

# FOCUS TECH-LONG

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Marketing Director

达意隆，世界在变，品质不变

Tech-Long: World Is Changing, Quality Retained





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国别. 城市 Country. City	展会名称 Exhibition Name	参展日期 Exhibiting Date
俄罗斯. 莫斯科 Moscow, Russia	第19届俄罗斯包装及包装机械展 UPAKOVKA / UPAK ITALIA 2011	2011年1月 January, 2011
中国. 广州 Guangzhou, China	109届中国进出口商品交易会 The 109th Session of China Import And Export Fair	2011年4月 April, 2011
巴西. 圣保罗 St. Paul, Brazil	2011年巴西国际食品、饮料加工和包装工业博览会 FISPAL 2011	2011年6月 June, 2011
泰国. 曼谷 Bangkok, Thailand	第十九届亚洲地区国际加工、饮料/包装技术及原材料展览会及研讨会 PROPACK ASIA 2011	2011年6月 June, 2011
南非. 约翰内斯堡 Johannesburg, South Africa	南非国际食品工业展 Africa's Big Seven	2011年7月 July, 2011
土耳其. 伊斯坦布尔 Istanbul, Turkey	第17届伊斯坦布尔国际包装展 17th international istanbul packaging industry fair	2011年9月 September, 2011
南非. 开普敦 Cape Town, South Africa	2011南非国际包装工业展 PROPACK CAPE 2011	2011年10月 October, 2011
中国. 广州 Guangzhou, China	110届中国进出口商品交易会 The 110th Session of China Import And Export Fair	2011年10月 October, 2011
中国. 上海 Shanghai, China	中国饮料工业科技展 CBST 2011	2011年11月 November, 2011
印尼. 雅加达 Jakarta, Indonesia	第二十四届印尼国际加工包装行业展览会 Propak Indonesia2011	2011年11月 November, 2011



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# PET全自动旋转式吹瓶机 工作组成立

## Work Group of PET Fully Automatic Rotary Bottle Molding Machine Founded

——达意隆牵头制定国家标准

——Tech-Long Takes The Lead In Laying Down National Standards



**本**报讯（记者 符丹萍）记者从3月23日PET全自动旋转式吹瓶机工作组（SAC/TC494/WG2）成立大会暨第一次工作会议上获悉，由广州达意隆包装机械股份有限公司牵头组织的PET全自动旋转吹瓶机国家标准的制定工作已进入实质性阶段，这意味着我国生产企业正慢慢从“制造型”转为“创造型”。在当天下午举行的第一次研讨会上，工作组广泛征求了制造商、用户、专家和供应商的意见，对全自动吹瓶机的术语和定义，产品分类和型号编制方法、要求、试验方法、检验规则及标志、包装、运输、贮存等进行广泛探讨，并形成标准的征求意见稿。据介绍，会后全国食品包装机械标准化技术委员会将在行业中广泛征求意见，最终使意见稿形成标准报批稿，上报国家标准委会审批。

News (Reporter: Fu Danping) It was learned at the meeting of founding the work group of PET fully automatic rotary bottle molding machine and the first working conference on 23th, March that the work of laying down a national standard for PET fully automatic rotary bottle molding machines had moved into a substantial stage which meant that the domestic manufacturers are in gradual transition from making to creating. At the first working conference held in the afternoon, the work group collected opinions from manufacturers, users, experts and suppliers extensively, discussed the terms and definitions, product classification, requirements, test methods, inspection rules and symbol, packing and transportation as well as storage for fully automatic rotary bottle molding machines and brought about a standard exposure draft. It is said that the National Technical Committee of Standardization on Food Packing Machinery would, after the conference, solicit opinions from all sides in the industry and eventually turned the inquiry draft into a submitted draft for approval by the National Standardization Administration.



## 标准的制定将提高行业准入门槛

### Standard Established Heightens Industry Entry Threshold

全国食品包装机械标准化技术委员会主任许占林指出，PET全自动旋转吹瓶机国家标准的制定对推动我国包装机械行业的发展具有非常重要的意义。首先，制定此标准将增强我国包装机械行业的竞争力，提高我国包装机械企业在国际上的地位。“三流企业做产品，二流企业做技术，一流企业做标准。”许占林告诉记者，产品标准已经成为国内外企业竞争力的重要体现。我国生产企业正慢慢从“制造型”转为“创造型”，加强标准建设已经成为建设创新型国家的重要内容之一。

其次，该标准的制定将增加包装机械行业的准入门槛，完善包装机械行业的竞争机制。在国内，全自动吹瓶机起步较晚，但发展迅速，行业内大大小小的吹瓶机制造商不下百家，但行业中始终没有PET全自动旋转式高速吹瓶机相关的国家标准，使该项产品在生产、检验、售后服务中都非常不规范。为了使该项产品在技术上规范化、标准化，通过制定国家标准来促进PET全自动旋转式高速吹瓶机的发展，提高其技术水平，缩小与国际先进国家的差距，已经是迫在眉睫。

Xu Zhanlin, Director of the National Technical Committee of Standardization on Food Packing Machinery points out that the establishment of national standard for PET fully automatic rotary bottle molding machines is of significant importance in promoting the development of domestic packing machinery industry. First of all, it will sharpen the competitive edge of the domestic packing machinery industry and upgrade the position of the domestic packing machinery enterprises in the world. Third-class enterprises make products, second-class enterprise develop techniques while first-class enterprises establish standards. Product standards have been important presentation of enterprise competitiveness at home and abroad, Xu said. The domestic manufacturers are in gradual transition from making to creating. Strengthening standard establishment has been a key item on the agenda of building an innovation-oriented country.

Secondly, the standard establishment will heighten the entry threshold for packing machinery industry and improve the competition system. Although fully automatic rotary bottle molding machines got off to a late start in China, the development has been very fast. Nowadays, there are more than a hundred bottle molding machine manufacturers of different scales at home. However, no appropriate national standard for PET fully automatic rotary high-speed bottle molding machine has ever been laid down which results in nonstandard production, inspection and after-service. In order to normalize and standardize the techniques, it is extremely urgent to promote the development of PET fully automatic high-speed rotary bottle molding machines, improve the technology level and narrow the gap between our country and the advanced countries in the world through laying a national standard.

## 行业内翘楚承担大任

### Outstanding Enterprise Takes Great Responsibility

在高新技术及其产业迅猛发展的今天，标准已深化成为进入市场的一道门槛和掌控市场的一种手段。因此，应该进一步鼓励和引导企业加强自主创新，利用标准抢占市场竞争制高点。而此次标准的制定，正是由行业内的龙头企业广州达意隆包装机械股份有限公司（下称达意隆）牵头承担大任的。许占林表示：“我们欢迎更多的企业能够参与到国家标准的制定中来，希望越来越多像达意隆公司这样的优质企业能够在制定国家标准的工作中起表率作用。”

据悉，为响应广州市萝岗区打造“质量强区暨高新技术产业标准化示范区”的号召，达意隆公司于2010年向全国食品包装机械标准化技术委员会递交了成立“PET全自动旋转式吹瓶机工作组”的申请，当年年底获批并被任命为组长单位负责起草该国家标准。

达意隆公司成立于1998年，2008年1月在深交所正式挂牌上市。目前，该公司不仅是国家火炬计划重点高新技术企业、中国包装龙头企业，还是国内液体包装设备行业内第一家民营科技型上市企业和第一家国家认定企业技术中心依托单位，世界少数几家能够提供饮料生产整线的设备厂商。目前该公司的客户群体已覆盖国际国内的知名饮料企业，其中与可口可乐、法国达能公司成为全球战略合作伙伴，并于2008年与百事可乐签订了全球战略框架协议合作协议，成为百事可乐全球五家包装设备供应商之一（国内唯一）。

“达意隆非常重视自主创新，目前，我们已建有广东省饮料包装成套设备工程技术研发中心和省级企业技术中心，拥有超过160人的研发队伍，申请技术专利66项，其中发明专利22项，制定企业标准3项，独立起草行业标准2项，参与起草国家标准3项。是广东省知识产权优势企业和广州市首批创新型企业。”达意隆公司董事长张颂明告诉记者，该公司自主研发的吹灌旋一体化设备成功推向市场，成为目前全球三家有能力制造该设备的公司之一，并荣获省、市科技进步奖。此外，40000瓶/小时全自动旋转式高速PET瓶吹瓶机应用十多项专利，单腔最高产能达1800瓶/小时，填补了国内空白并达到国际领先水平。

In these days when new and high technology and high-tech industries are developing that rapidly, standards have become thresholds for entering markets and devices for controlling the markets. Therefore, enterprises shall be further encouraged and guided in making independent innovations and taking the commanding ground in market competition using the standards. It is TECH-LONG PACKAGING MACHINERY CO.,LTD. (hereinafter referred to Tech-Long), a leading enterprise in the industry, that takes the lead in laying down the standard. “The national standard establishment is open to broader participation by enterprises, and we hope that more and more excellent enterprises such as Tech-Long can play an exemplary role in establishing the national standard”, Xu said.

It is learnt that in order to respond to the call of building Luogang District, Guangzhou

into a model district of high quality and high-tech industry standardization, Tech-Long submitted its application of founding the work group of PET fully automatic rotary bottle molding machine to the National Technical Committee of Standardization on Food Packing Machinery in 2010 which was approved at the end of the year. Tech-Long was then appointed as group leader responsible for drafting the national standard.

Tech-Long was established in 1998 and listed on the stock market of Shenzhen Stock Exchange in January, 2008. The company is not only a key high-tech enterprise in the Torch Program and a leading packing enterprise in China, but also the first private listed science-and-technology enterprise and the first relying unit for state approved enterprise technology centers in the domestic liquid packing equipment industry, as well as one of the few manufacturers offering beverage production lines. The client base of the company has cover the international and domestic well-known beverage enterprises among which Coca Cola and Danone are the global strategic partners. The company signed a global strategic cooperation framework agreement with PepsiCo in 2008 which makes it one of PepsiCo's five packing equipment suppliers in the world and the only one in China.

“Tech-Long highly values independent innovations. We have established the Guangdong R&D center for beverage packing equipment technology and a provincial enterprise technology center. We have a R&D team of more than 160 members, 66 technology patents, including 22 invention patents. We have laid down three enterprise standards, independently drafted two industry standards and participated in drafting three national standards. It is a preponderant enterprise of intellectual property in Guangdong Province and one of the first innovative enterprise batch in Guangzhou”, Zhang Songming, Tech-Long Board President said, the blow-fill-cap combi-block developed by the company has been successfully launched to the market which makes it become one of the three companies in the world that have the capacity to manufacture such equipment, awarded the provincial and municipal prizes for progress in science and technology. In addition, more than ten patents are applied in the fully automatic high-speed rotary PET bottle molding machine with the speed of 40000BPH and the speed of each cavity is up to 1800BPH which makes it become the first of its kind in China and leading in the world.

摘自《广东科技报》  
Excerpt from the Guangdong Science & Technology News



达意隆董事长张颂明先生亲自接待来访的与会人员  
Tech-Long's President Zhang Songming Receives Conference Participants



工作组第一次工作会议  
Work Group's First Working Conference

# 分享就是幸福

# 关注就是力量

# Share Is Happiness, Concern Is Strength



## 达意隆携手“点滴是生命”慈善机构关注饮水难问题

### Jointly with Lotus Light Charity Society, Tech-Long Concerns Itself with Water Drinking Difficulty



一杯清水，对于生活在城市的你和我来说，是唾手可得的事，但对于1000万居住在中国西北部偏远地区的农民来说，喝一杯清纯的水却是遥远而奢侈的梦！

中国西北部是世界最干旱的地区之一，年均降雨量只有300毫米左右，但蒸发量却达1500—2000毫米以上。人畜饮水几乎全靠人工蓄集有限的雨水，人们在地下修建蓄集雨水的容器，称为水窖。因为贫穷，一般的农户根本无法修建水窖。因此，缺水成为他们生活上的最大问题。

由于缺水，不用说农户无法耕种，就连最基本的卫生条件都缺乏。要从根本解决因缺水带来的贫穷，唯有帮助他们建设可自给自足的集雨水窖。

To people living in the cities, a cup of clean water is never out of reach; but to some 10 million peasants residing in the arid regions in Northwest China, having a sip of clean water is merely a dream of luxury.

Northwest China is one of the driest regions in the world. Annual rainfall is only about 300mm while annual evaporation rate is as high as 1,500-2,000mm. Drinking water for human beings and livestock predominantly comes from the little volume of rainwater collected by water cellars, an underground container solely used for such purpose. Due to poverty, most peasants cannot afford to build a water cellar on their own, and therefore water shortage has become a major problem in their daily living.

Persistent drought has made cultivation hardly possible and the hygiene condition extremely poor. To solve the root of this problem, we have to help peasants build rain-saving water cellars, equipping them with accessible drinking water to grow crops and raise livestock on their own.



**水**是维系生命与健康的基本需求，然而目前世界上仍有超过十亿人面临饮水难问题的困扰，其中包括数以万计的儿童、妇女。在一些落后的偏远山区，水俨然成为奢侈品，已经严重影响当地人的日常生活。

面对如此现状，多年来以仁爱、善济为出发点的香港“点滴是生命”慈善机构发挥自身的资源，积极联合各级政府、媒体、企业以及社会各界人士举行了一场名为“慈善集雨水窖”的慈善活动，为国内干旱山区农民修葺水窖，改善缺水问题。

在得知这一信息后，广州达意隆包装机械股份有限公司营销总部总监张崇明先生第一时间与该机构取得联系，经过详细了解后，最终决定向“慈善集雨水窖”捐赠水窖，帮助干旱地区农民修葺水窖，缓解饮水困难问题。

一滴水，一份情，在达意隆这片充满希望的田野上，每一位达意隆人都深谙饮水思源，回馈社会的道理，张崇明先生的此次善举不仅体现了其仁慈济世之心，同时彰显了广州达意隆公司高度社会责任感和良好的社会公益意识，相信在更多社会力量参与下，中国公益事业将会得到蓬勃的发展。

Water is the basic need to support life and health, while more than a billion people including tens of thousands of children and women are facing the water drinking problem. In some undeveloped remote mountainous areas,

water has become a luxury and water shortage has greatly impacted the locals' daily life.

Facing such situation, a Hong Kong charity Lotus Light Charity Society takes advantage of its resource and actively unite governments of all levels, media, enterprises and people from all sectors of society to organize a charitable activity charity for rainwater cellars in order to build and repair the water cellars for the people living in the arid mountainous areas to relieve the water shortage problem.

Mr. Zhang Chongming, marketing director of TECH-LONG PACKAGING MACHINERY CO.,LTD. contacted the organization shortly after he heard of that. A decision of donating water cellars was eventually made after a full understanding was developed to help building water cellars and relieve water drinking problem.

A drop of water expresses a kindness. In this Tech-Long field full of hope, every Tech-Longee thoroughly understands that one shall never forget the source of benefit and gratitude for it and shall pay back to the society. Mr. Zhang's kindness presents his own kind heart and Tech-Long's strong sense of social responsibility and fair consciousness of public benefit. It is believed that China's public welfare undertaking will get thriving as a broader participation develops.

水窖是什么? 水窖和井有何分别? 水窖是用什么物料制造?

What is a water cellar? What's the difference between a water cellar and a well?

What is a water cellar made up of?

水窖是地下储水容器, 要先挖地十几米深, 然后用砖, 混泥土建成。井是为了淘用地下水, 在有地下水的上方挖造的至地下水的水深位置。

一眼水窖是包括集雨场及过滤池, 集雨场是一个很大的水泥地, 透过每年雨季下雨后, 雨水就会经过集雨场流进过滤池, 经过滤后储存与水窖内, 农民于屋外的水窖里打水就可以了。

Water cellar is an underground water storage tank, built with brick and concrete after excavating a large hole of 10-plus meter deep. A well is dug into the ground to a depth that penetrates a water-yielding formation.

A water cellar includes a rainwater collection platform and a filter tank. The rainwater collection platform is a large concrete platform, where rainwater will be led to the filter tank. After purification, water will be stored in the water cellar, allowing peasants to fetch water at their doorstep.

建水窖需时多久? Hong long does it take to build a water cellar?

建造一个水窖需时四个月并需要于雨季前完成。点滴是生命定于每年5—6月开始在各项目点动工兴建水窖, 为每年所筹得的善款落实于国内西北部地区建设水窖。因此, 如善款迟于每年5月底递交至本会, 该善款便会拨到下一年的水窖工程。此安排母的是希望能于每年9月份前为受惠农户完成水窖工程, 让水窖可以于雨季前发挥集雨功能; 此外, 每年11月至3月份是当地的冬季, 下雪会令地面冰封而变硬也会使工程无法进行, 而本会将于每年约12月左右陆续向捐款人寄出水窖的完工照片及有关受助户资料。

It takes approximately four months to construct a water cellar, with target completion scheduled before the rainy season. Actual construction will take place after winter each year, therefore any donation to LLCS later than the end of May will be allocated to the water cellar project of the following year. This arrangement is to make sure that all water cellars can be completed before September, ensuring they are in place to save rainwater before the rainy season arrives. Besides, during winter (November to March), snowing will make construction infeasible. In December, LLCS will mail the completed project photos together with details of the beneficiary to the donors for keepsake.

建水窖后, 农户的生活条件得到怎样的改善? How can water cellars improve peasant's lives?

- 1、水窖建成后, 农户无需再往返几公里以外去山沟打水、掬水、馱水或到黄河边去买水。
- 2、彻底改变了过去村民长期饮用牲畜污染源和高氟低碘水的状况高了群众的饮水质量, 减少了各种传染病和地方病的发生。
- 3、重新分配农户的生产力, 家庭青壮劳动力可以腾出更多的时间走出去读书、学技术、清洁庭院和自身卫生, 也可以投入耕种。
- 4、一眼水窖的建成, 不单以为着农户的缺水问题得到前所未有的改善, 同时也为他们带来一个簇新的庭院, 改善一家人的居住及生活条件, 感觉焕然一新。

1. With a water cellar in place, peasants will no longer need to walk far to fetch muddy water; rather they can easily access drinking water at the doorstep.

2. The quality of drinking water is significantly improved by adding fluorine with low iodine, helping reduce the spread of epidemic and local diseases.

3. Improved productivity. Those young and healthy can have more time to study and focus on personal and household hygiene, and also to work in the fields.

4. A new water cellar does not only solve the water shortage problem, but also bring peasants a brand new courtyard.

# 点滴是生命

Lotus Light Charity Society

相关链接: 点滴是生命

Further reading: Lotus Light Charity Society

点滴是生命于1998年3月27日根据香港特别行政区慈善机构牌照规例成立, 是注册慈善团体。税局档号档号: 91/5246

该慈善机构的宗旨为服务社会, 救济贫苦, 自成立以来, 点滴是生命投入各类的慈善工作, 造福社群。主要的活动包括: 为国内干旱地区筹建集雨水窖、多次返回祖国内地偏远地区赈灾、助学、扶贫、及定期在全港十八区为区内贫苦无依的长者举办大型慈善表演和派发物资, 探访老人院等。自2004年起, 积极投入集雨水窖项目, 现已为国内西北部干旱地区建成30,000眼水窖, 为超过15万人改善缺水问题。至今, 透过各项慈善活动服务超过50万人。

LLCS is a non-profit making charity organization founded and registered with the HKSAR Government on March 27th, 1998. (IRD Ref.: 91/5246)

LLCS works for the society and helps the poverty. It has been sparing no effort in all kinds of charity works since its incorporation. Regular activities include: raising funds to build rain-saving water cellars in the arid regions in Mainland China, as well as organizing relief efforts for natural disaster victims, education support and poverty relief programs. Locally we also organize large-scale variety shows for the elderly across 18 districts in Hong Kong, giving away gift-packs and making regular visits to elderly homes. Since 2004, we have been actively involved in the rain-saving water cellar project. So far, 30,000 water cellars have been completed in China's dry Northwest, helping more than 150,000 people resolve the water shortage problem, with more than 500,000 people benefiting from our various charitable activities.

Text and Picture by: Ni Yongsheng / Yang Liu



# 回馈社会 慈善羊城

## Repay Society

## Charity in Guangzhou

——达意隆获首届“羊城慈善奖”

Tech-Long Awarded First Guangzhou Charity Prize

达 意隆十年的发展离不开社会各界的关怀与支持，也希望通过一些方式和途径来回馈社会，因此公司一直强调企业对社会的责任感，并一直关注希望工程、新农村建设、社会教育事业及灾后重建等。

今年，广州市首度设立“羊城慈善奖”，以表彰为广州市慈善事业作出突出贡献的机构和个人。本次评选表彰活动共设“羊城慈善先进集体”和“羊城慈善先进个人”两个奖项，经“羊城慈善奖”评审小组评定，达意隆被广州市慈善会评为羊城慈善先进集体。今后，公司将继续发扬了雪中送炭的精神和国际人道主义精神，履行一个企业所承担的社会责任，积极回馈社会。

Tech-Long's ten-year development relies on the concern and support from all sectors of the society and it hope to pay back to the society by certain ways. The company places emphasis on the sense of responsibility for the society and concern itself with the Hope Project, new countryside construction, social education and post-disaster reconstruction all the time.

The first Guangzhou Charity Prize was set up this year to recognize and commend the organizations and individuals who has made outstanding contribution to Guangzhou's charity. Two awards namely Outstanding Organization and Outstanding Individual are set. Tech-Long was honored as an "Outstanding Organization" by the Guangzhou Charity Society upon the assessment. For the future, the company will carry on the spirit of provide timely help and international humanism, fulfill its social responsibility that an enterprise shall undertake and actively pay back to the society.

Text by: Deng Ruili / Picture by: Wang Yannan

广州市开展广东扶贫济困日暨广州广州慈善日活动动员表彰大会合影 2011.6.28



# 服务型经济体系中的 可持续发展战略 Sustainable Development Strategy in Service Economy

专访广州达意隆包装机械股份有限公司营销总监张崇明先生  
Special Interview with Mr. Zhang Chongming, Tech-Long Marketing Director

**成** 熟、高度发达的服务型经济（或称体验型经济）已成为美国经济增长的关键促动力。在中国，特别是在中国的生产制造领域中，作为第三类产业，服务经济的崛起将是对旧有行业发展模式的一次新的启迪。投资生产线、引进技术、完善基础设施建设……

企业的持续发展，在搭建这些主动脉的过程之外，不能脱离服务型经济增长模式——大动脉边缘丰富的静脉与毛细血管的营养和丰沛。从服务经济领域借鉴适当的驱动力，将帮助中国制造业企业拥抱更多的契机。关于这一点，广州达意隆包装机械股份有限公司的营销总监张崇明先生显然很有见解。

The mature and highly-developed service economy (or experience economy) has become the key force to promote the economic growth in America. In China, particularly in China's domain of manufacture, as part of the tertiary industry, the growth of service economy is new enlightenment for old industry's development mode. Production line investment, technology introduction, infrastructure construction...

An enterprise's sustained development can not be divorced from the growth mode of service economy. Learning from service economy will help China's manufacturer to grasp more chances. Apparently, Zhang Chongming, Marketing Director of TECH-LONG PACKAGING MACHINERY CO.,LTD has his view on that.



张总您好，首先请您介绍一下，达意隆公司作为国内领先的液态食品包装设备生产企业，在2010年所取得的成就、今后的发展策略，以及在这个过程中您作为企业领导者的感悟。

Nice to meet you, Mr. Zhang, would you please talk about the accomplishments Tech-Long has made in 2010 and the future development strategy as a leading liquid food packing equipment manufacturing enterprise at home and your reflection as a leader?

张崇明先生：我在这里提供一个数据：2010年，仅仅在出货环节，达意隆便实现了强劲的增长，创造出了历年来最高的出货业绩——6.5个亿，并同期实现了收款高峰，以及销售利润的最好成绩。

在企业飞速发展的过程中，我们所面临的局面一直是瓶颈与契机的混合体。达意隆成长的轨迹，其实一直描绘出了一条可持续发展的曲线：在我们的营业收入从1个多亿激增到3个多亿时，我们的资金和管理模式也面临了新的挑战，这也是达意隆在后来选择上市的原因——在取得了阶段性成就的前提下，以创新的方式应对新时期的挑战和考验。

对于已坐稳国内液态食品包装机械领域头把交椅的达意隆而言，快速、激烈的增长已不是我们的目标：任何企业在实现了一定的规模、引领着行业前进的脚步、代表着业界未来的发展趋势时，所做的正确选择一定是，以缓慢的脚步、审慎地实现可持续的发展。在未来的两、三年中，我们希望能够以每年20%~30%的增长率实现平稳的增长和过渡，建立长远的规划、形成清晰的发展思路，同时逐步完善我们的经营、管理环节。在这个过程中，我们将逐步完成积累和沉淀，像建立我们厚重的企业文化一样，为企业的发展注入更深刻的内涵，而不偏向浅显、急功近利的增长方式。

Mr. Zhang: Here I can offer you a figure.



In 2010, Tech-Long's delivery order was 650 million which was the highest in the past years and made a peak payment collection and a highest selling profit in the same year.

In the rapid development, we are facing a situation mixing bottlenecks and turning points. Tech-Long's growth course depicts a curve of sustainable development. Our turnover had once sharply increased to more than 300 million from 100 million while our fund and management faced new challenges and that's why Tech-Long chose listing. It is our innovative way to deal with the challenges and trials in the new period based on the stage accomplishment.

For Tech-Long who has been holding the stable leading position in the domestic filed of liquid food packing machine, a rapid and sharp growth is no longer the goal. The correct choice must be sustainable development with slow steps and prudent attitude. In the next two or three years, we hope that we can realize a steady growth and transition with an annual growth rate of 20% to 30%, map out a long-term plan, come up with clear ideas for development and in the same time progressively improve our operation and management. In this process, we will gradually achieve accumulation and accretion, just like the process we cultivate our profound culture, to give a deeper connotation for the enterprise's development, instead of

pursuing shallow growth mode that brings quick success and instant benefits.

### 研发创新，服务“技术需求”

### R&D Innovation Satisfies Technical Demand

企业注重发展软实力，提升服务体系的质量，也需要硬件设施的支撑，那么请问达意隆在硬实力的发展方面将做出哪些努力？

An enterprise needs hardware to support its soft strength development and service system quality improvement. How will Tech-Long do in the aspect of developing hard strength?

张崇明先生：2010年，达意隆最大的成就在于建立了国家级的研发中心，跻身全国为数不多的800余家国家级研发中心的精英企业之列。国家级研发中心的建立体现了国家对包装机械本土市场及民营高新技术企业的有力支持。作为上市公司及行业中的标杆企业，达意隆具备了获准建立国家级研发中心的资质。在此研发中心建立之后，达意隆将可借用更强大的资金支持，为业界、客户带来更加丰富的技术创新成果，更多地回馈国家、市场及客户，实现国家与企业的双赢局面。

作为拥有包装机械行业中唯一的国家级研发中心的高新技术企业，达意隆将在今后借用来自两个渠道的、强劲的研发资金的支持：在国务院和发改委等相关部门对国家级研发中心的支持下，享受可观的研发资金的支持；同时，达意隆对技术研发一直倾情关注，每年将来自企业自身的、占据销售收入6%~9%的资金用于进行技术创新。

此前，在没有来自国家研发资金注入的前提下，达意隆凭借自身实力研发出的吹、灌、旋一体化包装机械产品，填补了中国包装机械行业在国际同类市场中的技术空白。在当前两

个资金渠道的强劲支持下，达意隆将获得新产品从研发到市场推广的有力资金支持，以更出众的技术优势，为客户提供技术服务，同时为市场和业界发展提供支持和驱动力。

Mr. Zhang: In 2010, Tech-Long's remarkable accomplishment is founding a national R&D center and which makes it enter into the ranks of the some 800 top enterprises that have a national R&D center. The establishment of the national R&D center presents the vigorous support given to the local packing machine markets and the private high-tech enterprises by the State. As a listed and model enterprise in the industry, Tech-Long is qualified to the approval of establishing a national R&D center. With the R&D center, Tech-Long can lean on a more powerful capital support to create more technology innovations for the industry and the customers, to pay more back to the country, market and the customers and to achieve a win-win victory between the State and the enterprise.

As the unique high-tech enterprise with a national R&D center in the packing machine industry, Tech-Long will make use of the powerful R&D fund support from two channels: considerable sum of R&D funds from the State Council, the National Development and Reform Commission and other departments concerned and the R&D funds of 6%~9% of turnover from Tech-Long itself.

Before the State R&D funds are injected, Tech-Long filled in a gap in the field of technology in China's packing machine industry in the international market of its kind with its own blow-fill-cap combi-block. Funds from these two channels give Tech-Long a powerful capital support to develop new products and launch them. With more conspicuous technical superiority, we will offer our customers best



# 低碳时代，我们先行！

## LOW CARBON ERA, WE ADVANCE AHEAD



550ml, 9.8g

达意隆为全球少数几家同时掌握PET吹瓶和灌装两大关键技术的供应商，基于丰富的整线项目经验，整合“吹瓶技术”和“灌装技术”，是吹灌旋设备技术的根本保障。

Tech-Long is one of the few suppliers who masters both “PET blowing molding” and “filling” technologies. Based on experience on whole line management, and combining “PET blowing molding” technology with “filling” technology, the BFC combi-block technology becomes more and more mature.

吹灌旋一体设备  
BFC (Blowing-Filling-Capping) Combi-block



technical service and provide the market and industry with support and driving force.

### 整合营销，服务“体验经济”

### Integrated Marketing Serves Experience Economy

为企业的发展注入更深刻的内涵，是否意味着达意隆在发展过程中整体策略的转型？

Whether giving a deeper connotation for the enterprise's development means transforming the overall strategy in the developing process?

张崇明先生：从中国制造业的整体发展进程来观察，我们可以注意到，以廉价的劳动成本为代价，中国制造业已经吸引了众多外资资本的注入。这些外资带来了大量的就业和发展机会，与民营资本的注入共同形成了中国经济的促动力。但在中国市场中，在建立硬实力的背后，我们对软实力的关注和建设实际上是欠缺的。

软实力的建设其实可被理解为服务经济体

系的建立或体验型经济增长方式的建立，这其实是对投资等硬件建设行为的丰富和营养补充。以我们熟悉的汽车行业为例，汽车行业产品最主要的利润来自于服务环节——维修等环节，同时这也是树立企业形象的关键环节。在包装机械行业中，领先企业的最大利润也来自于服务环节、特别是备品备件的销售业绩，这个比例甚至超过了企业整体销售利润的15%。

在这一策略的指向下，在2010年，达意隆进行了重大的策略调整——整合了销售、工程与配件服务部门，实现了对三个部门的一条龙式管理模式。在创新的机制下，达意隆可在第一时间内寻找到客户针对服务环节的需求并跟踪销售机会，同时也可将应对客户需求的响应速度提高到一个新的高度。这种创新的机制将方便达意隆更快速地跟进市场变化的趋势，更细分地满足来自客户和市场的需求，更完善地为客户提供全方位的服务支持，实现于客户、企业的双赢局面。事实上，作为构成未来竞争核心力的服务环节，其终极目标为配合及快速响应来自客户、市场、销售机会的需求。



Mr. Zhang: Observing the overall developing process of China's manufacturing industry, it is noted that at the cost of cheap labor force China's manufacturing industry has attracted numerous foreign capital which has brought about numerous employment and development opportunities and then become jointly with private capital to promote China's economy. However, behind the hard strength construction in China's market, our concern and construction on soft strength is insufficient.

The construction of soft strength can be interpreted as the establishment of the system of service economy or establishment of growth mode of experience economy. This is actually the enrichment and supplement for hardware construction such as investment. To take the auto industry which is familiar to us as an example, the primary profit comes from the service-maintenance link which is also the key link in portraying company image. In the industry of packing machine, the primary profit of a leading enterprise also comes from the service link, particularly from the sales achievement of spare parts which even takes up more than 15% of the total profit on sales.

Under the guidance of such strategy, Tech-Long made significant

policy adjustment, namely, integrating the departments of sales, engineering and parts and after service in 2010 and realizing the streamlined management on the three departments. Through this innovative mechanism, Tech-Long is able to find out the customers' demands for service link and track the sales opportunities as soon as possible and speed up response to the demands to a new high extent. Such innovative mechanism will enable Tech-Long to faster follow the market change trend, to meet even detailed needs from customer and the market, to provide the customers with all-round service and to achieve a win-win victory between the customers and the enterprise. As a matter of fact, the service link, as the core competitiveness in the future, aims ultimately at meeting and rapidly responding to the demands from the customers, market and sales opportunities.

### 战略优化，服务“业界趋势”

## Strategy Optimization Serves Industry Trend

如果企业具备了在硬件条件和软件服务方面的双重优势，达意隆将如何为企业、甚至行业的发展提供创新的思路？因为我们知道在一定程度上，达意隆这样的企业的脚步其实可以引领行业的整体前进方向。

It's known that, to some extent, the footsteps of enterprises such as Tech-Long can lead the overall forward direction of the industry. How Tech-Long will provide innovative ideas for its or even the industry's development if it already has the superiority in both hardware and software?

张崇明先生：在全球液态食品包装领域中，轻量化、回收再利用等环保技术已成为全球液态食品包装行业的主流趋势。作为一种相对成熟的技术，它已经风靡欧洲市场多年。在欧洲瓶装饮

料市场中，消费者在购买瓶装饮料产品时所支付的税已经超过了产品本身的价格。这一策略很好地促进了塑料容器的回收再利用进程。在中国，环保的概念还没有为业界和消费者所广为接受。

在企业社会责任项目（CSR）的引领下，液态食品行业中的领军企业——比如可口可乐、百事可乐等公司，正在中国市场推广其长期践行的低碳、环保策略。因此，作为这些行业翘楚企业的下游服务商及中国包装机械行业低碳策略最优秀的践行者，在持续的技术研发和创新的支持下，达意隆适时将发展策略进行了优化和调整——关注低碳、环保策略，关注洁净能源、清洁生产、能源消耗及节能降耗。在此背景下，我们所推出的超轻量瓶以及低碳环保的吹、灌、旋一体化饮料包装设备，便成为了这个策略下的两个成功产物。

在这里，我们以一款常规的水产品的包装为例：当容器的瓶重由17g降低为10g-11g时，包装容器仅在材料方面便削减了6g的原始材料用量，这便实现了包装在材料环保领域的突破。而包装容器通常使用的PET材料，肩负着义不容辞的环保责任，因为它来自于石油，是不可再生资源的附属产品；在污染物排放方面，克重降低的瓶型也将削减生产过程中污染物的排放量，以及优化生产过程总体的碳足迹；在设备应用方面，应用吹、灌、旋一体化的饮料包装设备，设备的能耗和占地空间的削减是非常可观的。例如，三条每小时生产10万瓶水的生产线，便带来了10万吨水的消耗量，而达意隆的吹、灌、旋一体化饮料包装设备无需使用水来进行清洁，将对珍贵的水资源的耗费降至零点；常规的生产线通常需要建设100米-200米的风道，随后带来的风机及其产生的热能和电能消耗问题，均可以通过应用吹、灌、旋一体化的饮料包装设备而避免。在直接或间接的环保收益中，轻量化的瓶型及其相关技术可以帮助企业削减大量成本，合理优化和调配社会资源，实现企业与社会共赢的局面。

事实上，轻量化技术的入门门槛相对较高。



这项技术的实现，需要企业具备在资金、理念、研发、技术、经验、管理、外围环境等各环节中的相当实力。达意隆在攻克轻量化技术的过程中，曾遇到并解决了超过100项技术瓶颈及难关。在奠定了强劲的吹瓶和灌装技术的基础平台之后，达意隆吹、灌、旋饮料包装一体化设备应运而生，成为国内液态食品灌装、包装领域中的唯一一家可提供轻量化瓶型及其整线生产技术的高新技术企业。

Mr. Zhang: In the field of global liquid food packing, eco-friendly technology such as lightweighting and recycling has become the main stream and trend in the global liquid food packing industry. As a relatively mature technology, it has been a fever spread throughout Europe for years. In European bottled beverage market, the tax paid has outnumbered the product value when a consumer buys a bottle of beverage. This policy greatly promotes the recycling progress of plastic containers. While in China, the concept of environmental protection has not been widely accepted by the industry and consumers yet.

Under the guidance of China CSR Map, leading companies in the liquid food industry such as Coca-Cola and PepsiCo are popularizing their low-carbon eco-friendly policy in China's market which has been carried out for a long time by them. As a downstream service supplier for top companies in the industry and a most outstanding low-carbon policy practitioner in China's packing machine industry, under the sustained support of technology R&D and innovation, Tech-Long timely optimize and adjust its development policy which focuses on low-carbon and environmental protection, clean energy and production, energy consumption and conservation and reducing energy consumption. Against such background,

we have launched the extremely lightweight bottle and the low-carbon eco-friendly blow-fill-cap combi-block which are the two successful outcomes from this policy.

Here let's take a conventional packing for water product as an example. When the bottle weight of 17g is reduced to 10g-11g, 6g of raw material will be saved which is a breakthrough in the material aspect. PET which is usually used for packing containers shoulders the responsibility for environmental protection that admits of no excuse for it comes from petroleum which is non-renewable. As for contaminant discharge, the bottles losing their weight will also reduce the contaminant discharge and optimize the carbon footprint in the manufacturing process. As for equipment application, the reduction of equipment consumption and space occupied is highly considerable when applying the blow-fill-cap combi-block. For example, three production lines with the output of 100000BPH need a water consumption of 100000 tons while Tech-Long's blow-fill-cap combi-block enables the consumption to drop to zero because the cleaning process does not need water. A conventional production line usually requires a 100-200m air conveyor resulting in heat generating and power consuming problems. However, these problems can be avoided through applying the blow-fill-cap combi-block. Among the direct or indirect profits gained from environmental protection, lightweight bottles and relevant technologies can help the enterprise in cutting substantial cost, optimizing and allocating social resources and achieving a win-win victory between the enterprise and the society.

As a matter of fact, the entry threshold for lightweighting technology is relatively

high. To accomplish this technology requires considerable strength in all links such as capital, ideas and concept, research and development, technology, experience, management and outer surroundings. In the process of accomplishing lightweighting, Tech-Long encountered and overcame more than 100 technical bottlenecks and difficulties. Based on a solid and strong ground of blowing and filling technologies, Tech-Long's blow-fill-cap combi-block came to the world as times require enabling Tech-Long to become the unique high-tech enterprise offering lightweight bottles and technology of the whole production line in the domestic field of liquid food filling and packing.

## 内延外展，服务“新兴市场”

### Interior Extension Serves Emerging Markets

现在，达意隆已在饮料包装行业中取得了令国内同行难以望其项背的成就，那么您又如何看待达意隆在新兴市场中的机会呢？达意隆将采取怎样的策略来发掘贵公司在创新市场中的契机？

Since Tech-Long has made incomparable accomplishments in the beverage packing industry, what is your view of opportunities that Tech-Long has in the emerging market? What policy will Tech-Long take to find out its turning points in the new market?

张崇明先生：除了在传统的饮料行业中积累的长期优势，达意隆的业务领域拓展方向主要为调味品、日化品及食用油行业，我们在相关领域中也取得了比较可观的成就。

在调味品行业，以酱油、醋产品为例，该类产品以玻璃瓶及PET瓶为主要的包装形式，产品对灌装、特别是灌装阀门的要求很高，不允许出现滴漏的现象。凭借领先的技术优势，在短短两

年间，达意隆已在酱油、醋等调味品领域中取得了非常大的成功。调味品对灌装速度的要求相比饮料、水产品而言并不苛刻（当前国内产能最高的一条调味品生产线的灌装产能为24000瓶/小时），而一般来说酱油产品的生产速度为不到12000瓶/小时。因此，基于我们在饮料行业所积累的传统优势，达意隆完全可以满足各规模调味品企业的生产所需，并将中、高速的灌装生产线视为主要的目标市场。目前在调味品领域，达意隆的合作客户已包含了海天、东古、美味鲜、欣和、富氏等调味品生产企业。

在日化领域，鉴于与宝洁等全球知名日化生产企业所实现的长期、优质的合作，达意隆已具备很强劲的实力与操作平台。至今，宝洁公司每年与达意隆都能就洗发水、洗手液等产品展开合作。日化行业集中了最多的异型瓶、异型盖，以及高粘稠度产品的灌装需求。在满足这些苛刻需求的过程中，达意隆逐步积累了强大的实力平台，进而奠定了进军日化用品行业的基础。当前，达意隆也与国内知名的日化产品生产企业——蓝月亮洗手液实现了合作。我们正在等待国家针对日化用品行业相关产业政策和标准的出台，以迎接深度进军日化产业的良好契机。

可以想见，达意隆所开拓的新兴市场，均得益于国家对相关行业的严格监督和支持，以及我们对新兴市场所始终持有的、敏锐的洞察力。国家相关产业政策的出台，可以确保市场进入健康发展的轨道、保护包装机械产品的市场价格以及企业的合理利润，避免企业以牺牲品质为代价而削减成本，维护正常的行业秩序和健康的游戏规则。在商机无限的食物、饮料、日化行业中，国家抬高针对相关行业的门槛之日，便是达意隆这类在理念、技术、企业社会责任感等诸多层面上均处于行业领先地位的企业的契机到来之时。我相信届时，达意隆将拥抱更多的发展契机。

Mr. Zhang: Tech-Long has accumulated long-term superiority in the traditional beverage

industry. Besides that, its business primarily expands the industries of flavoring, daily chemicals and edible oil and considerable achievements have been made.

In the industry of flavoring, for examples, soy and vinegar are packaged in glass bottles and PET bottles which require much for filling, especially filling valves, no leakage allowed. Depending on its leading technical strength, Tech-Long has achieved significant success in soy and vinegar packing within only two years. Condiments do not require a filling speed as fast as beverage and water do (Currently, the filling speed of the highest condiments production line in China is up to 24000 bph, while the speed of soy products is no more than 12000 bph. Consequently, based on our traditional advantage accumulated in the beverage industry, Tech-Long is able to meet the requirements for condiments companies of all scales and take the medium and high speed filling lines as the main target market. By now, Tech-Long's customer base covers Haday, Donggu, Meiweixian, Shinho and Fortune Food (China) in the flavoring field.

In the industry of daily chemicals, seeing the long-term and high quality cooperation with world famous daily chemicals manufacturers such as P&G, Tech-Long has already have powerful strength and operational platform. Every year, P&G and Tech-Long will cooperate in products like shampoo and liquid soap. Numerous special-shaped bottles and caps are used in the industry of daily chemicals, as

well as filling requirements for products with high viscosity. In the process of satisfying these rigorous requirements, Tech-Long gradually builds a powerful strength platform and the foundation of expansion to the industry of daily chemicals is laid down. In addition, Tech-Long is currently cooperating with Bluemoon, the well-known daily chemicals manufacturer at home. We are waiting for the birth of appropriate policy and standard made by the State to grasp the opportunity of expansion to the industry of daily chemicals.

It can be inferred that the emerging markets developed by Tech-Long benefit from the rigorous supervision and support by the State and our keen insight into the emerging markets. The appropriate national policy ensures that the market develop on a healthy track, protects market prices of packing machinery products and reasonable profits for the enterprises, prevents the enterprises from cutting down the cost at the cost of sacrificing quality and maintains the industry order normal and rules healthy. In the industries of food, beverage and daily chemicals full of business opportunities, the moment for enterprises leading in idea, technology, sense of social responsibility and other aspects like Tech-Long will come when the State raises the corresponding entry thresholds. I believe that Tech-Long will then have more chances for development.

*Text and Picture by: PP Cao Xiao / TL Yang Liu*



# 信者，联创未来。 智者，通成伟业。



# 热烈祝贺合肥达意隆包装技术有限公司成立

## Congratulations on Establishment of Hefei Tech-Long Packaging Machinery Co.,Ltd

近年来，随着经济回升，人们对健康饮料、饮用水的需求持续上升，瓶装饮用纯净水和矿物质水更是以年增长一倍的发展势头迅速上涨，特别是地处中国中东部地区的合肥等地需求量很大。

为了将环保轻量化技术推广到全国各地，可口可乐公司加大与达意隆合作的力度。在继深圳达意隆包装技术有限公司后，双方再次强强联手，2011年6月2日，达意隆在合肥成立了合肥达意隆包装技术有限公司，此项目总投资3000万，厂房建筑面积1897m<sup>2</sup>，目前员工人数50人，年产量预计在1亿瓶水，年产值大约在4800万元左右，投产后公司主要经营包括包装技术研发及相关信息咨询；生产销售瓶装纯净水、矿物质水，同时兼销售塑料原料及产品。

目前，水厂内有一条24000BPH全自动的生产线，主要生产设备吹灌旋一体机、包装机均出自达意隆，现正处于安装调试阶段。合肥达意隆包装技术有限公司的成立，主要致力于环保轻量化瓶的生产，正式投产后可大大降低塑料产品的消耗，减少环境污染，产生巨大的经济效益和社会效益。

In recent years, as the economy gradually recovers, the demand for healthy beverage and potable water has experienced a continuous increase and bottled potable pure water and mineral water are rapidly increasing, showing an annual doubling growth trend, particularly in

the central and east areas such as Hefei City.

To promote the environment-friendly lightweight technology all over the country, Coca Cola enhances the cooperation with Tech-Long. On June 2rd, 2011, Hefei Tech-Long Packing Technology Co., Ltd was established after the establishment of Shenzhen Tech-Long Packing Technology Co., Ltd. The total investment is 30 million, and the plant takes an area of 1897m<sup>2</sup>. There are fifty employees by now. The annual output is expected to be 100 million bottles and the annual output value is about RMB 48 million. The primary business covers packing technology R&D and consulting service, producing and selling bottled pure water and mineral water, as well as the plastic raw material and products.

So far, there is a 24000BPH fully automatic production line in the plant. The main production equipment—blow-fill-cap combi-block and packing machines are manufactured by Tech-Long which are in the installation and commissioning process. Hefei Tech-Long Packing Technology Co., Ltd focuses on producing environment-friendly lightweight bottles. The official operation will greatly decrease the plastic consumption, reduce environmental pollution and bring about great economic and social benefit.

### 相关链接 FURTHER READING :

达意隆作为饮料企业的息息相关的设备供应商，2009年8月份，广东太古可口可乐携手广州达意隆包装机械股份有限公司开启了轻量化项目。双方强强联手以一种加工承揽的方式，把环保型轻量化瓶推向社会，这个项目启动后迅速掀起了一股“环保、低碳”绿色风暴，得到了社会各界的积极响应。

2010年4月26日，可口可乐在深圳首推“冰露”环保轻量化瓶取得轰动性效果后，从5月份开始，“冰露”已经陆续在西安、厦门、合肥等城市震撼上市。

Tech-Long, as an equipment supplier bound up with beverage enterprises started the lightweight project jointly with Swire Coca-Cola GD in August, 2008. The both parties cooperate in popularizing environment-friendly lightweight bottles through signing a OEM contract. This project has prompted an “environmental protection and low-carbon” green storm since it got started and produces a positive response from all sectors of the society.

On April 26th, 2010, Coca-Cola launched Icedew environment-friendly lightweight bottle and gained resounding result. Icedew has been available on the market in Xi'an, Xiamen, Hefei and other cities since May.

Text by: Fan Rund / Ni Yongsheng



# 达意隆：世界在变，品质不变

## Tech-Long: World Is Changing, Quality Retained

品质是企业对产品的严格要求和对消费者庄严的承诺，更是企业的一项重要战略目标。基于这样的战略，2010年，达意隆建立了**国家级的研发中心**，跻身全国为数不多的国家级研发中心的精英企业之列。

*Quality is an enterprise's strict requirement for its products and a solemn commitment given to the consumers, as well as an important strategic goal. Based on such strategy, Tech-Long founded a national R&D center in 2010 and entered into the ranks of the few top enterprises that have a national R&D center.*



2011，达意隆将本年度确定为“质量年”，在这一战略的指导下，公司的各项工作将回归产品源头，以生产制造为本，加大产品的研发力量的投入，提升产品品质作为重点。明确从产品品质和过程质量控制两个维度狠抓质量问题，同时将技术规范化管理、提升技术创新水平和加强工艺控制管理作为切入点实现品质管理上的创新。

围绕品质这一企业生命线，达意隆进行广泛的宣传。针对员工，各事业部门安排各种培训活动，进一步强化员工的品质意识。公司每年都将销售额6%-9%的资金用于技术研发和创新，在竞争激烈的包装机械行业中越战越勇，达意隆的新产品、甚至到每一个零配件都是经过无数次的检测才面市，确保无故障的情况下才正式投入使用，因此每一个印有达意隆商标的产品都是质量的保证。

企业制定国家、行业的标准是建立在技术领先，质量过硬的前提之下，近年来，达意隆凭借着自身的优势积极参与国家、行业各项标准的制定。2011年3月23日，达意隆牵头制定PET全自动旋转吹瓶机国家标准。接下来，达意隆将一如既往的协助全国包装机械标准化技术委员会的各项活动，为行业的规范和发展贡献力量。

The year of 2011 has been confirmed to be a “year of quality” by Tech-Long. In the light of this strategy, all programs will return to the source, based on producing and manufacturing, the company will increase fund input in R&D, focus on upgrading product quality, carry out strict quality control on both product quality and process quality, achieve innovation on quality management through technology standardization management, upgrading technical innovation level and strengthening process control management.

Tech-Long gives wide promotion about quality—the lifeblood of the enterprise. All departments arrange various training activities for the employees to further enhance their quality awareness. The company spends 6%-9% of its turnover in technology R&D and innovation every year and fights its bravest in the fierce packing machinery competition. Tech-Long will give numerous tests on each single product or even each single part of it before putting it into the market and officially put it into service when no fault comes out. Therefore, a product marked with Tech-Long label is guarantee of quality.

Leading technology and top quality are the premises on which an enterprise is able to lay down national and industry standards. In recent years, depending on its advantages, Tech-Long play a positive role in establishing various national standards and industry standards. On March 23th, 2011, Tech-Long took the lead in laying down national standards for PET fully automatic rotary bottle molding machine. In the future, Tech-Long will assist the National Technical Committee of Standardization on Food Packing Machinery in various activities as always to make a contribution to the standardization and development of the industry.

摘自《国际商报》

Excerpt from the International Business Daily



## 引领行业趋势，唱响“绿色”旋律

Lead Industry Trend, Troll Green Tune

2011年3月23至24日，《2011中国液态包装技术创新及市场发展趋势论坛》在广州鸣泉居度假村隆重拉开序幕，来自全国液态包装领域的40多家企业近百名代表齐聚一堂，共商行业发展大计。本次论坛的中心议题主要围绕着：降低成本，实现精益生产；液态行业可持续性发展蓝图；液态包装技术的最新进展。会上，作为液态产品包装设备行业的龙头企业——广州达意隆包装机械股份有限公司凭借轻量化吹灌旋一体机再一次向行业展示其“绿色”本色。

首日，来自达意隆公司市场部经理周桦先生以《PET瓶轻量化解决方案实践与探索》向与会代表展示了达意隆超强的实力和环保节能的理念。会议结束后，光明乳业、金威啤酒、珠江啤酒等二十多家企业代表在达意隆相关人员的陪同下参观了达意隆广州总部的工厂车间并进行了技术上的交流。

During March 23th to 24th, 2011, the forum on China's Liquid Packing Technology Innovation and Market Developing Trend 2011 was held in Guangzhou Oriental Resort. A hundred representatives or so from more than

40 companies in the liquid packing industry attended the forum to discuss matters of vital importance. The core topic for discussion centers on cost reducing, lean production, blueprint for sustainable development and the up to date liquid packing technology progress. In the forum, the leading enterprise in the industry of liquid product packing equipment—Tech-Long presented its green nature again with its lightweight blow-fill-cap combi-block.

In the first day, Mr. Zhou Hua, Marketing Manager of Tech-Long, expressed Tech-Long's extremely powerful strength and its idea of environmental protection and energy saving to the participants with a speech Practice and Exploration of PET Bottle Lightweighting Solutions. After the meeting, representatives from over twenty enterprises like Bright Dairy, Kingway Brewery and Zhujiang Brewery visited Tech-Long's plant in its headquarters in Guangzhou and exchanged technical experience.

Text and Picture by: Ni Yongsheng

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# 热烈庆祝东莞达意隆水处理技术有限公司隆重开业！

## Congratulations on Opening of Dongguan Tech-Long Water Treatment Technology Co., Ltd

为了进一步提高水处理设备的市场拓展能力和生产能力；增强公司水处理设备的竞争力，经过一段时间的精心筹备，达意隆正式成立了全资子公司——东莞达意隆水处理技术有限公司，并举行了简单而隆重的开业仪式。

开业当天上午，阳光明媚，东莞达意隆厂区处处洋溢着喜庆的气氛，主干道上整齐的摆满了道贺的花篮。参加仪式的除了东莞达意隆员工，还有达意隆本部高层和流体事业部骨干人员及部分嘉宾。大家饶有兴趣地参观了新的厂区和车间现场生产现状。

此次，东莞达意隆进行了两项重大活动：一是承办了“达意隆年度水饮料营销管理经验交流会”的水处理设备展览；二是筹办东莞达意隆开业仪式。东莞达意隆将以此为契机，不断开拓创新，争取再创新高！

In order to further improve the market expansion capability and production capacity of water treatment equipment and strength the competitiveness of the company's water treatment equipment, after a period of prudential

preparation, Tech-Long set up its wholly-owned subsidiary— Dongguan Tech-Long Water Treatment Technology Co., Ltd and held a simple but solemn opening ceremony.

It was a sunny opening morning when the whole Dongguan Tech-Long plant was in cheerful atmosphere and flower basket fully occupied the thoroughfare. Dongguan Tech-Long's employees, as well as the management of the headquarters, key members of the liquid department and some guests attended the ceremony and visited the new plant and workshops with great interest.

The two significant activities arranged by Dongguan Tech-Long were an exhibition on water treatment equipment for Tech-Long's annual meeting on beverage marketing management experience exchange and the opening ceremony of Dongguan Tech-Long. Dongguan Tech-Long will take this chance to explore and to innovate in order to make more outstanding accomplishment.

### 相关链接 FURTHER READING :

东莞达意隆脱胎于原流体事业部制造部。流体事业部成立于2010年3月，人员从原灌装事业部水处理和前处理相关人员统一划转。达意隆水处理设备已经具备一定的技术基础，且市场前景广阔。子公司是一个新的发展平台，体现了公司将水处理设备业务做大做强的意愿。今年7月起公司开始筹建东莞分公司，随后9月-10月完成搬迁。东莞达意隆位于东莞市东城区莞城大路岭地段，靠近莞深高速、广惠高速，距离广州总部约50分钟车程。新厂占地30亩，拥有近7000平方的制造车间，并有配套的办公楼、食堂、宿舍、篮球场等。

Dongguan Tech-Long derives from the original manufacture division of liquid processing department which was founded in March, 2010 and of which the personnel came from the original filling department working in water treatment and pretreatment. Based on certain supporting technology, Tech-Long's water treatment equipment has a bright market prospect. The subsidiary is a new developing platform showing Tech-Long's desire to develop the business of water treatment equipment to a large scale and robust status. The company started the preparation work of setting up Dongguan Tech-Long since July 2010. The migration work has been finished in September – October. Dongguan Tech-Long is located in the section of Daluling, Guancheng, east of Dongguan, near Dongguan-Shenzhen freeway and Guangzhou-Huizhou freeway. It is a 50-minute drive from Dongguan Tech-Long to its headquarters in Guangzhou. The new plant occupies an area of 30 acres and the manufacturing workshop occupies an area of some 7000m2. The plant is equipped with office buildings, canteens, dormitories and basketball courts.





## 【领导寄语】

# LEADERS' WORDS OF HOPE

张赞明（东莞达意隆执行董事兼总经理、流体事业部总监）左

Zhang Zanming (Dongguan Tech-Long's Executive Director and GM, Director of Liquid Processing Department) on the left

公司的发展扩大，对员工来说意味着更大的可以一展才华的舞台。公司领导希望员工能与公司共同成长。像东莞达意隆这样处于起步阶段的子公司、新部门，需要管理人员，需要技术能手。相比新人，公司更愿意起用熟悉公司状况的优秀老员工。

大家都有共同的起点，如果你不愿意去突破，去抢占山头，那就只能是等着失守。公司已经铺好路，你先走一步，你多走一步，就可能获得更好的发展空间。

The expansion means a larger stage for its employees to display their talent. We hope that our employees grow together with the company. A new company in its initial stage like Dongguan Tech-Long requires management and master technicians. Our company would like to cultivate experienced employees acquainted with the company rather than new recruits.

All of the employees are standing at the same starting line. You will lose your position if you are unwilling to break through your defense line to jostle for a new one. The company has already paved the way. You may gain more developing space if you start a little earlier and take a few more steps.

肖磊（东莞达意隆厂长）中

Xiao Lei (Plant Manager of Dongguan Tech-Long) in the middle

目前达意隆东莞子公司有79人，车间主要分为流体和重工两个班组，经过两个班组的优化运行，产能恢复较快，产值有所提高，近阶段计划在制造工艺和品质管理上做出突破。

最后非常感谢董事长和公司各级领导对我们工作的支持，特别要感谢的是为达意隆东莞子公司筹备工作付出辛勤劳动的所有员工！

There are 79 employees in Dongguan Tech-Long by now. The workshop is mainly divided into two sectors-the Liquid and the Heavy Industry. The capacity resumes rapidly and the value of output increases to some extent. Breakthrough is ready to be made in manufacturing process and quality management in next near phase.

Thank the president and managements of all levels for their support and thank our hard-working staff for the contribution to Dongguan Tech-Long's preparation work.

刘诗文（流体事业部副总监）右

Liu Shiwen (Deputy Director of Liquid Processing Department) on the right

谈到搬迁过程，流体事业部副总监刘诗文深情地讲：“搬迁过程中压力比较大，主要是人员的到位和生产进度的对接问题。在全体员工上下一心的共同努力下，整体来说过渡顺利，比预期的要好。”

在对未来的展望，刘总信心满怀：“在国内水处理行业目前达意隆的技术处于一个领先的水平，虽然距国际一流水平还存在一定的差距，但我们拥有饮料的整线生产，这方面的优势是非常明显的。我们希望东莞达意隆能在这个新的起点创造出新的辉煌。”

Speaking of the relocation, the deputy director of Liquid Processing Department) Liu Shiwen said, "The relocation work is under great pressure which mainly comes from keeping production continuity during personnel allocation and startup of new plant here. All the employees made joint efforts to smooth the relocation of which the result is better than expected."

Liu is full of confidence in the prospect of the company. "Tech-Long has leading technologies in the domestic water treatment industry. Although a gap between them and the world-class technologies exists, we do have a complete production line for beverage. Our advantage in this aspect is obvious. We hope that Dongguan Tech-Long can make outstanding achievements at this new starting point", Liu said.

# 达意隆水饮料营销管理经验交流会胜利召开

## Annual Tech-Long Meeting on Water Beverage Marketing Management Experience Exchange Successfully Held

**前**不久，由广州达意隆包装机械股份有限公司主办的年度水饮料营销管理会议在风景秀丽的东莞汇景酒店顺利落下帷幕。在为期2天的会议上，来自全国各地水饮料行业的企业负责人和营销负责人齐聚一堂，集思广益、出谋献策，就水饮料行业营销工作做出了重要的探索。

本次活动，达意隆秉承着“服务、责任、共赢”的理念，为广大同行提供一个重要的沟通平台，让大家在体验新技术的同时交流经验，互通有无，共同进步。

会议当天，达意隆广州总部彩旗飘飘，来自五湖四海的200多位嘉宾在营销总部同事的热情接待下参观了各个生产车间。接着，参观团一行来到达意隆东莞子公司，饶有兴趣地参观了达意隆水饮料高新设备。随后大家亲临达意隆深圳分厂“冰露”生产一线，体验这一环保轻量瓶矿泉水的生产过程，并零距离参观了达意隆其他设备的现场运营状况。现场，达意隆精湛的技术、良好的服务获得大家的啧啧称赞。

翌日，东莞汇景酒店嘉宾云集。资深水饮料营销专家邓郁老师首先就水饮料营销工作做了详尽的报告。然后分别从水饮料行业的日常工作管理，客户开发管理，店面形象管理、水、桶、饮水机知识，人员管理，店面财务管理等方面做了一个全面、系统的阐述。会后，与会人员均表示“参加这样的行业交流会真是受益匪浅，希望以后能有更多的机会参加这样的活动。”

The curtain descended not long ago on the annual meeting on sharing beverage marketing management experience held by Guangzhou Tech-Long in the Grand View Hotel



in Dongguan. At this two-day meeting, enterprises' directors from the beverage industry and their marketing directors gathered together to express their opinions extensively and to put forward ideas and plans. It was a significant exploration of beverage marketing.

Acting on the ideas of service, responsibility and mutual benefit, Tech-Long provided an important exchanging platform for the enterprises in the same industry to experience new technology and to exchange experience to achieve joint progress.

In the meeting day, colored flags were waving in Tech-Long's headquarters in Guangzhou. The marketing personnel warmly received over 200 guests coming from all corners of the country who then visited all workshops around Tech-Long company. And then, the visiting group arrived at Dongguan Tech-Long and visited Tech-Long's high-tech beverage system with great interest. The visitors afterwards came to the forefront of Icedew production in Shenzhen plant to experience the manufacturing process of eco-friendly lightweight bottled mineral water and to witness the field operation of other Tech-Long systems at zero distance. All visitors spoke highly of Tech-Long's exquisite techniques and excellent service.

The next day, guests gathered in Dongguan Grand View Hotel. Mr. Deng Yu, a senior beverage marketing specialist, firstly gave a talk on beverage marketing in details and then comprehensively and systematically expounded on routine work management, customer development management, image management, knowledge about water, water barrel and water dispenser, personal management, financial management and the like. After the meeting, the participants said that they benefited a great deal from such meeting of exchange and wished to have more chances to attend activities of this kind.



茶歇时分我们的工作人员和与会代表进行了面对面的会谈

在各代表眼里，达意隆到底是怎样一个企业？

他们心中对达意隆又有着怎样的期许呢？

At the tea break, our staff had a face-to-face conversation with the participants.

As they comes from different trades,what kind of enterprise Tech-Long actually is?

What expectations of Tech-Long they have?

罗坦 广东省瓶装饮用水行业协会会长

Luo Tan, President of GD Bottled Potable Water Association

达意隆公司我年年来，但每次来都有崭新的变化。在这种蓬勃发展的大好形势下，特别是来到达意隆东莞的水处理基地，看到了达意隆高速发展的前景，东莞26000多平米的厂房，在国内包装机械设备厂是较为少见的。

感谢达意隆公司，本次营销经验交流会为水、饮料行业打造了一个经验交流的宝贵平台，这也是达意隆公司从设备到营销方面协助行业发展的重要举措。

I visit Tech-Long every year and new changes surprised me every time. In the background of such vigorous development, I can see Tech-Long's prospect of rapid development since I have come to Dongguan Tech-Long's water treatment base. It's rare to see a plant of more than 26000m2 in the domestic packing machinery industry.

I am grateful for the valuable platform for exchanging experience that Tech-Long has built up for the industry of water and beverage through this exchange meeting which is also an important measure Tech-Long takes to assist in industry development from equipment to marketing.



梁敏 程海纯天然山泉水有限公司总经理

Linag Min, GM of Chenghai Pure Natural Water Co., Ltd



很早以前，我们就和达意隆保持着良好的合作关系，这么多年，达意隆一直在不断进步，特别是近几年，可谓是“飞跃式”的发展，其中包括产品的质量，综合效率、设计理念、公司的企业文化、营销体系以及价格体系等方面，我认为达意隆在这些方面花了很多心思做了很多工作。今天参观了达意隆的工厂后，对双方将来开展合作更是满怀信心。相信在不久的将来达意隆将会越走越远。

We have maintained a good cooperative relationship with Tech-Long for a long time. Tech-Long has been progressing all these years and is going through a leaping development in recent years, including product quality, overall efficiency, design ideas and concepts, culture, marketing system and pricing system. I think that Tech-Long has expended much thought on and done a lot in these aspects. I am full of confidence in our future cooperation since I have visited Tech-Long's plant. I believe that Tech-Long will become stronger and stronger in the near future.

邓郁 资深水饮料营销专家

Deng Yu, senior expert in beverage marketing

营销无止境，它是一种不断发展的过程，对于行业而言，行业进步和发展才是真正的进步。各地相关协会将此事项提到议事日程，而以企业的名义来推动这方面的工作就数达意隆了，达意隆作为本行业中当仁不让的领先地位，他有能力，有责任，有义务来协助这方面的工作，协助政府机关、协助协会、协助厂家、协助消费者加快行业的发展，在这些方面，近年来达意隆起到了很好的模范作用。

Marketing is infinite and keeps developing. For an industry, the progress and development of the whole industry is the real progress. Associations have put this onto their agendas while Tech-Long is outstanding for it promotes this as an enterprise. Holding the leading position in this industry, Tech-Long has the capability and responsibility and obligation to assist the authorities, associations, manufacturers and consumers in accelerating the development of the industry. Tech-Long has been a good model in these aspects in recent years.



## 相关链接 FURTHER READING

### 达意隆东莞子公司 Dongguan Tech-Long

本次参展的主要设备包括原水箱、原水泵、多介质过滤器、活性炭过滤器、反渗透设备、CIP系统、纯水箱、纯水泵等及典型工艺图和电脑动画。展会现场依据设备类型分为主体设备、标准器件、管理控制、视觉效果、现场图片、罐体设备、现场焊接、设备连接、工艺动画、膜系类等10个展示区域。

The main equipment in this exhibition covers raw water tank, raw water pump, multimedia filter, active carbon filter, RO system, CIP system, pure water tank and pure water pump. Typical process drawings and computer animated drawings are also shown. According to the types of equipment, the exhibition field is divided into ten sections: main equipment, standard device, management control, visual effect, field picture, tank equipment, field welding, equipment connection, process animated drawing and RO membrane, and so on.



### 达意隆深圳分厂 Shenzhen Tech-Long

参观团来到达意隆深圳分厂现场观摩“冰露”生产一线，体验这一环保轻量瓶矿泉水的生产过程，并零距离接触达意隆其他设备的现场运营状况。

The visiting group came to the forefront of Icedew production in Shenzhen plant, experienced the manufacturing process of eco-friendly lightweight bottled mineral water and witnessed the field operation of other Tech-Long systems at zero distance.



# 达意隆再次亮相 PROPACK ASIA 2011

## Tech-Long Launches Again in PROPACK ASIA 2011



2011年6月15至18日，享誉亚太地区的PROPACK ASIA 2011在泰国曼谷国际会展中心(BITEC)盛大开幕，来自全球61个国家及地区的3909个参展商齐聚这一年一度的行业盛典。26288平方米的参展面积，33376的参观商人数，参观人数较去年增长了8.8%。如此盛大的场面，当然少不了包装机械行业内的一些熟悉身影，其中包括克朗斯、西得乐、ZIEMANN、达意隆等知名

品牌，他们用精湛的技术，完美的创意为展会增加了不少亮点。近年来，达意隆每年都会参加PROPACK系列展，本次展会达意隆在展台上可谓下足了功夫，强烈的视觉冲击，创意十足的平面广告，向广大客户展示了亚洲的力量。

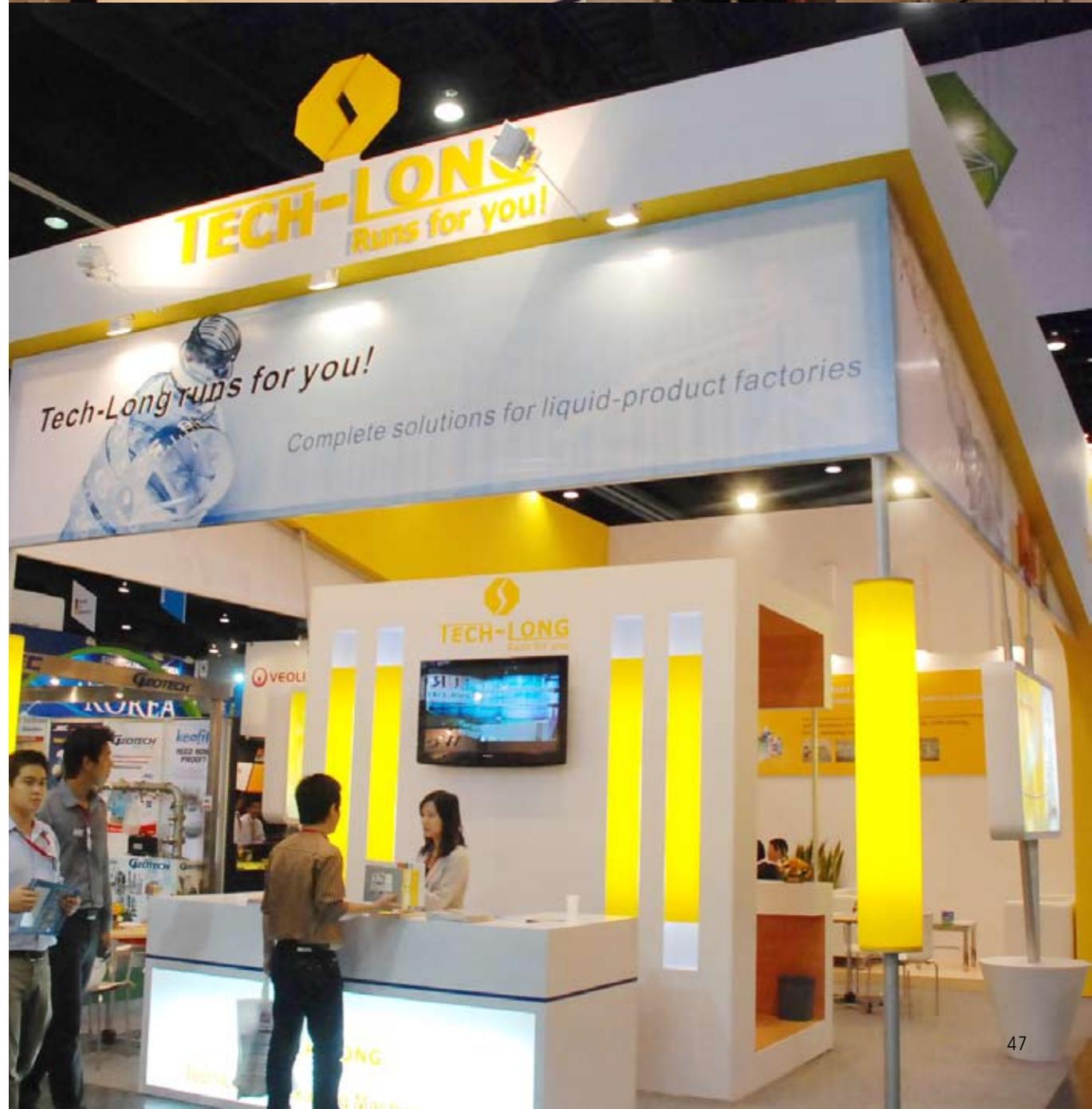
泰国地处东盟经济自由贸易区中心，是通往亚洲和湄公河区域的重要门户，也是东南亚地区的经济、金融中心和航空枢纽，因此具有重要的战略意义。近年来，伴随着经济结构的变化，制造业已成为泰国主要的产业。达意隆频繁亮相PROPACK ASIA 2011，一方面展示了公司形象，夯实了当地市场，另一方面加强达意隆在亚太地区的影响力，同时为更好地辐射其他地区做好充足的准备。

During June 15th-18th, 2011, PROPACK ASIA, well-reputed in Asia-Pacific, was held in Bangkok International Trade and Exhibition

Center (BITEC). 3909 exhibitors from 61 countries and regions took part of this annual grand gathering. The exhibition hall occupied an area of 26288m2 and the number of visitors was 33376 which was an 8.8% increase compared with last year. Well-known companies in the packing machinery industry such as KRONES, SIDEL, ZIEMANN and TECH-LONG gathered in the exhibition, bringing their exquisite techniques and creative conceptions which were attractions in the exhibition. Tech-Long has been taking part in PROPACK exhibition in recent years. Tech-Long worked so hard on the exhibition booth. Strong visual impact and creative print advertisement displayed the power of Asia to the customers.

Thailand is the center of the ASEAN free trade zone, a significant entrance to Asia and the reaches of Mekong, as well as an economic and financial center and a hub of airline traffic in Southeast Asia and thus is of great strategic importance. In recent years, with the change of economy structure, manufacturing has become the main industry in Thailand. Tech-Long's frequent appearance in PROPACK ASIA, on one hand, displays its image and consolidates its local market, on the other hand, strengthens its impact in Asia-Pacific area and makes adequate preparation for expansion to other regions.

Text and Picture by: Lu Jinxing





# 实例

## Product Running Status

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# 从1到10背后的故事

## Story Behind 1 to 10

### 达意隆与统一开启合作新篇章

Tech-Long and Uni-president Start New Cooperation

5年前，达意隆第一台DRS30000热线后段输送线首次进入统一集团的生产线。  
5年间，统一和达意隆之间的合作从第一年的1个项目迅速增加到第五年的10个项目。  
达意隆成立10多年来，无论是最初五加仑设备和小瓶水灌装设备等单机的问世，还是2009年生产轻量瓶一体机的破茧而出，在业内达意隆都被冠以“勇于创新”的头衔。从DRS12-40\*40\*12小瓶机生产线再到DRS18-66\*66\*18小瓶机生产线投入使用，达意隆见证的不仅是技术的更新换代，同时也见证了统一的发展历史，更见证了一个时代的转变。

在饮料“全民化”的时代，凭借着出众的创新能力，达意隆将推动行业的发展作为自身的责任。在饮料行业的下个黄金时代，达意隆又将与统一擦出怎样的火花？

Five years ago, Tech-Long's first DRS30000 conveying system for secondary packing machines entered into production line of Uni-president Group for the first time.

During the 5 years, the cooperation between Tech-Long and Uni-president Group has developed rapidly from 1 project in the first year to 10 projects in the fifth year.

Established for more than 10 years, with product ranges from sole machine (5 gallon bottle filling machine, water filling machine for small bottle, etc) at the beginning, to 2009's combi-block that produces lightweight bottles, Tech-Long has been awarded the title of "having courage in making innovation" by the companies of its kind. From the DRS12-40\*40\*12 small bottle production line to the DRS18-66\*66\*18 small bottle production line, Tech-Long has witnessed not only the development of technology, but also the development history of Uni-president Group and even the changes of this period.

In the age of beverage popularity, depending on its outstanding creativity, Tech-Long will take the responsibility for promoting the growth of the industry. In the next golden age in beverage industry, what will be come up with for the future cooperation between Tech-Long and Uni-president?



## 同声自相应，同心自相知

Similar Voices Bring Echo, Kindred Minds Bring Mutual Understanding

达意隆与统一的首次接触可以追溯到2002年，当时统一生产饮料设备全部采用进口，国内设备压根就没有立足之地，他们对国内设备了解甚少。当时统一在方便面市场的占有率很高，经过多年的耕耘，饮料市场也开始发力，一番精密的分析后，达意隆相关负责人敏锐意识到开启双方合作的重大意义，于是决定在第一时间向统一介绍达意隆的优质设备，初步改变他们对国内设备的看法，同时加强他们对达意隆设备的了解。

“功夫不负有心人”，长时间的锲而不舍、精心耕耘终于换来了2006年达意隆和郑州统一的第一次牵手，郑州统一决定将达意隆的热线后段输送线引进其日常生产，在统一这个饮料王国里，达意隆首次实现了“代替进口”。与其说双方结缘，倒不如说是惺惺相惜，在悠远的企业历史长河中，双方拥有许多共同语言。

古语有云：“同声自相应，同心自相知”，创业至今达意隆始终坚持“为您而转”的理念，这点与统一“诚实苦干、创新求进”的宗旨有着异曲同工之妙，双方都非常注重企业的创新、品质、人才，这些为日后双方的长期合作奠定了坚实的根基。

Tech-Long firstly established its relationship with Uni-president in 2002 when Uni-president still used imported equipment. There was then no place for domestic equipment and Uni-president knew little about the domestic market. At that time, Uni-president had a high share in instant noodle market and through many years' efforts of Uni-president Group, the beverage market began to flourish. After sophisticated analysis, Tech-Long's directors realized the significance of cooperation with Uni-president and then determined to as soon as possible introduce its high quality equipment to Uni-president to change

their view on domestic equipment and strengthen their understanding of Tech-Long's equipment.

“Hard work pays off”. The long-term persistence brought about the first cooperation: In 2006, Uni-president Zhengzhou introduced the Tech-Long's conveying system for secondary packing machines on the hot line into its operation. In the beverage kingdom, the product of Tech-Long replaced the imported one successfully for the first time. The cooperation between Uni-president and Tech-Long is not so much from predestination as affinity. In the long history of enterprise development, the two companies have many in common.

As an old saying goes, “similar voices bring echo, kindred minds bring mutual understanding”. Tech-Long insist on the spirit of "runs for you" which is similar to Uni-president's tenet of "be honest and hardworking, innovate to make progress". Both the two companies highly value innovation, quality and talents which have laid a solid foundation for future cooperation.

## 从了解到认可是综合实力的体现

Change from Understanding to Recognition Reflects Overall Strength

跨入21世纪之际，消费者的生活需求不断扩大，从最初的追求生存过度到重视生命价值。统一企业瞄准消费者的需求的多元化并于2007年果断做出战略调整，优化业务，以省为单位精耕市场。这意味着需要更多更高新的技术去支撑这个战略，在明确统一企业的战略意图后，达意隆不断加强自身的研发能力，适时推出高速度、高产量、稳定性强的新设备，展示出自身的超强实力。



在双方的首次合作过程中，统一企业对达意隆的设备有一定的好感，但具体到各个领域的全面合作，统一企业还是保持着谨慎的态度。对于中国液态包装设备的龙头企业，统一企业一直密切关注达意隆的发展。

双方再次合作的契机出现在2009年，统一企业在广西巴马成立新矿泉水厂（这是统一企业在中国大陆的第一个自有矿泉水厂），需要引进一条新的生产线，这时候，达意隆再次进入统一企业的视线，经过多方的认证和考核，巴马统一正式向达意隆采购了一条矿泉水生产线。据厂家介绍，这条线运行情况良好，完全可以媲美欧美进口设备。就在这个项目进行得如火如荼的时候，另一个好消息接踵而至，昆明统一也向达意隆引进一条24000BPH的热灌装生产线，用于生产果汁饮料。就这样，双方逐渐建立起一定的默契和信任度。

In 21st century, consumers have an increasing demand for life quality from surviving to respecting the value of life. Aiming at the diversified demand, Uni-president made decisive strategic adjustment, optimized the business and cultivated the market at the provincial level, which indicates that more and higher new technologies are needed to support the strategy. Upon the understanding of Uni-president's development strategy, Tech-Long keeps strengthening its R&D capability and releases new equipment with high speed, output, and high stability which demonstrates its powerful strength.

During the first cooperation, Uni-president had a strong impression on Tech-Long's equipment, while as for all-round cooperation, Uni-president held a cautious attitude and kept an eye on the Tech-Long's development, the leading enterprise producing liquid package equipment.

The second opportunity for cooperation occurred in 2009 when Uni-president needed a new production line for its newly-built mineral water plant in Bama, Guangxi Province (which was the first plant of its own established in Mainland China). Tech-Long,

as a candidate, attracted the Uni-president again. Through many assessments and evaluations, Uni-president Bama ordered a Tech-Long production line. According to the feedback, the production line is in good service and comparable with the equipment imported from Europe and America. When the cooperation on this project was going well, Uni-president Qunming also ordered a 24000BPH hot filling production line for its juice production. Since then, the two companies have established tacit understanding and confidence.

## 丰富齐全的产品类型

### A Wide Range of Products

经过多年的锤炼，在液态产品行业统一这个老品牌已经深入人心，旗下的水饮料产品涵盖了：茶（冰红茶、绿茶、茶里王）；果汁（多果汁、番茄汁）；综饮（奶茶、雅哈咖啡）；水（统一矿泉水、Alkaqua优质饮用天然水）；豆奶；冷藏饮料；小浣熊牛奶等。近年来，随着统一战略布局、经营思路的转变，市场份额的不断扩大，双方的合作领域扩大到大桶机生产线、全自动吹瓶机、矿泉水处理系统及软化装置、小瓶机生产线、无菌线后段输送系统、模具等方面。

After years of refining, the brand Uni-president has become a household name in the liquid product industry. Its beverage covers: tea ( ice black tea, green tea, Chaliwang); fruit juice ("ate" series juice, tomato juice); drinks( milk tea, A-HA coffee); water (Uni-president mineral water, Alkaqua natural water); soy milk; cold drinks; Little Raccoon Milk and so on. In recent years, with the transformation of strategic blueprint and management thoughts, Uni-president's market share keeps increasing and the cooperation has expanded to bulk bottle production line, fully automatic bottle molding machine, mineral water treatment system and softener, bottle production line, conveying system for secondary packing machines on aseptic filling line, moulds and so on.



## 吹响全面合作的集结号

### Sound the Horn of Assembly for All-Round Cooperation

08年开始，统一企业将销售、生产及后勤支援分离，进一步朝专业分工发展。未来，逐步实现在每个省，至少设立1个生产基地的目标，并在最短时间内，布建能适合各类产品销售的通路网络。建立从省、区域、到整个中国的销售平台。面对这样的大好形势，达意隆以全新的视野重新审视双方的合作，不断整合自身资源，加强部门间的沟通、合作，力求为客户奉上最优质的设备与服务。随着统一企业战略布点的急增，双方在2011年迎了合作的又一高峰，其合作项目高达10个之多。

在短短五年的时间里，达意隆实现了从1到10的突破，在这光鲜业绩的背后彰显的是达意隆精湛的技术、良好的服务，同时也反映了达意隆人锲而不舍、敢于拼搏的优良作风。

Since 2008, Uni-president separated marketing, producing and supporting for developing division of labor based on specialization. In the future, it will fulfill the aim of establishing at least one production base in each province and establish a sale network for all kinds of products within the shortest time. In addition, it intends to set up a sale platform covering provinces, regions and the whole country. Facing such good situation, Tech-Long reviews the cooperation with a new vision, integrates its own resources, and strengthens the communication and cooperation between departments in order to provide its customers with best equipment and service. As the strategic points of Uni-president sharply increase, the peak of cooperation between the two companies has arisen, with 10 cooperation projects.

Tech-Long has made a breakthrough from 1 to 10 within the five years. Behind this accomplishment is Tech-Long's exquisite technology and excellent service, as well as the Tech-Longees' spirit of perseverance and the courage to fight and strive.

在继往开来的新时代，随着统一业务的不断腾飞，我们完全有理由相信，双方将紧握合作新契机，再攀事业新高峰！

In the new age, as the business of Uni-president is growing, there is every reason to believe that the two companies will grasp the new opportunity to cooperate and climb up new peak in career!

Text by: Zou Shizhen / Ni Yongsheng / Yang Liu

# 水饮料 营销管理第一人



## 导语

在全国知名水饮料企业做到高层的职业经理人不多；  
 以上人群中连续专注于水饮料行业16年的更不多；  
 以上人群中既从事过销售管理又从事过市场管理的更更不多；  
 以上人群中既从事过桶装水管理又从事过瓶装水管理的更更更不多；  
 以上人群中与国际、国内知名营销企业合作过的更更更更不多；  
 以上人群中连续多年取得近翻倍业绩的更更更更更不多；

.....  
 以上人群中熟悉全国水饮料行业状况并与全国不同城市、不同发展状态水饮料企业合作过的水饮料专家就只有本人一位了。

## 邓郁

资深水饮料营销管理专家，水饮料行业著书第一人，著有：

- 《水饮料企业渠道拓展三十六计》
- 《桶装水水店效益增长三十六计》
- 《桶装水水店管理手册》
- 《桶装水售后服务管理手册》
- 《水饮料企业质量管理手册》
- 《水饮料企业岗位考核标准手册》
- (以上宝典目录见达意隆公司官方网站)

1996年至今从事水饮料营销管理工作，曾任职于华润集团怡宝公司、云南大山公司等全国知名水饮料企业，并任职中高层，都取得不俗的业绩，既有理论高度又有丰富的实操经验。

指导过全国上百家水饮料企业，为数千家桶装水水店做过培训

《羊城晚报》、《民营经济报》授予著名“品牌经理人”称号

为以下企业提供营销培训、营销顾问或营销项目合作等服务：

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- 东莞市大田米业有限公司
- 湖北三江集团三江泉饮料有限公司
- 湖北武汉钢铁公司武钢人饮料有限公司
- 哈尔滨哈特集团名人食品饮料有限公司
- 东莞金富山泉饮料有限公司
- 东莞津的饮品有限公司
- 江西天久矿泉水有限公司
- 广西巴马活泉饮料有限公司
- 深圳吉福食品配送有限公司
- 梅州九龙山矿泉水有限公司
- 湖南常德浪力饮料有限公司

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11. 《桶装水水站人员管理》	11. 《怎样进行瓶装水本地促销(路演)》	7. 《水饮料企业定位(品牌/价格/区域/产品/渠道/消费者定位)》
12. 《桶装水水站售后服务管理》	12. 《怎样进行瓶装水本地促销(路演)》	8. 《水饮料产品成本管理》
		9. 《怎样举办产品上市新闻发布会及邀请经销商会》
		10. 《中国高端饮用水情况汇总》

深圳沃特营销机构提供以下服务：  
 \* 方式一：水饮料营销管理资料销售  
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 \* 方式三：水饮料营销项目顾问合作  
 \* 方式四：坊间授课

业务联系：邓郁 13502808648

# 珠海中富再次大手笔 采购达意隆设备

## Zhuhai Zhongfu Orders Tech-Long Equipment Again

2011年中富陆续和达意隆签订了珠海、长春、北京三间分公司高速吹瓶机，重庆分公司的吹灌旋一体机等项目合同……

In 2011, Zhongfu contracted with Tech-Long in succession on high-speed bottle molding machine for its branches of Zhuhai, Changchun and Beijing and on blow-fill-cap combi-block for its Chongqing Branch...





“一不小心就成了第一”，2005年中富董事长黄乐夫幽默风趣的一席话至今还让人记忆犹新，当时中富和达意隆签订了10台全自动吹瓶机合同，一跃成为当时达意隆最大的买家。

中富与达意隆间的合作可谓源远流长，2003年，双方开始了首次合作，在此过程中，中富见证了达意隆的迅速崛起，特别是达意隆推出的第一台全自动吹瓶机，中富无私的帮助给予了达意隆莫大的支持，使达意隆能够迅速攻克难关。长久以来，在诚信、默契的基础上双方保持着愉快的合作关系，私下里，双方的技术人员还时常就生产、技术方面等问题交换意见。

2010年，在得知中富的采购意向之后，达意隆十分重视，在第一时间内派技术、研发、营销项目组前往中富进行深入交流、探讨。在全方位听取中富的需求后，双方开始就设备的具体参数，方案、合同条款等事项进行协商并达成一致的协议。

2011年中富陆续和达意隆签订了珠海、长春、北京三间分公司的高速吹瓶机、重庆分公司的吹灌旋一体机等设备的项目合同。一路以来，达意隆凭借着过硬的设备质量、出色的服务获得中富的高度认可，并成为中富最值得信赖的合作伙伴。

“We just become the No.1”, Zhongfu's President Huang Lefu said in 2005 whose sense of humor was impressive. Zhongfu ordered ten fully automatic bottle molding machines and became the most important buyer of Tech-Long in 2005.

Zhongfu has a long history of cooperation with Tech-Long. In 2003, in the process of their first cooperation, Zhongfu witnessed the rapid growth of Tech-Long and gave support to Tech-Long when it launched its first fully automatic bottle molding machine so that Tech-Long could figure out the difficulty. The two companies have kept a good partnership for a long time and their technicians often exchange their opinions on production and technology.

In 2010, when getting the idea that Zhongfu had the intent to order again, Tech-Long shown its significant value by sending its project teams of technology, R&D and marketing to Zhongfu for further communication and discussion. The both parties started to negotiate on the equipment parameters, scheme and contract clauses after the buyer had fully express its demand and eventually the parties reached an agreement.

In 2011, Zhongfu contracted with Tech-Long in succession on high-speed bottle molding machine for its branches of Zhuhai, Changchun and Beijing and on blow-fill-cap combi-block for its Chongqing Branch. Depending on top quality and excellent service, Tech-Long was highly acknowledged by Zhongfu and became its most trustworthy partner.

## 早期的中富：崭露头角

### Zhongfu in the beginning: display its remarkable capabilities

1982年，在南中国珠海，中富的创始人黄乐夫先生始创了一家企业，这家企业最终成为今日的珠海中富实业股份有限公司。

1996年，中富在深圳证券交易所上市，成为萌芽中的中国包装行业的首家上市公司。

In 1982, Zhongfu's founder Huang Lefu established a company which has developed into today's Zhuhai Zhongfu Industrial Co., Ltd.

In 1996, Zhongfu was listed on the stock market of Shenzhen Stock Exchange and thus became the first listed company within China's budding packing industry.

## 成长中的中富：中流砥柱

### Zhongfu in growth: become a tower of strength

进入高速发展后的中富，大幅增加生产设备数量，在这个特别的成长时期，中富获得了国家和地方政府颁发的许多荣誉和奖项。

Zhongfu significantly supplemented its production facilities when it stepped into an era of rapid development during which it received many honors, prizes and awards from both central and local governments

## 今日中富：独占鳌头

### Zhongfu's today: is already a champion in its field

中富已发展成为一家拥有7000名员工，在全国各地设有85家工厂的上市公司，是中国最大的PET瓶制造商之一。作为中国饮料行业内公认的领先者，得到行业龙头“可口可乐”和“百事可乐”等企业的认可。中富的PET直立瓶、瓶胚、HDPE瓶盖和PC灌被评定为中国的重点产品。

Zhongfu has matured into a listed company employing approximately 7000 people and operating 85 plants located in all corners of the country and has become one of the largest PET bottle manufacturers in China. As a generally recognized leading company within China's

beverage industry, it is also recognized by the world leaders such as Coco-Cola and PepsiCo. Zhongfu's PET bottles, preforms, HDPE closures and PC bottles are all listed as China's key products

## 未来中富：新机遇，新挑战

### Zhongfu's future: new opportunities, new challenges

经过27载的不懈努力，中富已经成长成能满足中国饮料行业快速发展需要的全国性企业。目前，中国的非酒精饮料市场，占据全球第二大的规模，是增长速度最快的市场之一。面对如此巨大的市场，中富将继续致力于与客户建立和发展长期的合作关系，成为中国大陆PET产品市场的领导者。

Sparing no effort in the past 27 years, Zhongfu has developed into a nationwide company satisfying the needs of China's soaring beverage industry. China's non-alcoholic beverage market is the second largest and one of the fastest in the world today. Standing in such a huge market, Zhongfu will keep focusing on developing long-term partnerships with its customers and strive to become the market leader in PET products within Mainland China.

Text by: Kuang Minqiang / Ni Yongsheng / Yang Liu



# 达意隆、蓝月亮强强联手 打造优质新生活

Win-Win Cooperation between  
Tech-Long and Blue Moon  
Create High-Quality New Life



**深** 谙洗涤之道的广州蓝月亮实业有限公司，一直以来秉承着“一心一意做洗涤”的理念，将国际尖端技术融入中国人的生活，成为洗涤行业的潮流代表。

作为国内最早从事家庭清洁剂生产的专业品牌，蓝月亮系列产品体现了“轻松清洁，解放劳力”的宗旨，塑造了品牌独具的“高效、轻松、保护”的鲜明个性。蓝月亮产品的优秀品质，源于不断创新的领先技术。公司的研究发展部门由一批高素质的化学专家组成。化工精英用智慧和信念，倡导洗涤自动化、高效化，开发出在国际同行中卓然领先的产品，使繁重的劳动变成了轻松享受。

蓝月亮人深知质量稳定的重要性，产品万分之一的缺陷，带给顾客的就是百分之百的损失。到目前为止，公司已通过ISO9001国际质量管理体系认证、ISO14001环境体系认证，这为产品的质量稳定提供了进一步的保障。

十多年来，蓝月亮产品广泛进入千家万户，赢得了大众的信赖。为了不断提升人们生活品质，蓝月亮人，追求不息！

Bearing the idea of "focus our efforts on wash", the Guangzhou Bluemoon Industrial Co., Ltd, as a professional company producing wash products, has become the leading company in wash industry by integrating the international top technology into the Chinese life.

As the first professional brand in household product in China, the Bluemoon series reflect the idea of "easy wash and labor saving" and shaped the distinctive features of efficient, easy and protective. The high quality of Bluemoon products benefits from its leading technology. It has gathered a batch of qualified chemical experts for R&D. With intelligence and faith, the experts advocate automation and high efficiency in cleaning, and have developed outstanding products that make people enjoy the wash work rather than just do it.

The Bluemoon staff understands very well the importance of stable quality. Even a minor defect will bring about a great loss to consumers. The company has passed the ISO9001 certification, ISO14001 certification which is a further guarantee for stable product quality.

For more than 10 years, Bluemoon products have become a household name and have been recognized by the general public. In order to improve customers' life quality, the Bluemoon staff is striving for better products!

## 瞄准时机进入新领域

### Grasp Good Opportunity to Enter into New Field

早期，国内日化行业因产能及设备技术等因素的制约，长期采用原始的高密度劳动力生产模式，即使这样也还是改变不了老式设备不能满足灌装的高精度问题。灌装精准度因素直接影响企业的成本和消费者满意度等问题，而且灌装时灌装阀产生的滴漏及挂丝也对产品的卫生产生影响，面对以上种种因素，达意隆根据自身优势迅速制定战略，为全面进入高端日化包装行业做好充分的准备。

Limited by factors such as low speed and out-fashion technology, the labor-intensive production mode is adopted for a long term in the industry of household products at home. Even so, the old-fashioned equipment can not meet the requirement for precise filling which will directly affect cost and consumers' satisfaction. Even worse, dribs and extrusion caused by the filling valve will affect the hygienic condition of the product. Under such circumstances, based on its own strength, Tech-Long rapidly mapped out a strategy, the international giant in the industry of household products, which was a full preparation for entering into the high-end household products packing market.

## 站在巨人的肩膀上

### Stand on the Giant's Shoulder

日化行业因涉及洗发液、洗衣液等灌装物料的介质粘度非常高，所以在整个灌装过程中对解决物料气泡所引起的灌装精度、灌装阀滴漏和挂丝等问题的要求非常高。达意隆凭借着与宝洁公司深度合作的经验以及自身超强的研发实力，公司迅速掌握了核心技术，截止2010年达意隆公司已经为宝洁公司提供了二十多台高粘度高速灌装机，并在世界各地稳定运转。2011年宝洁公司再次向达意隆公司订购六台高粘度高速灌装机，单台的灌装速度以500ml计算达到18000瓶/小时，宝洁公司作为日化行业的龙头企业，在很大程度上代表着行业的最高标准，宝洁与达意隆的多次合作，验证了达意隆在日化行业的技术已经达到国际化水准。



Because of the high viscosity of materials to be filled such as shampoo and fabric detergent, it is of great importance to solve the problems of precise filling, avoiding dribs and extrusion caused by bubbles. Based on the deep cooperation with P&G and its own powerful R&D strength, Tech-Long has rapidly caught hold of key technology. By the end of 2010, Tech-Long has provided P&G with more than 20 high-viscosity high-speed filling machines which are stably functioning all over the world. In 2011, P&G ordered another six. The output of each single machine is up to 18000 bph for a volume of 500ml. As the leading company in its field, P&G represents the highest standard for the industry. The cooperation between P&G and Tech-Long certifies that Tech-Long technology measures up to the international standard in the industry of everyday chemicals.

## 强强合作，实现双赢

### Cooperation between Powerful Strengths Brings Win-Win Victory

继宝洁公司之后，2010年达意隆公司与国内外知名企业广州蓝月亮实业有限公司拉开全面合作的序幕。蓝月亮实业有限公司作为国内知名的民营企业，秉承“一心一意做洗涤”的理念，致力于打造新的生活理念。伴随着国民生活质量的提高，蓝月亮在洗涤行业中的市场占有率不断攀升，由于劳工市场人工费用及管理成本的提高，行业对全自动高速生产线的需求越来越大。在这种大环境下，达意隆公司与蓝月亮公司强强合作，达意隆公司将高粘度灌装设备提供给蓝月亮公司，帮助蓝月亮公司大大减少人力及管理成本的设备，催化产品的更新换代。到2011年蓝月亮公司已经向达意隆公司订购了9台高粘度高速灌装机，双方的下一步合作仍在商谈中。达意隆与蓝月亮的强强联手，将对双方今后的合作产生积极的意义。

After the cooperation with P&G, Tech-Long started in 2010, its cooperation with Guangzhou Bluemoon Industrial Co., Ltd, a well-renowned company at home and abroad. As a famous private company, Bluemoon holds the idea of "focus on wash" and strive to create a new life concept. As life quality keeps being improved, Bluemoon's market share keeps increasing. Because of the increased labor cost and management cost, the demand for fully automatic high-speed production lines is growing. Against such a background, Tech-Long helped Bluemoon in reducing manpower and management cost and promoting product upgrade by providing high-viscosity filling machines. Bluemoon has ordered nine high-viscosity high-speed filling machines by 2011. The two companies are negotiating on their future cooperation. The deep cooperation between Tech-Long and Bluemoon will result in a positive impact.



灌装、旋盖（压盖）二合一一体机  
Filling, rolling (capping) integration machine

达意隆开发出适合高粘度特性的流量式和称重式灌装技术，有效解决了灌装过程中的消泡、滴漏、挂丝、灌装精度偏差大的问题，并进一步提高了灌装效率，令所有对高粘度灌装有需求的企业多了一个更有保障的设备选择。

Flowmeter type filling and weight-module type filling technologies for high viscosity developed by Tech-Long have effectively solved the problems of bubbling, dripping, extruding and large precision deviation in filling. Moreover, the efficiency has been also improved which makes such equipment become a better choice for high viscosity filling.

#### 定量灌装(流量计式) Volumetric filling machine (measured by flow meter)

定量灌装设备为我司完全独立自主开发新产品，主要针对于高粘度的液体灌装，同时也可用于其他高精度要求的液体产品（包括酒类、饮料、酱油等）。

此设备的研发填补了高端用户一直对进口设备的依赖，从而大大地降低了投资成本等前期投入，而后期的配件及售后服务费用更是优于国外品牌。

The volumetric filling machine is developed by our company independently and applicable for high-viscosity liquid filling and other liquid products with a high precision requirement (including wines, beverage and soy sauce).

With this equipment, investment cost, expense on parts and after-sale service can be significantly reduced. It is an alternative to imported equipment for high-end customers.

Text by: Huang Yuzhi / Ni Yongsheng / Yang Liu

# 瑞年国际牵手达意隆 一切“顺”起来

Real Nutraceutical Works With  
Tech-Long to Smooth Everything



**成** 立于一九九七年的瑞年国际有限公司，现时为中国最大的氨基酸营养保健品生产商，国内市场份额约32.9%。2010年2月19日该公司在香港主板成功上市（股票代码：02010.HK）。公司多元化的产品组合覆盖整个健康食品市场。

无锡瑞年实业有限公司，是瑞年国际有限公司旗下健康品业务线的核心性企业，是我国首批通过国家GMP保健品企业之一。瑞年实业位于风景秀丽的无锡太湖国家旅游度假区境内，注册资金5.3亿元。公司以营养健康品生产、经营为主，包括片剂、软胶囊、瓶罐装口服液、固体制剂等工艺先进的多条生产线。

瑞年实业以“强壮民族体质，服务人类健康”为己任，坚持良心品质，摒弃急功近利，视产品质量和科技创新为企业的发展之根本，立志于成为“中国健康产业领军企业”。近年来，瑞年相继

推出了瑞年氨基酸片、瑞年氨基酸口服液、瑞年蜂王浆含片、顺牌凉茶、顺牌氨基酸饮料、Shainny享妍美容养生品等高科技健康品，深受消费者青睐。

Founded in 1997, Real Nutraceutical is now the largest manufacturer of amino acid-based nutritional supplements in China with a 32.9% market share. It went listed on HKEx's main board on February 19th, 2010 (Stock Code: 02010.HK). The diversified product combination of the company stretches across the entire healthy food industry.

Wuxi Real Nutraceutical Industrial Co., Ltd, a core subsidiary company of Real Nutraceutical Group producing health care products, is one of the first batch of companies producing health care products that passed the GMP certification. Real Nutraceutical Industrial Co., Ltd, located

in Taihu National Resort in Wuxi, with the registered capital of 530 million Yuan, focuses on nutritional supplements production and operation, owning some advanced production lines for tablets, soft capsules, bottled and canned oral liquids and solid preparations.

Real Nutraceutical takes the responsibility for strengthening bodies and serving health, insists on good conscience and quality, seek no instant success and quick profits, views quality

and technological innovation as the essentials of its development and is bent on becoming a leading company in China's health care industry. In recent years, Real Nutraceutical has launched amino acid-based tablet, amino acid-based oral liquids, royal jelly troche of the brand Real Nutraceutical, herbal tea and amino acid-based drinks of the brand Shun, products of the brand Shainny for beauty and health which in high favor with the consumers.

## 瑞年国际与达意隆“联婚”，加强双方合作

### Real Nutraceutical and Tech-Long Deepen Their Cooperation

顺牌凉茶是瑞年国际旗下的产品，聘请葛优担任品牌形象代言人，顺牌凉茶的配方源自清朝岭南地区凉茶世家，其家族按此配方制作的凉茶口味清爽甘醇，滋味极其地道，且有清热祛火的功效，百年来备受百姓喜爱，并因此获得“国家非物质文化遗产第41号秘方”的殊荣。

“顺”牌凉茶自上市以来，广受消费者的好评，销量节节攀升，原生产线的产量已无法满足市场的需求。从2009年底开始，瑞年实业便开始马不停蹄地着手新饮料生产线准备工作，期间还派遣相关人员实地考察了国内外多家知名饮料设备制造厂商，同时还专门考察了热灌装、无菌灌装及其他的一些灌装生产工艺。当初，瑞年实业曾考虑选择无菌灌装生产工艺，经过详实的论证后认为：热灌装是目前世界上饮料生产工艺最成熟、品质最有保证的一种灌装形式，选择热灌装将进一步保障产品的质量。

2010年底，经过近一年的设备考察，瑞年实业有限公司最终选定达意隆作为其设备供应商，并于2010年12月正式向达意隆成功订购了一条24000瓶/小时饮料热灌装整线。此项目包含：水处理系统、前处理系统、吹瓶机系统、灌装生产线、纸箱全裹机、码垛机及整厂的物流运输系统等生产设备。项目投产后主要用于生产“顺”牌凉茶等系列产品。

江苏省是中国饮料设备供应商分布最多的省份之一，省内拥有大大小小饮料设备供应商几百家，瑞年实业舍近求远，选择达意隆设备，是对达意隆实力的认可；是对达意隆文化的认可；更是对达意隆人的认可。此次达意隆与瑞年国际的成功牵手，是达意隆在江苏树起的又一旗帜。

The herbal tea of the brand Shun is one of Real Nutraceutical's products. Ge You is invited

to serve as the celebrity. The prescription derives from a family of herbal tea in the Five Ridges in Qing Dynasty. Herbal tea prepared in accordance with this prescription tastes cool and sweet. It is genuine and able to relieve inflammation and internal heat and thus has been in high favor with the masses for some hundred years and is awarded with the title No.41 Secret Prescription in the list of the National Intangible Cultural Heritage

Since available in the market, this herbal tea is well and widely received by the consumers and its sales volume keeps increasing. As a result, the original production line can not meet the demand. Since the end of 2009, Real Nutraceutical had been busy in the preparation work for a new beverage production line and sent its personnel concerned to some famous beverage equipment manufacturers at home and abroad for observation and investigation and made special observation and investigation on hot filling, aseptic filling and some other filling technologies at the same time. At the very beginning, Real Nutraceutical had thought about adopting the aseptic filling technology. However, hot filling was viewed as then the most mature beverage production technology with the top quality in the world.

At the end of 2010, upon an observation and investigation of almost one year, Real Nutraceutical Industrial Co., Ltd chose Tech-Long as its equipment supplier and ordered a complete beverage hot filling line with the output of 24000 bph in December, 2010, including the water treatment system, pre-treatment



system, blowing system, filling production line, carton packer, case palletizer, and whole line conveying system. It is mainly used for producing product series of herbal tea of the brand Shun.

Jiangsu Province is one of the provinces in China that have most beverage equipment suppliers. There are some hundred beverage equipment suppliers of various scales within Jiangsu. However, Real Nutraceutical has chosen Tech-Long which means Tech-Long is in recognition of its strength and culture, as well as the recognition of the Tech-Longees. This successful operation between Tech-Long and Real Nutraceutical is another achievements Tech-Long has made in Jiangsu.

Text and Picture by: Li Youhua

## 提供定向技术培训，全方位服务客户

Provide technical target training, serve customers in the round

2011年4月29日，瑞年公司派遣相关人员赴达意隆接受机械设备理论知识；新机器实操和保养等相关内容的培训。

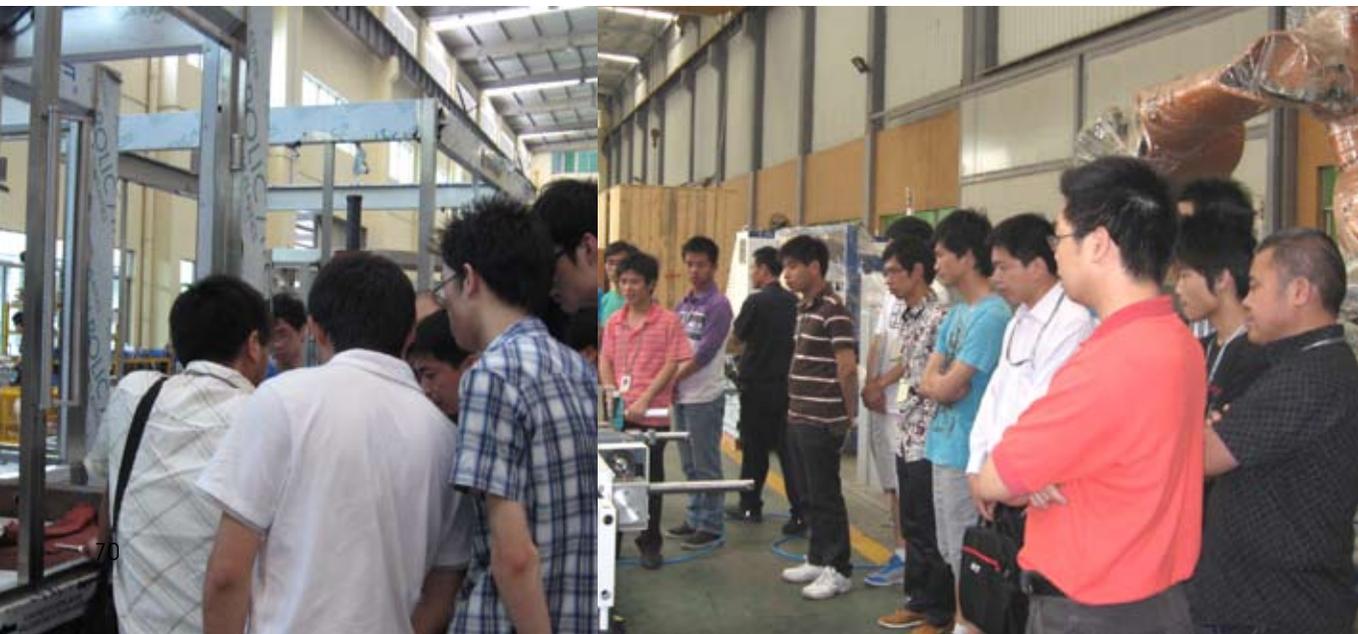
达意隆不仅为全球广大客户提供高科技的机械设备，同时还包括全方位的服务。在行业激烈的竞争中，达意隆凭借自身的技术优势和良好的服务赢得了客户的尊重，并在业内树立了良好的口碑。公司坚持以客户的需求为导向，采取向外派遣专家、向内引进人员等方式进行针对性培训，力求帮助客户解决技术问题上的后顾之忧，为合作伙伴创造良好的经济效益。

On April 29th, 2011, Real Nutraceutical sent a study group to Tech-Long to take the training on knowledge about mechanical facilities,

operation and maintenance of new machines and the like.

Tech-Long provide its customers with all-round service, as well as high-tech mechanical facilities. In the fierce competition, Tech-Long has earned the respect from its customers and built up a good reputation within the industry by displaying its technical strength and providing excellent service. Based on the requirements of its customers, Tech-Long gives target training by sending experts to its customers combined with receiving the study groups from its customers in order to help its customers solve technical disturbances and to create good economic benefit for its partners.

Text and Picture by: Liu Xinran



# 品质 铸就品牌 加林®

## 5加仑瓶盖，还是加林好！始于1993年

珠海市永隆加林饮水机有限公司：成立于1993年，是中国最早制造聪明盖的生产厂。一直将“促进饮用水产业健康发展”视为己任，秉承“与客户共同进步”的理念，在企业、市场营销、产品开发、技术提升等方面长期合作。加林拥有多条全自动生产线，年生产聪明盖能力达1.5亿多个，是中国最大规模的5加仑瓶盖专业制造厂。可以提供普通聪明盖、防伪盖、一次性顶穿盖和热封聪明盖等多款多色5加仑瓶盖供客户选择。

Zhuhai yonglong jialin watercooler co., Ltd was founded in 1993. As one of the first 5 gallon caps manufacturer in China. Jialin be ways position itself as an active participant in a beverage industry and along with the beverage industry growth. Jialin has been to "promote the healthy development of domestic water" mission and upload idea of common progress with the enterprise philosophy.

We start into a long and mutually beneficial cooperation in enterprise management, marketing, product development and technical upgrade etc. There are a number of automatic product lines and the annual output reaching 150 million pieces. As one of the biggest manufacture of 5gallon caps in China, we can supply kinds of caps: Non-spill cap, Top pop disc cap, One piece cap and cap with a single stick label to satisfy with our customers.

**一、净化车间，设备先进：**净化生产车间，注塑、加芯盖、加垫和热封整套生产流程实现机械自动化。

**Purification workshop and advanced equipment:** Injection, insert plugs, liners and heat-sealing is done by automated machines the entire production process in the purification workshop.

**二、专利技术，不断创新：**加林专心致力于聪明盖的开发、研究和生产。加林首倡的热封聪明盖，并推出顶穿密封盖，短身顶穿密封盖等专利新品，为桶装水的食品安全和品质保证及成本节约提供新的技术保障。

**Patented technology and constant innovation:** We have been dedicated to 5 gallon caps development, research and production. First advocated manufacturing 5 gallon caps in China and provides new patented products such as one piece caps, short body caps top pop disc caps etc. This is new technology guarantees bottled water safety, quality and cost saving.

**三、标准、测试严格：**严格的质量管理体系保证了加林聪明盖优良品质。

**High standards and strict testing:** The strict ISO program ensures our 5 gallon caps excellent in quality.

**四、食品级全新材料：**全新材料，品质如一。加林聪明盖通过了美国FDA的食品卫生认证。

**Food-grade PE materials:** New food-grade materials and good quality, we have passed the test of certificate of FDA.

本着创新、优质、专业和诚信的精神，加林赢得了乐百氏、怡宝、屈臣氏、雀巢和可口可乐等国内国际各大知名水厂的信赖和支持。

Because of constant innovation, good quality, professionalism and integrity of spirit. We have won order from many water factories all over the world, such as Danone, Coca-cola, Cestbon, Watsons etc.



珠海市永隆加林饮水机有限公司 ZHUHAIYONGLONG JIALIN WATERCOOLER CO.,LTD  
广东省珠海市南屏科技园屏东4路13号 Tel: 86-756-8821146 Fax: 86-756-8822027  
E-mail:lzy2008@21cn.com Http://www.watercooler.cn 域名: 加林.com和5galloncap.com



加工车间 Processing workshop



注塑车间 Injection workshop



品质检测室 Testing room

# 达意隆、农夫山泉 再次携手打造茶园厂项目

## Tech-Long and Nongfu Spring Make Another Concerted Effort to Build Tea Plant



### 企业背景 Company Background :

农夫山泉（淳安茶园）有限公司位于淳安县石林镇毛竹源码头（建德岭后），为农夫山泉股份有限公司下属的一个子公司。从2007年9月18日破土动工，建设总规模11万平方米，装备8条国际先进的生产线。农夫山泉茶园基地项目被列为杭州市2008年新一轮“十大工程”重点项目。项目建成后，茶园工厂将成为农夫山泉最大的生产基地，更是亚洲最大的单体饮料生产基地。

Nongfu Spring Co., Ltd (Chun'an Tea Plantation) is located in Maozhuyuan Dock, Shilin Town, Chun'an County (behind the Jiande Mountain). It is a subsidiary company of Nongfu Spring Inc. the construction started on September 18th, 2007 taking an area of 110 thousand square meters and equipped with eight internationally advanced production lines. The project of Nongfu Spring Tea Plantation was listed among the ten key projects in Hangzhou in 2008. The tea plantation will become Nongfu Spring's largest manufacturing base and the largest monomeric beverage manufacturing base in Asia.

“专业、细心”达意隆正是以这样一个个性化的设计，一次次热情的服务践行着“为你而转”的理念。当我们再次走进农夫山泉茶园厂，现场层次清晰的管道，和谐有序的设备，错落有致的布局，无时无刻散发出达意隆科学、专业的精神。

By providing individual designs and warm service professionally and patiently, Tech-Long is practicing the idea of “runs for you”. When stepping again into Nongfu Spring Tea Plant, we can see well-organized pipelines, orderly facilities and well-arranged layout all of which are giving off Tech-Long's spirit of science and profession.

**农**夫山泉茶园厂是在农夫山泉淳安改造项目完成之后达意隆和农夫山泉合作的又一个水处理项目。淳安水处理系统改造项目是达意隆和农夫山泉首次合作的项目，虽然当时项目改造时间紧迫，但是达意隆人还是凭借精湛的技术顺利完成项目的改造。鉴于首次合作的经验，农夫山泉将茶园厂项目交给达意隆整体规划设计，这对达意隆而言是一个展示先进技术水平、整线能力的机会。

针对农夫山泉茶园厂的实际情况，达意隆调动水处理多方面的专家，结合实地考察，为其量身定制了一个专门方案，力求在实现技术含量的同时兼顾整体的实用性和美观性。

The plant is another water treatment project that Tech-Long works together with Nongfu Spring since the Chun'an renovation project. The renovation project of Chun'an water treatment system was the first cooperation project between Tech-Long and Nongfu Spring. Although urgent, Tech-Long's staff was able to complete the renovation work with the exquisite techniques. Because of the first satisfying cooperation, Tech-Long is commissioned to make an overall plan for the tea plant project by Nongfu Spring which is another opportunity to display its advance technology and complete production line.

According to the specific conditions of the tea plant, Tech-Long dispatch experts in various aspects of water treatment to customize a scheme based on field investigations and made every effort to integrate technology with practicability and aesthetic appearance.



## 1、别出心裁的液位

### Unique liquid level

保护管既能固定水箱液位管的垂直位置，又能保护液位管的安全。

The protective pipe can not only fix the level gauge of the water tank, but also protect it.



## 2、液位接线盒的科学运用

### Scientific application of the level junction box

巧妙的将水箱的液位探头信号集中安装在一个液位信号收集盒内，让每一条液位信号线都易于检查，减少信号混淆的可能性，方便于检测和维修。

The level probe is ingeniously installed in the same level signal collecting box for the convenience to check each signal wire and thus reduce the possibility of signal blurring. In addition, it is convenient for checking and maintaining.



## 3、电缆线槽

### Wire Trunking

将每一条与外部相连的电缆集中在线槽中，大方得体。

All the wires connected with the exterior are gathered in the wire trunking, making a well-organized appearance.



## 4、现场管道一致性排布

### Harmonious arrangement of pipelines

现场管道经过统一的龙门支架，可根据不同的用途分布在不同层次上，使整体运转良好有序。

The pipelines in the field can be arranged through a support frame at different levels according to their purpose to ensure an orderly operation.



## 5、罐体排列

### Tank arrangement

这是多介质过滤器和活性炭过滤器。所有的操作阀门都安装在同一水平面上，所有的管路统一走向，操作简单方便。

These are multi-media filter and active carbon filter. All the operational valves are installed at the same level; furthermore, all the pipelines are arranged in the same direction which makes easy operation.



## 6、整齐的泵组

### Orderly pump set

不同功能的泵排成一个泵组，这让管道和电机的动力电缆都能一字型排开，每一个动力电缆的防水等级都可达IP54。

Pumps with various functions turn into a pump set after they are gathered. Consequently, all the pipelines and motor wires can be deployed. The waterproof IP of each wire is up to IP54.



## 7、CIP管路

### CIP Pipelines

整个系统的CIP管路安置在转换板后面，标志清晰，手动阀切换安全稳定。

The CIP pipelines are installed behind the converter plate with a clear mark; manual valve guarantees safe and stable swifts.



## 8、细节彰显人性化

### Detail presents consideration

不仅操作面条理分明，操作背面的排布也井然有序。同时利用颜色的间区有效区分管道的作用，走在不同的高度。排水管道根据排水方向下稍斜以免水流直接冲向排水沟而飞溅影响地面的整洁。

Both the front surface and the back of the operation platform are arranged in order. Different colors are used to distinguish the respective purposes of the pipelines which are fixed at different levels. The water drainage pipelines slightly incline according to the drainage direction to avoid splashing and keep the floor clean.



## 【水处理简介 Introduction to Water Treatment】

一套水处理系统所采用的工艺取决于水源的水质及用水的目的，基本可分为预处理系统、深度处理系统、终端处理系统三部分，广泛应用于食品饮料生产用水、啤酒发酵糖化用水、城市给排水、市政及工业废水、锅炉给水、电子工业高纯水、医药行业注射用水及海水淡化系统等。

预处理包括多介质过滤器、活性炭过滤器、软化器、除铁除锰过滤器、超滤、微滤等；深度处理包括膜法处理及离子交换；终端处理包括臭氧、UV等方式及抛光混床、EDI或CDI处理等。

The technology a set of water treatment system used depends on the quality of water and its purpose. The system set is basically divided into three parts: pre-treatment system, advanced

treatment system and terminal treatment system. It is widely used for water treatment for food and beverage production, beer fermentation and saccharification, urban water supply and drainage, municipal and industrial sewage treatment, boiler feeding, high purity water in electronic industry, medical injection, sea water desalination, etc.

The pretreatment includes multi-media filtration, active carbon filtration, softening, iron and manganese filtration, ultra-filtration, micro-filtration, etc.; advanced treatment includes water treatment by film and ion exchange and the terminal treatment includes ozonization, UV sterilization, polishing mixed-bed treatment, EDI or CDI, etc.

# 苏丹金箭： 携手达意隆开辟国际市场

## Sudan Golden Arrow Opens up International Market with Tech-Long

苏丹金箭是苏丹最大的私人企业，公司建于1948年，经营范围涉及房地产，目前是苏丹境内唯一一家拥有丰田代理，YAMAHA摩托电机代理，日产代理，三菱代理，日立代理的大型企业。



in 1948. Its business scope involves real estate. It is the only large enterprise in Sudan that has the authorities of agency of Toyota, YAMAHA motor, Nissan, Mitsubishi and Hitachi.

Premier Food Product founded in 2002 is a wholly-owned subsidiary company of Golden Arrow, equipped with 430 full-time employees, 80 transport vehicles, some automobiles and 10-ton trucks. Milk and fruit juice are the main products of the company who also produces and sells CSD beverage and water. It has many famous brands, such as Taza, Daima, Primo, Kuku Fruti and Latti. Taza is the first milk brand applying the Tetra packing technology in Sudan. The company is a powerful beverage producer and distributor in Sudan whose sales network covers the whole territory of Sudan.

To meet the busy season, beverage manufacturers will make some plans on investment and expansion at the end of every year. It is of great importance for machine suppliers to grasp the changeable market for development.

创立于2002年的第一食品生产（Premier Food Product）是隶属于金箭的一家全资子公司，公司正式员工430人，拥有80台运输车，外配多辆小汽车和10吨的大货车。公司主打产品以牛奶和果汁为主，同时兼顾含汽和水的生产和销售。目前旗下拥有多个知名品牌，如Taza, Daima, Primo, Kuku Fruti, Latti等。其中Taza是苏丹境内第一个用利乐包装的牛奶品牌，公司销售网络遍布苏丹境内，是苏丹一家实力雄厚的饮料生产和分销商。

为了迎接生产旺季的到来，各饮料厂家都会在每年年底做一些投资、扩产的规划，对于机械设备供应商而言能否准确掌握瞬息万变的市场信息对企业发展起到举足轻重的作用。

Sudan Golden Arrow is the largest private company in Sudan which was originally founded

2010年初，为了巩固苏丹的国内市场，同时也为开辟周边、海外市场做好准备，Premier Food Product决定扩大自身的生产规模。在初步确定采购意向后，Premier Food Product开始按照技术要求寻找合适的设备供应商，这时，在国外享有一定知名度和美誉度的达意隆引起了Premier Food Product的注意，很快双方有了初步的接触，经过多次的沟通，双方逐渐形成默契，2010年4月，在这个春暖花开的季节里，Premier Food Product向达意隆订购了一条22000BPH的含气生产整线加上300BPH的五加仑整线，相关的事宜正良好有序地进行着。

此次携手Premier Food Product，达意隆凭借自身良好的品牌形象获得客户的认可，接下来达意隆将继续借用品牌效应开辟新的国际市场。

Early in 2010, in order to consolidate its domestic market and make preparation for developing markets in its bordering countries and overseas markets, Premier Food Product decided to expand its production scale and began to looking for an appropriate equipment supplier according to its technical requirements after it had confirmed its preliminary intent of purchase. Then, Tech-Long, enjoying popularity and good reputation abroad attracted Premier Food Product's attention. They soon made contact with each other and gradually reached an agreement after some negotiations. In April 2010, Premier Food Product ordered a Tech-Long 22000BPH complete line and 300BPH five-gallon complete line.

Depending on its own good brand image, Tech-Long was recognized by Premier Food Product. In the future, Tech-Long will keep using its brand to explore new global markets.

Text and Picture by: Frankie Pan



左一 项目介绍人王毅(王总)、左二Premier Food Product公司总裁Abdu和总监Amir(右二)、达意隆项目负责人尹峰(中间)和潘毅鹏(右一)

First on the left, project introducer Wang Yi; second on the left, Premier Food Product's president Abdu and general director Amir (second on the right); Tech-Long's project director Yin Feng (middle) and Pan Yipeng (first on the right)

# 达意隆深化与巴基斯坦百事的合作

## Tech-Long Deepens Cooperation with PepsiCo Pakistan

### 企业背景 Company Background :

Haidri Beverages (Pvt) Ltd——巴基斯坦百事可乐的最大合作伙伴，同时也是巴基斯坦最大的饮料灌装企业，旗下的集团拥有两个实力雄厚的分公司：Nothern Bottling Co.(Pvt) Ltd and Beverage Plus(Private) Limited。集团在业内拥有超过25年的饮料灌装历史，多年来一直致力于生产优质的产品，并在当地的饮料市场份额中一直占据着领先地位。

Haidri Beverages (Pvt) Ltd is the largest beverage company in Pakistan (A Franchise of PepsiCo Inc.) with a successful business history of more than 25 years. Beside that there are two branch beverage companies called Nothern Bottling Co. (Pvt) Ltd and Beverage Plus(Private) Limited . This company devotes to produce qualified high-end beverages, and take a leading position in local beverage market.

Text by: Tomas Zhang / Ritesh Anuragh  
Picture by: Tomas Zhang

客户现场留影  
In PepsiCo Plant



达意隆与巴基斯坦百事双方之间的合作源于2008年3月，当时巴基斯坦百事可乐一次性从达意隆引进了一条30,000瓶每小时500ml PET瓶的热灌装线和一条18,000瓶每小时250ml玻璃瓶的热灌装线。这两条热灌装线被安装在巴基斯坦的首都伊斯兰堡的Beverage Plus(Private) Limited 工厂里，投入使用后，全线运转稳定，生产效率完全符合百事生产要求。

2009年，为了扩大含气灌装线的产能，全面提高PET瓶的供给能力，巴基斯坦百事和达意隆启动了新的25,000瓶每小时的吹瓶机以及配套项目洽谈工作，经过多次的洽谈协商，双方最终达成一致的协议，并于当年3月成功立项。近期，该项目将安装调试完毕并交付厂方正式使用，目前，各方面的调试工作进展非常顺利，生产效率与预期目标相吻合。

作为巴基斯坦百事可乐的最重要的合作伙伴之一，Haidri Beverages (Pvt) Ltd在饮料行业占据了一定的影响力。基于之前与百事可乐的多次成功合作，达意隆和Haidri Beverages (Pvt) Ltd初步筑建了良好的合作平台，

2010年10月，达意隆国际销售总监Mr.Johnson Zhang一行专程到巴基斯坦伊斯兰堡拜访了Haidri Beverages (Pvt) Ltd。在此期间，Mr. Johnson Zhang受到了该集团的热情款待。随后Mr. Johnson Zhang与Haidri Beverages (Pvt) Ltd董事长Mr. Imran Khan以及技术总监Mr. Muhammad Akhtar Chaudry就新项目的开展展开了全面而详细地洽谈，客户对达意隆的机械性能以及服务各个方面大为赞赏。此次会谈进行得相当顺利，客户最终确定购买RJM14全自动吹瓶机意向。

此次达意隆和Haidri Beverages (Pvt) Ltd间的紧密合作，为今后双方的合作提供了更广阔的前景，双方将秉承“诚信、共赢”的合作理念，携手共进！

Haidri Beverages (Pvt) Ltd (A Franchise of PepsiCo Inc.) and Tech-Long cooperation was beginning from 2008. In November 2008, signed

two contracts as 30,000bph PET bottle hotfilling line and 18,000bph glass bottle hotfilling line. These two lines have been installed in the Pakistan capital city Islamabad. The efficiency was qualified as Pepsi Standard and run very well.

In 2009, base on the successful cooperation after the first two projects, and due to the customer want to enlarge their ability to blow PET bottle for themselves, they started to plan a new project of the blowing machine with Tech-Long. In March 2009, after a very good discussion Tech-Long successfully got the 25,000bph blowing machine and air conveyor project. The installation and commissioning of this project has been completed recently, and the production efficiency completely reached the expectation of Pepsi Stand.

Haidri Beverages (Pvt) Ltd is a very strong and important cooperater of Tech-Long, it has a lot of beverage industry experience and huge market shareholder in Pakistan. Tech-Long as the leading packing machine supplier in China, commit itself to providing high quality equipment and complete service for clients. Successful projects with PepsiCo make a higher stage and better prospect for Haidri Beverages(Pvt) Ltd and Tech-Long.

In October 2010, Tech-Long international sales director Mr. Johnson Zhang paid a visit to one of the largest PepsiCo factories in Islamabad Haidri Beverages(Pvt) Ltd. Mr. Johnson Zhang got a hospitality reception from Hadri Beverage. During that time he has a very good meeting with the technical director Mr. Muhammad Akhtar Chaudry and the owner Mr. Imran Khan. Haidri Beverages(Pvt) Ltd was very satisfied with Tech-Long machines' performance and purchased a new RJM14 Automatic Blowing Machine. In the last but not the least the customer decided to buy it from Tech-Long and make better cooperation with each other.

# 达意隆吹响进军东非的号角

## Tech-Long Sounds Horn to Advance into East Africa

### 合作背景 Cooperation background :

埃塞俄比亚，位于非洲东部，面积1103600平方千米，人口多达八千万，是非洲人口的第一大国。当地气候复杂，温差较大，矿物种类较多，地热、森林资源丰富，水资源极其丰富，有30多条大河发源于中部高原，素有“东北非水塔”之美誉。

Ethiopia, located in east Africa, with an area of 1103600 km<sup>2</sup> and population up to 80 million, is the largest country in Africa in population. The climate there is complex with considerable temperature difference. There are many types of mineral. It is rich in geothermal energy, forest and water resources. More than 30 rivers originate from the central plateau. It's been known as the "Water Tower of Northeast Africa".

2010年4月22日，达意隆在非洲东部的第一条生产线顺利签单，由此吹响了达意隆进军东非的号角……

在这个充满生机和活力的国度里，得天独厚的水资源决定了当地饮料市场发展潜力，因此也决定了饮料机械设备竞争的异常激烈。此次购买达意隆设备的是埃塞ORIGIN食品饮料公司，隶属当地第二大集团公司旗下，在当地具有一定的规模和实力，如果能与ORIGIN食品饮料公司建立合作关系，就可以在埃塞俄比亚市场上建立一个重要阵地，实现以点带面，这对达意隆在东非市场上宣传公司品牌具有极其重要的战略意义，正因为如此，也引来了多家国内外同行的激烈角逐，其中包括新美星与合肥中辰等多家企业，考察期间，客户对以上几家公司进行综合的考察。最终，达意隆还是凭借着超强的实力，良好的服务脱颖而出，获得客户一致的认可。

ORIGIN食品饮料公司这次采购的是一条10800的支装水线和桶装水线，总合同价值在450万人民币左右，其中包括吹灌旋一体机。吹灌旋一体机作为公司的拳头产品，这次强势进入埃塞俄比亚市场，不仅开拓了东非的市场，同时树立了良好的品牌形象。达意隆将借此契机将ORIGIN食品饮料公司打造成为达意隆在东非市场的榜样客户，从而辐射整个非洲市场，并进一步塑造成为宣传达意隆品牌的一扇崭新的窗口。

目前，这个项目的所有设备都已生产入库完毕，很快将交付客户进行安装。相信借助ORIGIN食品饮料公司这个“据点”，达意隆将在东非这片广袤的大地上越飞越高。

Since the first production line contract between Tech-Long and East Africa had been signed, Tech-Long sounds the horn to advance into East Africa...

In this land full of life and energy, the exceptionally rich water resource determines the exceptionally fierce competition among beverage equipment suppliers, as well as the

development potentiality of the local beverage market. It is ORIGIN that ordered Tech-Long equipment this time which is a subsidiary of the second largest group company among the local companies. ORIGIN is an ideal cooperation partner because of its strength in the local market. If Tech-Long can develop a working partnership with ORIGIN, it is able to establish a key position in Ethiopia's market for business expansion which is of great strategic importance for Tech-Long to promote its brand into the east Africa market and that's why so many companies of its kind at home and abroad including Newamstar and Sinostar are competing so fiercely for. During the period of observation, the customer carried out detailed observations on the mentioned companies. Ultimately, Tech-Long stood out for its powerful strength and excellent service and was recognized by the customers.

What did ORIGIN order was a 10800BPH bottled water production line and bulk bottled water production line with a contract value of about RMB 4.5 million Yuan. blow-fill-cap combi-block is included in this order. As the hit product, the powerful entrance of blow-fill-cap combi-block into Ethiopia's market has expanded its market to east Africa and portrayed a good brand image. Tech-Long have taken the chance to make ORIGIN become a model customer of Tech-Long in east Africa to reach out to the whole African market which will become a new window for promoting the brand of Tech-Long.

At present, all facilities for this project are produced and put into the warehouse and will be delivered to the customer for installation very soon. It is believed that Tech-Long will become stronger and stronger in East Africa based on its position in ORIGIN.

Text and Picture by: Sam Hu



# 企业长廊

## Enterprise Story

84 异国的天堂，美丽的三亚

Exotic Paradise, Beautiful Sanya

88 达意隆导入卓越绩效模式，建立科学管理体系

Tech-Long Introduces Performance Excellence Model and Establishes Scientific Management System



### [ 文化.品牌 Culture, Brand ]

文化塑造品牌，文化造就梦想，文化推动发展。先进的企业文化是灯塔、是指南针、是催化剂、更是一种生产力。企业文化的深度决定品牌内涵的厚度，达意隆始终坚持企业文化的建设与发展，以独特的人文关怀塑造了健康、积极向上的企业文化。

公司每年都会举办各式各样的活动丰富员工的生活，其中包括：为提高员工的综合素质和劳动技能开展的学习培训活动；为开发员工智力，培养员工的创造性和成就感，开展的技术创新活动；为丰富员工的精神生活，陶冶员工情操的娱乐活动，为培养员工拼搏精神，增强体质开展的体育竞技活动；为使员工增强对企业的感情，开展的福利性活动等，通过参与活动，让员工的生活和生产经营融为一体，让员工感受家庭般的温暖，同时增强员工以厂为家，以企业为傲的主人翁意识，促进企业又快又好的稳步发展。

Culture molds brands, creates dreams and promotes development. An advanced enterprise culture is a lighthouse, a compass, an activator, as well as a productive force. The depth of an enterprise's culture decides the depth of connotation of the brand. Tech-Long insists all along on constructing and developing a healthy and positive culture with its unique humanistic care.

Every year, the company will hold all kinds of activities for its employees, including training for improving overall quality and skills, technological innovation activities for developing intelligence and creativity and instill the sense of achievement, entertainments for enriching spiritual life and refining sentiment, sport activities for cultivating the spirit of fighting and building up body and benefiting activities for enforcing attachment to the company. These activities combine life with work. Through taking part in these activities, the employees can feel homey warmth.

# 异国的天堂，美丽的三亚

## Exotic Paradise, Beautiful Sanya

“请到天涯海角来，这里花果遍地栽，百种花果百样甜，随你甜到千里外，柑桔红了叫人乐，芒果黄了叫人爱，芭蕉熟了任你摘，菠萝大了任你采，啦啦啦啦啦啦……”动人的歌谣，美丽的画面，朗朗上口的旋律引起无数游人对椰岛的无限遐想……

“Please come to the End of the World (Tianya-Haijiao); here, flowers and fruits are everywhere; they have different tastes of sweet; when you travel far away, please bring them for they will sweeten your days; you will feel happy as the oranges turn red and the mangoes turn yellow; you can pick the plantain bananas and pineapples no matter how many you want when they mature. Layalayalaya...” an attractive ballad, a beautiful scene and a catchy tune brings about unlimited reveries...



达意隆营销总部合影  
A group photo of Tech-Long marketing head office's staff

2011年5月31日，达意隆营销总部一行50多人浩浩荡荡踏上开往三亚的火车，开始了为期5天的蓝色之旅。这里，碧水蓝天共一色，烟波浩瀚，帆影点点；这里，椰林婆娑，鸟语花香，奇石林立，游人仿佛置身于画卷中，如痴如醉，如烟如梦。

阳光、沙滩、海水，如此经典唯美的海南印象早已深深定格在游人心里，进驻喜来登大酒店后，大家稍事休息便开始活动。第一、二天是自由活动，于是大伙三五成群到海边戏水；有的忙于合影留念；也有的索性玩起了沙滩排球、水上篮球……团结拼搏的场面吸引了

游人的驻足，顿时成为一道独特的风景线。

几天的舟车劳顿后，大家选择在当地的一家餐厅美美的享受一顿海鲜晚餐，首先端上来的是号称海南“四大名菜”之首的文昌鸡，那淡黄光亮的色泽，早叫人垂涎三尺。好菜一道道往上送，叫人目不暇接：膏满肉肥的和乐蟹，皮滑肉精的东山羊，当然也少不了白灼河蚌、椰子饭、清蒸海虾之类。用餐过程相关人员还精心安排了歌舞助兴，好酒好歌相伴，大家又唱又跳完全陶醉其中。



The most famous dish among Hainan's four famous dishes—Wenchang Chicken  
海南四大名菜之首——文昌鸡



酒店风景一瞥  
A glimpse at the hotel scenery



最佳拍档  
The best partners



6月3号天微亮，大伙按捺不住兴奋之情，迫不及待来到三亚热带天堂森林公园，在通往山顶的路途，可谓山路十八弯，每一弯都是那么别有风情。园内的盘山路、石阶、栈道、亭台楼阁羞隐隐约约藏于丛林之中。这里最有趣的当属密林之上的云端，一座座似鸟窝形状的木屋，当地人称之为“鸟巢”。这里拥有独栋别墅及客房，建造奢华，极富热带风情。很多人到此都是慕《非诚勿扰II》之名而来，当然，我们也不会错过每一个经典景点。在这座有“情人桥”美誉的吊桥上，细细体验那种只可意会不可言表的浪漫情怀……

转眼间，几天的三亚之旅在欢笑声中圆满画上句号，在这里，达意隆人将最美的回忆，最灿烂的笑声留在美丽的三亚，留在每一个达意隆人的心中！

On May 31st, 2011, 50 employees of Tech-Long's marketing head office boarded the train bound for Sanya for a five-day blue journey. In Sanya, the sea and the sky share the same color. The endless ocean is shrouded in the mist. In the sea, the sailboats cast their shadows. In Sanya, the coconut trees are dancing; the birds are singing; the flowers are giving forth their fragrance and the strange stones are standing like trees in a forest. It seems that we are all in the scenery of a painting, like a dream.

The typical and beautiful Hainan is always so impressive because of its sunshine, sands and sea. After checking in at the reception in Sheraton Hotel and a short rest, everybody started their respective activities in the first and second days. They went to the sea side to play with water. Some were busy in taking photos; some were playing beach volleyball and aquatic basketball which attracted the attention from other tourists and suddenly became a unique view.

The group felt tired because they had been visiting and playing for several days. So they enjoyed a seafood dinner at a local restaurant. The

first course is Wenchang Chicken, the most famous one among the four famous dishes, with a yellowish gloss. Everyone cast greedy eyes at it. The waitress served some delicious courses in succession, including fleshy crabs, tender mutton, boiled clams, rice with coconut, steamed shrimps, and the like. At the dinner party, the tourist group was entertained with singing and dancing performances and then became intoxicated with happiness.

It was at dawn on June 3rd that everyone could not help being excited, so they could not wait to go to the Tropical Paradise Forest Park. The roads leading to the mountaintop are full of twists and turns. Each twist or turn has a distinctive charm of its own. The mountain roads, stone steps, plank roads built along the cliffs, pavilions, terraces, and towers hid among the trees and loomed. The most interesting thing is the frame houses at the top, with a bird's nest shape. The locals call them the "bird's nest". There are detached magnificent villas and guest rooms with unique tropical style. Many tourists come here because the story in the movie *If You Are The One II* happens here. With no doubt, we would not miss every typical attractions. The "lover bridge", a suspension bridge, on which people can experience the romance that can only be sensed but not expressed by words...

The journey in Sanya ended in cheering and laughing. The Tech-Longees have left their most pleasant recollections, radiant smiles behind here—the beautiful Sanya, and also, keep them in their minds.

Text by: Ni Yongshen

# 达意隆导入卓越绩效模式 建立科学管理体系

## Tech-Long Introduces Performance Excellence Model and Establishes Scientific Management System



为进一步提升企业管理的科学性，建立与国际接轨的绩效模式，达意隆于2011年6月引进并导入了卓越绩效模式。

卓越绩效模式（Performance Excellence Model）是当前国际上广泛认同的一种组织综合绩效管理的有效方法和工具。该模式源自美国波多里奇奖评审标准，以顾客为导向，追求卓越绩效管理理念。它通过综合的组织绩效管理方法，使组织和个人得到进步和发展，提高组织的整体绩效和能力，为顾客和其它相关方创造价值，并使组织持续获得成功。

我司在6月组织进行了卓越绩效启动会，并开展了相应的咨询、培训活动。相信在先进的综合绩效管理理念指导下，我司包括领导、战略、顾客和市场、测量分析改进、人力资源、过程管理、经营结果等各方面都会取得更大的进步。

In order to further upgrade the scientificness of enterprise management and establish a performance model geared to international standards, Tech-Long introduced and applied the Performance Excellence Model in June, 2011.

Performance Excellence Model is an effective integrated approach and tool to organizational performance management which has been widely recognized in the world. It derives from the Baldrige Criteria for Performance Excellence, is oriented to customers and pursues the management idea of performance excellence. Through an integrated approach to organizational performance management, it helps the organizations and individuals make progress and development, improve the organization's overall performance and capability, create value for the customers and other related parties and makes the organizations achieve continuous success.

The company organized a Performance Excellence start-up meeting in June and developed appropriate consulting and training activities. It is believed that with the advanced Performance Excellence Model, Tech-Long will make more significant progress in leadership, strategy, customer and market development, measurement analysis improvement, human resource, process management and performance.

Text by: Wang Zhenwu  
Picture by: Rainmy.chan



# 微负压等压灌装技术在酱油灌装机的应用

——新型酱油灌装和压盖技术介绍

## Application of Light-vacuum and Isobaric Technology on Soy Filling Machine-Introduction to New Soy Filling and Capping Technology

■ Text and Pictures by : Tech-long Xie Qibo

通过运用单缸结构、微负压等压灌装原理，达意隆有效地帮助酱油生产企业解决了灌装过程冒泡、滴漏、灌装液位精度偏差大的问题，并提高了灌装效率。同时，凭借新型冲瓶、灌装、压盖、旋盖四合一机，达意隆开辟了酱油灌装市场。

*Adopting single-chamber structure and applying the isobaric filling technology, Tech-Long effectively helps soy manufacturers resolve the problems such as bubbling, dripping, filling precision deviation and improve the filling efficiency. Meanwhile, Tech-Long has opened up the soy filling market by virtue of a new rinse-fill-roll-on-cap monobloc.*

# 技术与加工

## Innovation in Technology and Manufacturing

91 微负压等压灌装技术在酱油灌装机的应用——新型酱油灌装和压盖技术介绍  
Application of Light-vacuum and Isobaric Technology on Soy Filling Machine-  
Introduction to New Soy Filling and Capping Technology



24000BPH四合一微负压灌装机  
24000BPH light vacuum rinse-fill-rollon-cap monobloc

At present, the differential pressure filling principle is applied in the domestic soy filling machine. However, many customers reflect that the soy filling machine has problems of bubbling, poor level accuracy, low speed, low rated output and low efficiency and so on. Against this background, Tech-Long Packing Machine Co., Ltd ("Tech-Long" for short) decided to apply the isobaric filling technology onto the soy filling machine and developed the first 32 heads isobaric soy filling machine. In addition, successful application has been made in the customer's plant.



Adopting single-chamber structure and applying the isobaric filling technology, the problems such as bubbling, dripping, filling precision deviation can be effectively solved and filling efficiency improved. In 2010, the company developed a rinse-fill-rollon-cap monobloc for a domestic soy company with the output of 24000 bph. Because of this, Tech-Long has successfully entered into the soy filling market. Here, a detailed description about the new soy filling machine is made.

This soy filling monobloc is designed for washing, filling, internal cover rolling on and external cover capping. The washing unit and rolling unit are conventionally designed. Therefore, the filling unit and the capping unit which are developed technically for soy filling are the key points here.

目前，国内现有机械阀灌装的酱油灌装机都是采用差压灌装原理，但是不少用户反映，这种酱油灌装机普遍存在灌装过程中冒泡严重、灌装液位精度差、灌装速度低、额定产量不高、效率低等问题。在这种背景下，达意隆包装机械股份有限公司（以下简称达意隆）决定将微负压等压灌装的原理用于酱油灌装上，自主开发了第一台32头的微负压等压酱油灌装机，并成功应用于客户工厂。

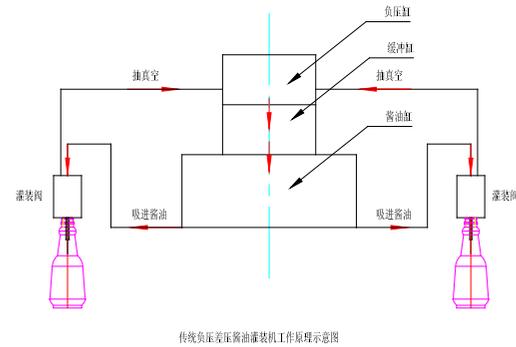
达意隆公司开发的酱油灌装机采用单缸结构、微负压等压灌装原理，有效解决了灌装过程冒泡、滴漏、灌装液位精度偏差大的问题，并提高了灌装效率。2010年公司给国内某酱油公司开发出冲瓶、灌装、压盖、旋盖四合一机，其80头灌装产量高达24000瓶/小时，凭借该项目，达意隆成功进入酱油灌装市场。下面就这种新型的酱油灌装四合一机做一个详细的介绍。

酱油灌装四合一机主要实现对瓶子的冲洗、灌装、内盖的压盖及外盖的旋盖。四合一机中的冲瓶机和外盖旋盖机按照常规的设计，这里不再介绍。本文着重介绍专门为酱油灌装开发的灌装机及内盖压盖机。

## 一、酱油灌装机的灌装原理

### Soy filling principles

为了对比说明，先简单介绍一下传统的国产酱油灌装机的的工作原理。这种灌装机采用多缸结构，应用负压差压灌装原理，整个灌装原理如下图所示：



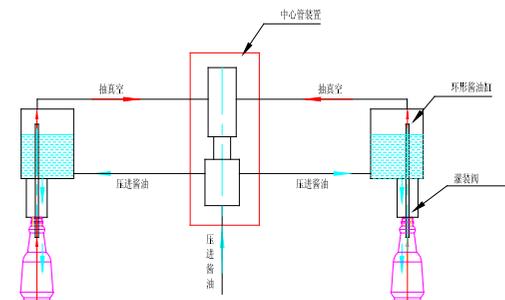
- 1.抽真空：通过灌装阀的回气管对瓶子抽真空。
- 2.灌装：当瓶子内达到一定的真空度时，在真空吸附作用下，酱油从酱油缸中被吸进瓶子里。
- 3.定液面：当瓶子内吸入的酱油上升至回气管底部时，瓶内液面不再上升，酱油此时由回气管吸到真空缸中，直至灌装阀关闭。
- 4.缓冲回流：负压缸内的酱油经筛网滤掉泡沫后，流进缓冲缸内，待一定时间后，回流到酱油缸中。

从上面的流程可以看出，由于采用的是差压灌装（即酱油缸内与瓶子内存在压力差），在灌装过程中，需不断对瓶子进行抽真空，在将酱油吸进瓶子内的同时，必定会从瓶子中吸走部分的酱油，这样的直接后果是成品液位不好控制、灌装效率低、灌装过程冒泡严重等；同时，由于采用的是三缸结构，清洗要求更高。更重要的是，差压灌装，对瓶身的硬度有较高的要求，玻璃瓶或瓶身很硬的PET瓶比较适合，瓶身硬度较差的PET瓶就无法灌装。

广州达意隆公司研发的微负压等压酱油灌装机，采用单个环形缸，利用的是微负压等压灌装原理，即环形缸内的背压为微负压（约为 $-0.03\sim-0.02\text{MPa}$ ），当缸内的压力和瓶子内压力相等时，酱油在自重作用下流进瓶内，其灌装示意图如下图所示：

- 1.等压条件的建立：环形酱油缸连接着真空管道。当瓶子上升至瓶口与灌装阀密封后，灌装阀被打开；瓶内气体通过回气管与酱油缸内微负压的气体相连，瓶子被抽真空，直至瓶内气压与酱油缸内气压相等。
- 2.灌装：当瓶内气压与酱油缸内气压相等时，酱油在自重作用下从酱油缸流进瓶子里。
- 3.定液面：当瓶子内的酱油上升至回气管底部时，瓶内液面不再上升；根据连通器原理，在足够多的时间里，酱油将沿回气管内上升，直至与酱油缸中的酱油液面持平。
- 4.关阀回吸：瓶子下降，灌装阀关闭；回气管内的酱油在负压作用下被吸回缸内。

分析以上流程：由于瓶子与酱油缸内建立了等压，酱油在自重作用下灌装，灌装过程平稳，有利减少泡沫的产生；同时由于灌装过程中没有酱油被倒吸回缸，灌装效率大幅提升，以灌500ml的瓶、60个灌装阀的灌装机为例，国内其他厂家设备的产量最高仅为10000瓶/时，而达



意隆研发的这款微负压等压灌装及的产品可达18000瓶/时。灌装完成后，缸内的微负压将回气管内的酱油回吸，成品液位容易保证，而且没有滴漏，既卫生又节约成本。微负压（负压为 $-0.03\text{MPa}$ 左右）的压力，一般硬度的PET瓶都适用，瓶子的适用范围大大提高。

Here, a brief description about the functioning principles of traditional domestic soy filling machine for comparison. This kind of machine has a multi-chamber structure and uses differential pressure. The principles of the whole filling process are as shown in the following figure:

1. Vacuuming: The bottles are vacuumed by using a vent tube on filling valve.
2. Filling: When the bottle reaches to a certain vacuum degree, soy will be sucked into the bottles by vacuum adsorption.
3. Settling down liquid level: When the soy in the bottle climbs to the bottom of the vent tube, the level will stop rising and the soy will be drawn into the vacuum chamber through the vent tube until filling valve is turned off.
4. Buffering & recirculation: The soy in the negative pressure chamber will flow into the buffer chamber after the bubbles are filtered by the strainer. It will return to soy chamber after a certain period of time.

From the above processes, a conclusion can be drawn that when adopting differential pressure filling (pressure difference exists between soy chamber and the bottle), the bottles are required to be vacuumed. However, part of the soy will be taken away when it is drawn into the bottles. Consequently, the liquid level is not in precise control. Problems of low

efficiency and bubbling will occur. Because of the three-chamber structure, the requirement for cleaning is even higher. More importantly, differential pressure filling requires higher bottle hardness and can only be applied in glass bottles or hard PET bottles, not in PET bottles with low hardness.

As for the isobaric soy filling machine developed by Tech-Long, single-chamber structure and isobaric filling principle are adopted which means the back pressure inside the chamber is a minor negative pressure (appropriately  $-0.03$  to  $-0.02\text{MPa}$ ). When the pressures inside the chamber and bottle equal to each other, the soy will flow into the bottle by gravity. The filling diagram is shown as follow:

1. Creating isobaric condition: The soy chamber connects with the vacuum pipe. When bottles rise up to filling valve and form an enclosed cycle, the valve will open. The air in the bottle connects with that in the soy chamber through vent tube and the bottle is vacuumed until the pressure in the bottle equals to that in the chamber.
2. Filling: when the pressure in the bottle equals to that in the chamber, the soy will flow into the bottle by gravity.
3. Level positioning: When the soy in the bottle climbs to the bottom of the vent tube, the liquid will stop rising. According to the communicating vessel principle, the soy will ascend along the vent tube until the liquid in the bottle and in the chamber reaches at the same level.
4. Valve turning off for suck-back: When the bottle gets down, the filling valve closes. The soy in the vent tube will be drawn to chamber

because of negative pressure.

Because the pressures in bottle and in the soy chamber equals to each other, the soy will flow into the bottle by gravity which makes the filling process stable and reduce bubbles. In addition, no soy will be drawn back to the chamber during the filling process which will significantly improve the efficiency. For example, the maximum output of a 500ml type filling machine with 60 filling valves produced by other domestic manufacturers is only 10,000 bph while the output of Tech-Long's machine is up to 18,000 bph. The soy left in vent tube will be sucked back by the light vacuum in the chamber and consequently, the liquid level is under control without any dripping. It is sanitary and cost-effective. The light vacuum (appropriately -0.03 MPa) is applicable to ordinary PET bottles.

## 二、微负压系统的压力控制

### Pressure control in light vacuum system

环形缸内的气体的压力控制是灌装生产过程中需要重点关注的问题。过大的负压，会将酱油从缸体里抽到真空系统里去，过小的负压，又起不了防止滴漏的作用；而且缸体内压力的稳定也是整个系统压力稳定的基础。达意隆的研发人员希望缸体内的微负压能够保持在一个理想的范围内，但是直接通过调定真空泵的真空度的方法不是很理想，原因是：当在某个状态下将真空泵调节完成后，真空泵抽走气体的体积就是一个定值，但是灌装时缸内的液面是变化的，也就是说缸内的气体体积是变化着的，同时其它的原因也会影响到缸内负压，所以缸内负压是变化着的，但不管缸内压力是大了还是小了，真空泵抽走气

体的体积都是定值，这样直接的效果就是负压大时酱油被抽走、负压小时滴漏严重。

研发人员在缸上加装一个压力传感器，并在与缸体连接的真空管路上装上一个真空调节阀，通过传感器的信号控制调节阀的开启，从而实现了在不同的情况下，真空泵抽走缸内气体的体积是变化的：缸内真空度小时加大对缸内气体的抽真空，真空度大时开启调节阀，减少对缸内气体的抽真空。如此一来，对压力的控制起到了立竿见影的效果，缸上的压力表显示的缸内压力基本稳定在要求的压力范围内，灌装阀基本没有滴漏，在真空泵前的缓冲缸中，8个小时正常生产后，通过真空管路抽走的酱油的量不足500ml。

Pressure control in the annular chamber is a key problem in the filling process. The soy will be drawn from the chamber to the vacuum system when the negative pressure is excessive while it can not avoid dripping when it is insufficient. The stable pressure in the chamber is the foundation of stability of the whole system. Tech-Long's researchers expect that the negative pressure in the chamber will be within an ideal range. By directly adjusting the vacuum degree in the vacuum pump, no satisfactory result can be achieved. The reason is: when the vacuum pump has been regulated at a certain state, the gas volume that has been removed is a constant value, but the level in the chamber is changeable in the filling process, that is to say, the gas volume in the chamber is variable. Other factors will also affect the negative pressure in the chamber and therefore the negative pressure in the chamber is variable. No matter whether pressure in the chamber becomes higher or lower, the gas volume that has been removed is a constant value. As a result, when the negative pressure

become higher, the soy will be taken away, otherwise serious dripping will occur.

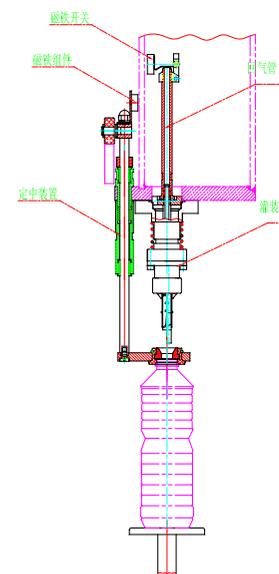
The researchers then install a pressure sensor on the chamber and a vacuum regulating valve on the vacuum pipe connecting chamber body. Consequently, the volume of gas that has been removed by the vacuum pump becomes changeable in different situations: When the vacuum degree in the chamber is lower, vacuuming shall be enhanced; while the vacuum degree in the chamber is high, vacuuming shall be reduced by turning on the regulating valve. As a result, a good pressure control can be achieved. When the pressure gauge on the chamber displays a stable pressure required, no dripping occurs. The amount of soy taken away through the vacuum pipe into the buffer chamber is less than 500ml after operation of 8 hours.

## 三、酱油灌装机的其他技术特点

### Other technical features of soy filling machine

除了原理上的不同外，为提高性能，此新型酱油灌装机还采用了以下新技术：采用偏心回气管有效减少泡沫的产生。

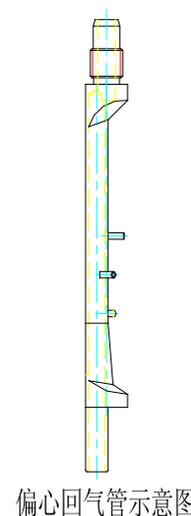
由于酱油本身较粘，灌装过程产生的泡沫不易消散，当瓶子内过多的泡沫封住回气管口、微负压的压力无法克服堆积的泡沫时，便会致酱油下流受阻，影响灌装速度，在即定产量下就会产生灌不



满、各个瓶子液位高低不一致等问题。因此，减少泡沫的产生是灌装时需要重点解决的问题。传统的做法是在直线形的回气管上装一分流伞，使酱油在分流伞的作用下以伞状沿瓶壁流入瓶子中，但使用这种方法时，由于酱油360度散开打到瓶壁上，相同流量

情况下流速减小，直径大小不同的瓶子酱油到达瓶壁的情况不尽相同，因此减少泡沫产生的情况不够理想。而偏心回气管利用偏心后改变酱油的流动方向，使酱油在较高流速下保证与瓶壁接触，以扇形沿瓶壁流入瓶子，减少泡沫产生的效果更好。同时回气管下端、扇形的反面处开有一段开口槽，这种设计一方面加快回气速度，显著提高灌装速度，而且当瓶内的泡沫封住回气管口时，瓶内气体还可以从开口槽处回流，另一方面当少量的酱油沿回气管扇形的对面直线流过回气管下端时，将在开口处就被回吸，不会直流入瓶子中，从而激起泡沫。

利用磁性开关实现无瓶不抽真空功能。利用同极相斥的原理，用一对磁铁来实现回气管的通气 and 断气，达到无瓶不抽真空的目的，减少真空损失。具体做法：在缸内的回气管上端装一可活动的磁铁开关，盖住回气管口；再在缸外的定中装置上端安装另一同极性的磁铁组件。当对应的阀有瓶子时，瓶子在托瓶汽缸的作用下上升，顶起定中装置，定中装置带着磁铁组件一起上升，



由于同极相斥的原理，回气管上端的磁铁开关逐渐被推开，回气管通气，对瓶子进行抽真空。当瓶子下降后，回气管上端的磁铁开关复位盖住回气管口，从而达到无瓶不抽真空的目的。这种形式结构简单、动作灵活、成本低廉，现场使用反馈很好。

Besides different filling principles, in order to improve performance, eccentric vent tube is also adopted to reduce bubbles.

Due to the viscosity, it is not easy for the bubbles generated in the filling process to disappear. When too many bubbles in the bottle block the mouth of vent tube and the negative pressure fails to break the accumulated bubbles, the soy will be hindered from flowing downward which will affect the filling speed. As a result, problems of inadequate filling and inconsistency in level will arise. Therefore, it is very important to reduce bubbles. The traditional practice is to install a flow divider on the linear vent tube so that the soy flows into the bottle along the wall through the flow divider. However, when the soy is distributed through 360 degrees to flow along the wall, the speed will lower if the flow is retained, or different bottle forms. Thus it is not ideal for reducing bubbles. However, an eccentric vent tube is able to change the soy flow direction so that the contact between the wall and the soy is guaranteed, but at a relatively high speed. Therefore, a better result of bubble reducing can be achieved when using an eccentric vent tube. In addition, there is a slot at the bottom of the pipe and on the back of the divider. The slot has two functions: on one hand, it remarkably accelerates filling by increasing air return speed. Besides, air in the bottle can flow back through the slot when the bubbles in the

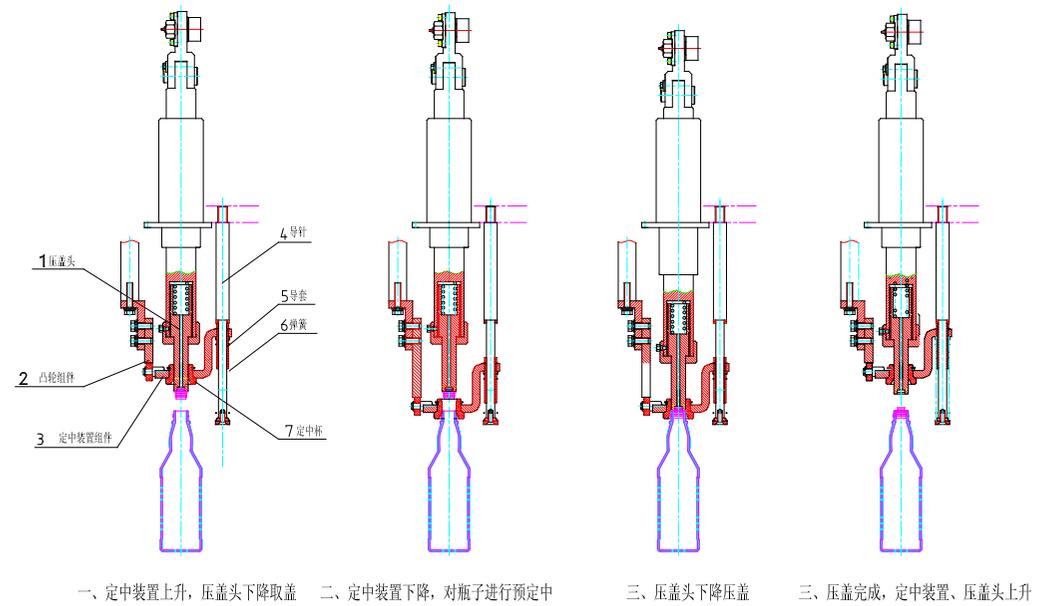
bottle block the pipe mouth; on the other hand, when little amount soy flows through the bottom of vent tube along the opposite straight line on the pipe, it will be sucked back at the slot. Thus, no bubble will appear.

The magnetic switch is a guarantee against vacuuming when there is no bottles. Based on poles repel principle, by using a pair of magnets, the air connection and disconnection is under control to reduce vacuum loss. It works in this specific way: a movable magnetic switch is installed on the upper vent tube in the chamber for a bottle; when another magnetic with the same polarity is installed at the upper end of centering device outside the chamber. When a bottle is ready for a valve, the bottle will ascend by the supporting cylinder and jack up the centering device. As the magnet rises with the centering device, the magnetic switch will be gradually turned on because like poles repel. Consequently, air in the vent tube connects and the bottle is vacuumed. When the bottle descends, the magnetic switch at the upper end of the air return pipe will return to its initial position to cover the pipe mouth. As a result, no vacuuming takes place when there are no bottles. This is a simple, flexible and cost-effective solution and positive feedback on field application has been obtained.

#### 四、内盖压盖机的新技术

#### New technology for roll-on capper of internal cap

酱油的塑料内盖具有薄壁、突出瓶口部分短、与瓶口内径配合间隙小等特点，因此盖身软容易压变形，压盖时用来取盖的位置短，压盖时



对中要求很高，容易出现歪盖坏盖等，故在实际生产中，酱油厂家都是采用人工来压内盖。有知名的设备厂家尝试过用压盖机来压盖，结果没有成功。在接到这个项目时，客户要求达意隆的酱油机必须包括内盖压盖机，不然整线的合同都不能保证。为此，研发人员考虑了各种方案，经深思熟虑后，最终采用了全新的压盖技术。

本压盖机为旋转式的压盖机，其运动原理与其它压盖机一样，都是压盖头绕轴线旋转，同时在凸轮作用下上升、下降完成压盖动作。本盖压盖机主要在压盖头上进行了新的尝试，如上图所示：1). 压盖体取盖口和塑料内盖用过盈配合，保证取盖后不掉盖；2). 给每个压盖头加装一套定中装置，用工艺保证定中装置与压盖头的同轴；3). 定中装置沿凸轮轨迹下降，弹簧复位保证处于上升的高位。工作流程如下：1). 压盖头下降取盖时，定中装置的定中杯穿在压盖头上，与压盖头的下端保持一段距离（方便压盖头

取盖），在凸轮轨迹作用下，与压盖头的中心轴同时下降；2). 压盖头取盖后，定中装置沿凸轮轨迹继续下降，套在瓶口上，对瓶口进行预确定中；3). 压盖头下降，对已被准确定中的瓶子进行压盖；4). 定中装置与压盖头在各自的凸轮作用下上升，压盖完成。

通过以上两项改进，现场取得了很好的效果，有效解决了压歪盖压坏盖的问题，同时15头压盖机每小时产量达到24000瓶，大大提高了整线的效率。

The wall of a plastic internal cap for soy bottle is thin; the protuberant part is short; the gap between the cap and bottle internal wall is limited. Therefore, the internal cap is soft and deformable. The distance for picking up a cap is short, while the centering requirement is exacting because the caps can be easily slanted or broken. That's why the bottles are capped

manually in practical production. Trials using a capping machine conducted by some famous plants were unsuccessful. The customer in this project required a soy filling machine which must be equipped with an internal cap capping machine; otherwise the contract for complete line will be invalid. Given this requirement, the researchers finally made a deliberate decision of adopting a new capping technology after taking various solutions into consideration.

This is a rotary capping machine. Like other machines, the head revolves on the axis and at the same time, it ascends and descends by the cam to finish a capping function. New trials are carried out on the head which is as shown in the above figure: 1) interference fit between capping clutch and the plastic internal cap is adopted to prevent the cap from dropping.; 2) each head is equipped with a centering device and the device and the head must share the same axis; 3) the centering device descends along the cam curve; the spring returns to a high position. The workflow is as follow; 1) when the head is descending for the cap, the cup of the centering device should be placed on the head and kept a certain distance from the lower end of the head (for picking up caps), then the cup descends together with the central axis of the head along the cam curve; 2) After picking the cap, the centering device keeps descending along the cam curve until it covers the bottle mouth for centering; 3) the head descends and caps the centered bottle; 4) The centering device and head ascend by their respective

cams and then capping is done.

With the two improvements, excellent results have been achieved in the field trials and the problems of slanting or breaking caps are resolved effectively. In addition, the output of a 15-head capping machine is up to 24,000 bph and the efficiency of the complete line has been significantly improved.

## 五、总结 Summary

微负压等压酱油灌装设备为广州达意隆包装机械股份有限公司完全独立自主开发的新产品，主要针对于酱油的包装，同时也适用于其他产品，包括非含汽酒类、食用油、甜醋、白醋等，应用广泛。此设备的开发成功，填补了公司在微负压酱油灌装系统技术上的空白。经过几年的不断摸索与成功实践，公司的酱油灌装技术日臻成熟，至今为止，达意隆酱油灌装机成功进入了广东中山美味鲜、东古酱油、海天酱油、山东富氏、山东欣和等知名企业，获得了客户的好评。2010年年底，海天公司选购了达意隆的酱油灌装机用于灌装陈醋和白醋。同时公司为山东富氏设计公司的灌装设备采用了洁净平台的结构，综合性能达到了国外著名品牌同类产品的水平。以上的灌装机及内盖压盖机技术，均已申请了专利保护。

The isobaric soy filling machine is developed independently by Guangzhou Tech-Long Packing Machine Co., Ltd. It is mainly used for bottle soy and is also applicable to

other products including wines containing no gas, edible oil, sweetened vinegar, white vinegar. The successful development has filled the gap of light vacuum technology for soy filling system. Tech-Long's soy filling technology is getting mature by attempting and summing up experience for years. Tech-Long soy filling machines today are running in some well-known enterprises such as Meiweixian Guangdong, Donggu, Haday, Fortune Food Shandong, Shinho Shandong and well received by them. At the end of 2010, Haday ordered soy filling machines for filling mature vinegar and white vinegar. At the same time, Tech-Long develops a clean platform structure for Fortune Food Shandong, of which the overall performance is comparable to famous foreign brands of its kind. New technologies mentioned above have applied application patent for intelligence protection.



# 液态产品工厂全面解决方案

## Turnkey Solution for Liquid Product Manufacturer



作为液态产品包装整线供应商，达意隆拥有液态产品生产线全线设备：水处理、前处理、注塑、吹瓶、灌装、输送、贴标、包装……他的优势是知道每个部位的需求，因此能够为客户量身定做，做到最贴身。

As whole line supplier for liquid product manufacturers, Tech-Long can provide whole line including: water treatment system, beverage processing system, preform injection molder, bottle blow molder, filling monobloc, conveying system, labeler, packing machines, and so on. Tech-Long's advantage is knowing requirements for every part of machines, and able to satisfy these requirements with customized machines.

