors to clients.

展会期间，有来自东南亚、欧洲、中东、非洲、澳大利亚、美国、日本、台湾等多个国家和地区的专业观众参观了达意隆的展位，并对达意隆的RJM14高速吹瓶机表现出了浓厚的兴趣。希腊Ippokrates S.A.的Mr.George Zourdos & Michael Vazanellis & Mr.Michalis Mavros和达意隆现场签订了约USD\$500,000元的设备订单；另外有埃及 ECAP ECFP POLY PET SIWA 在展会中已确定两台RJM10吹瓶机的设备订单，金额约USD \$600,000元；一跨国饮料设备企业的中东及非洲区域代理有明确意向要代理达意隆的设备。

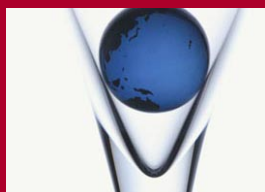
During the exhibition, such professional guests from such countries and regions as Southeast Asia, Europe, Middle East, Africa, Australia, America, Japan and Taiwan visited Tech-Long booth, and extended high interest to RJM 1 4 high speed blow moulding machine. Greece Ippokrates S.A. Mr.George Zourdos & Michael Vazanellis & Mr.Michalis Mavros signed the contract to order USD\$500,000 Tech-Long equipments; additionally, Egypt ECAP ECFP POLY PET SIWA has also confirmed to order two RJM10 blow moulding machines, and the total amount reached USD\$600,000; the regional agent of one multinational beverage equipment corporation in Middle East and Africa has also extend clear intention to Tech-Long equipments.

这次展会取得了圆满成功，对于“达意隆”品牌走向世界起到非常重要推广的作用。

The success of the exhibition will powerfully promote “Tech-Long” brand to the world market.

Text by Tech-Long Margen/Hakim

Picture by Tech-Long Hakim



特别报导 Special Report

品牌，是艺术品的雕琢-达意隆北京办事处总经理吴暇谈品牌建设
Brand is the carving of artwork -Tech-Long General Manager of Tech-Long
Beijing Office Wu Xia discusses brand construction

达意隆公司格言诠释
A new Interpretation to corporate proverb of Tech-Long



品牌，是艺术品的雕琢 Brand is the carving of artwork

达意隆北京办事处总经理吴暇谈品牌建设
General Manager of Tech-Long Beijing Office
Wu Xia discusses brand construction

近日，偶遇多年老友，问了我一个问题：“没想到你们公司发展这么好，成功的关键是什么呢？而且人都比较年轻，每个人都很能干，如果这些能干的人到其他企业里是不是也同样能成功呢？”老友的问题，让我思考了很多.....

Recently, I met one of my old friends by chance, who asked me “I was surprised at the success of your company. What is the factor of the success? Your employees are so young and efficient, and will they work as successfully in other companies as they do in your company?” It puts me into a deep thought.....

短短的几年，达意隆厂房从一期到四期，产品从单一到整厂解决方案，员工从几十人到八百人，业绩从默默无闻到行业瞩目，达意隆成长起来了，在成长的过程中，有欢笑、有泪水，达意隆人共同经历了风风雨雨，看到了五彩的光环，同时也面临着一个个挑战。

In the short several years, Tech-Long has developed with the workshop changed from Phase I to Phase IV, products changed from singleness to whole solution plan, and employees increased from several dozens to eight hundreds, and achievements from unknown to public to outstanding. The process is full of joys and tears, and Tech-Long people have experienced a lot and they see bright future in front of them and they are also facing more and

more challenges.

媒体经常说打造品牌，但是我想品牌不是打造出来的，而是像艺术品一样是精雕细琢出来的。曾经那么多我们熟知的品牌，每年的央视广告标王，但是今昔在何处？那是被巨资、被企业领导人的观念堆积起来的，只是被消费者熟知的“标牌”而已。记得张董事长曾经在年终会上讲过的达意隆要做“百年老店”，那该是多么厚重的沉积？！

The media often says that brands are created, however, I know brands are not created but are made carefully just like artworks. Those once well-known brands, which were on show on CCTV every year, have disappeared now, just because they are created with huge capital. I remember that chairman Zhang once said in the year-end conference that Tech-Long determined to be “an old and famous enterprise”, what a strong determination it is!

回忆做市场的初期，我们起步晚，在市场上已经有那么多的竞争对手，他们的市场占有率高，品牌知名度也比我们高；而我们的起点高，价格也比他们贵，很多客户对我们一无所知。我们曾经感叹要多做点广告，多做些渠道，别人都不知道我们。但简单的广告宣传效果并不理想。直到2001年，我想那也是达意隆人都记得的那个秋天，在北京的展会上，所有参展商和观众都被这个年轻而富有朝气的企业吸引了目光。“你们是外资的公司吗？”“你们是合资的公司吗？”“你们的设备是进口的

吗？”“你们是代理吗？”.....当时工作在现场的年轻销售人员听到这些问题时，都会自豪的回答“我们是民营企业，设备是中国制造！”，“达意隆”这个品牌这样被人们逐渐熟知了。

At the first stage, we experienced a lot of difficulties, because we were facing so many competitors in the market, who had more market share and more fame, while we started late with higher prices, therefore, many customers knew nothing about us at all. We determined to publicize the products by advertisements, but the result was not satisfactory. Until 2001, in that autumn and on the exhibition in Beijing, all exhibitors and audiences were attracted by this young and energetic enterprise. “Are you a foreign invested company?” “Are you joint-venture?”, “Are your equipments imported?”, and “Are you agents?”.....Hearing these questions, all salesmen on site answered with pride: “we are privately owned enterprise, and our equipments are made in China!” Thereafter, “Tech-Long” brand is well-known to the public gradually.

几年过去了，我们经历了辉煌，但我们也同时记得我们的失败。每年的年终总结会上听到更多的是总结工作的不足，互相学习经验。连续三年的业绩翻番，这些成绩并不能让我们止步不前，我们总是能更清醒地面对未来。今年吹瓶机得到更多的客户的认可，供不应求，部分原因是得益于去年我们对吹瓶机更新换代而对客户执行的“招回”策略。我认为没有正确对待失败的心态可能也就没有对前途的信心。这样建立的品牌更能让客户感觉值得信赖，也使我们更从容地面对一切挑战！达意隆像块玉，每个达意隆人都是工匠，我们需要更艰苦更细致的雕琢，才能更完美。

After several years of development, we have experienced great achievements and failure as well. On the year-end conference every year, we often hear people summarize their shortcomings in their work so as to learn from experiences. Although we have gained double increase of the achievement for consecutive 3 years, we are not content, and we do not stop but work harder with clear head. This year, bottle blowing machine has won high reputation among more customers, and its demand exceeds supply partly because we replaced the old bottle blowing machine and reclaimed them. I think the right attitude towards failure is very important, otherwise, no confidence for the future is possible. The brands established this way will be more reliable, and help us face all challenges with confidence. If Tech-Long is a jade, then every Tech-Long people is craftsman, so only with hard and careful work can it become more beautiful and perfect.

现在，我们又面临激烈的市场竞争、利润空间越来越小的困难，那么我们要用什么样的态度对待呢？类似把梳子卖给和尚、把冰箱卖给爱斯基摩人、把鞋子卖给非洲人等等，什么样的态度决定我们有什么样的思维，什么样的思维决定我们有什么样的行动。转换思路是我的观点，一个企业在行业中的竞争优势取决于有无核心竞争力，建设一个差异化特色的品牌是打造企业核心竞争力非常有效的手段。

At present, we are facing severe competition again, and it is more and more difficult to gain profits, then what attitudes should we have? Just like businessman sold combs to monks, refrigerators to Eskimos, and shoes to Africans, I think we should change our thinking, because attitudes determine thinking, and thinking determines our actions. The advantage of an enterprise is dependent on its competitiveness, so establishing a featured brand is an every efficient means to build the competitiveness of an enterprise.

“企业成功的关键是人，但不是一两个能干的人，而是一个团队，一群有同样的思想、同样的目标、同样的心态、同样的心胸而且同样的不计较个人得失的人”——这是我给老友的回答。

“The key factor to success for an enterprise is people, a team of people with same thought, same aims, same attitudes and same minds, and without considering personal gain or loss.” – It is my answer to my old friend.

达意隆公司格言诠释

A New Interpretation to Tech-Long Proverb

公司格言是一个企业精神的灵魂，是强而有力的市场推广工具，可以充分调动员工的工作热情和积极性，有效地提升公司品牌形象，为企业带来更大的经济效益，并有利于推动公司的企业文化进程，达意隆凭借多年包装行业的不断创新的经验，正式确定了新的公司格言。

Corporate proverb is the soul of an enterprise, as well as a powerful tool of marketing promotion. It is capable of initiating employees' enthusiasm for working, elevating corporate image, bringing about greater economic benefits, and promoting the development of corporate culture. With years of experience in the packing industry, Tech-Long has created proverb of the group.

“为你而转”——我们的格言

Runs for you – our proverb

“为”有服务之意，表示我们会为客户提供优质、周到、全方位的服务，喻意我们重视客户，以客户利益为中心，并以客户的需求为发展目标，不断提升产品品质。

“For” means service. We provide our customers with quality, considerate and all-rounded service. Customer benefit is the center of our service, and customer demand is the objective of our service, constantly improve product quality.

“你”代表我们尊贵的客户，也可以引申为达意隆的全体员工，体现了我们对外是以市场为导向，使企业得到更大发展；在企业内部充分地每位员工提供发挥潜力的空间和机会，“以人为本”思想在达意隆得到了充分的诠释。

“You” refers to our customers, or every employee of Tech-Long. Externally, our operation is orientated by the market. Internally, we provide every one within the enterprise with the room of career development. The thought of “people-oriented” is thoroughly shown in Tech-Long.

“转”具有强烈的动感，赋予企业“永不停息”、“活力”、“创新”的意义，并恰到好处地点出了我们的产品是以转动为主导的工作方式，同时给了产品生命的意义，喻意我们始终围绕客户利益而不断创新，努力提升！

“Run” indicates the idea of ceaselessness, livingness and innovation. It coincides with the operation method of our products: running. Furthermore, it means that we will run around customer benefits and keep improving.

新格言符合集团致力于为客户提供多方位服务的需要，充分体现集团是市场为导向，以客户利益为中心，提供上乘的客户价值，产品和营销计划以对客户的全了解为前提，从而能够为客户创造更大的利润的营销方式，并突出了公司产品的高科技含量和以技术领先的特性，新格言已广泛应用于公司形象及产品推广的各个层面。





The proverb of Tech-Long meets the demand of providing all-rounded service to our customers, indicating that the group is orientated with market demand and customer benefits. We will find out the model of marketing best suited to customer needs. The proverb will be extensively employed in various aspects including cooperate image building and product promotion.

公司标识的深刻含义

Interpretation to the logo of Tech-Long

达意隆的标志整体可划分为四个部分：

The logo of Tech-Long consists of four parts:

- A- 
- B- 
- C- 
- D- 

- A 外形似一对啮合的齿轮，表示公司产品属于机械装备行业；
The shape resembles a pair of joggled gears, representing the industry Tech-Long is in, machinery industry.
- A 像一对握手，表示内部发扬团队精神，外部友好合作；
The shape resembles two clasped hands, representing teamwork inside our company and cooperation outside our company.
- A 中间的闪电形状，寓意公司思维的火花、创新；
The lighting shape in the middle represents the spark of thinking or innovation.
- B 为Technology的缩写,中文意思为“技术”，代表达意隆属于高新技术企业；
is the abbreviation for “technology”, indicating that Tech-Long is a high-tech enterprise.
- C 中文意思“长期、长远”，代表公司以长远发展为目标；
means long-term, indicating that the goal of Tech-Long is a long-term one.
- B 字母“T”上部横线的延长，寓意公司产品定位在发展高端技术，技术领先；
The extended line on top of letter “T” indicates that Tech-Long is oriented to developing top technology and focuses on leading technology
- C 字母“L”下部横线的延长，寓意公司处事脚踏实地，以服务为基础；
The extended line of letter “L” indicates that the base of Tech-Long is service and the style of enterprise operation is a down-to-earth one.
- D 是公司的口号：“为你而转”，其核心的意义为：以实现客户的利益为中心。
is the slogan of Tech-Long: “Runs for you”, with the core significance being customer benefit at the center.