



# TFTA Visits China Automotive Fastener Companies (Year 2014)

## 2014年台湾螺丝贸易协会 中国汽车扣件参访报导

by William Liao, President of Fastener World Inc. 文 / 惠达杂志 社长 廖英武

### Introduction

Under Chairman Bill Chen's call, Taiwan Fastener Trading Association (TFTA) formed a delegation for a 6-day visit to China's largest automotive fastener show (of over 656 exhibitors) and 6 companies producing



automotive fasteners and peripheral equipment. Full gratitude is dedicated to president Chi-Hung Chen of Gwo Lian Machinery, general manager London Yan of Cowin Fastech, president Lien-Kum Juam of Hung Li Machinery, president Chi-Li Chu of Yeswin Machinery, president Chih-Sheng Chow of Eagle Metalware, and president Yung-Shuh Yang of Sanyung Electric Furnace for their hospitality in this journey. They offered full factory tour, elaborating the current status and future of China's automotive fastener industry, along with business patterns, and corporate history. The delegates felt the courtesy and benefited a lot from the journey. At the end of the journey, the delegates visited GM's car assembly plant in Shanghai (annual capacity: 7 million units) and learned more about the application of automotive fasteners.

Many Taiwanese entrepreneurs in China say that the local automotive industry is booming with over 20 million units of cars produced annually, and therefore fastener demand in the next decade looks optimistic. In addition to Taiwan, automotive fastener suppliers in Europe, US, Korea, Japan, and local China all increase production scale because they look forward to the automotive fastener market. Automotive fasteners are the top products used by the market. The value of manufactured automotive fasteners in replacement for imported ones is up to over USD 1 billion. The scale of peripheral market is even bigger. Some people in the industry point out investing in the domestic market is way better than investing in the export market and China doesn't have a suitable environment for export sales.

Last but not the least, I'd like to thank again for the hospitality of the aforesaid presidents. My gratitude for president Jin-Fang Hong of Sumon Industrial, Jih-Sheng Chen of Taiwan RDP, and general manager Chan-Fei Hu of Chun Zu (Shanghai). The journey was arranged by Chi-Hung Chen of Gwo Lian Machinery, led by TFTA founder James Su, and came to a perfect ending. It is a little exhausting but worth it.

### 前言

在理事长 陈建宇先生号召指示下，台湾螺丝贸易协会特别筹组参观团，全程6天中除参观同期展出号称全中国最大的上海汽车紧固件专业展656家汽车扣件展商外，也顺拜会7家从事汽车扣件展品及周边设备业者，全程中非常感谢国联公司 陈志宏董事长、群展公司 杨荣德总经理、鸿利公司 阮连昆董事长、友信机械 朱启礼董事长、鹏驰公司 周启胜董事长、三永电炉 杨永旭董事长的热忱招待，除无保留全厂参观外并详解中国汽车扣件业现况与未来发展、经营模式、点点滴滴，让全员备受礼遇及收获良多、不虚此行。最后也参观了号称年产700万部汽车的上海大众汽车组装厂，让所有团员对汽车扣件应用多一层的认识了解。

不可否认，此次大陆台商业者皆纷纷提出，在中国大陆汽车产业蓬勃发展年产超过2,000万辆以上，扣件需求量在未来10年甚至更久前景非常看好，不止台湾，其他外商如欧洲、美国、韩国、日本以及当地大陆厂等等供应汽车扣件业者纷纷大规模增产，皆一致看好汽车扣件市场，堪称扣件业使用量龙头，单以生产取代进口汽车扣件的部份，全额即高达10多亿美元，周边经济市场更大，也有部份人士指出当今投资汽车扣件内销市场要远比作出口外销好太多，在大陆做外销产销环境都不佳。

最后，再次非常由衷感谢上述多位董事长的热情接待及设宴款待，行程中也非常感谢山翁公司 洪进芳董事长、台湾牙板公司 陈吉胜先生、上海春日公司 胡展飞总经理的款待，国联公司 陈志宏董事长全程安排规划，本团团长创会会长 苏深贤先生领导下，整趟行程顺畅无比，2014年参访团画下完美的休止符，虽有点累但绝对值得的。

## Gwo Lian (Jiaxing)

Gwo Lian specializes in R&D and production of wire drawing machines and peripheral equipment, including wire releasing equipment, non-pickling wire rod rust removing equipment, hole mold drawing machine, roller type wire drawing machine, coiler, etc. The company can deal with high/mid/low carbon steel, bronze, stainless steel, alloy steel, etc.

Gwo Lian accumulates advanced techniques and experience from servicing global major plants, and over the years it focuses on R&D, precision production, environmental protection, and quality fastening. It works hard to satisfy domestic and overseas clients, reduce client's costs, and gain higher profit and added value,

### 嘉兴国联精密机械有限公司

国联机械专精于研发设计和专业制造相关伸线机器与附属配备，如：放线设备、盘元免酸洗除锈设备、眼模式伸线机、辊轮式伸线机、卷取机等等。可处理高/中/低碳钢、青铜、不锈钢、合金钢等各类金属线材。

从服务国际大厂集结先进技术与经验，国联历来专注秉持研发、精密、环保、坚固理念，做好国内外客户的服务满意度，来降低客户成本，追求更高的利润及附加价值。董事长陈志宏表示占地达13,000m<sup>2</sup>的嘉兴厂，出产机台高达80%使用台湾进口零部件，销售面以「八：二」的比例供应中国大陆及其他海外市场。台湾总公司则引进欧、美、日技术与零件，目前已行销36个国家，先后已开发出多项多国专利产品，目前该公司伸线设备每分钟可处里1,500m线材，伸线速度为业界最快。

President Chi-Hung Chen says the Jiaxing plant spans around 13,000m<sup>2</sup>. 80% of the machines produced in the plant use components imported from Taiwan. 80% of the machines are sold in China and 20% are sold to overseas market. The headquarters in Taiwan introduces techniques and components from Europe, US, and Japan. So far Gwo Lian's products have been sold to 36 countries. The company has developed multiple patented products. Its wire drawing equipment can cope with 1,500 wires per minute. This is the highest speed within the industry.



President Chi-Hung Chen (Gwo Lian)  
国联董事长 陈志宏先生

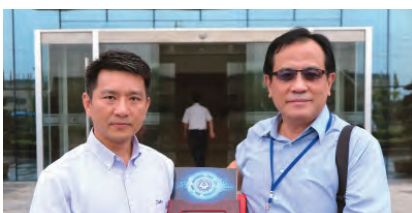


## Zhejiang Cowin Fastech

The company was established in 2011 with a first stage investment of USD 30 million, spanning 86,700m<sup>2</sup>. The plant is located in Ganyau Industrial City in Jiashan County, and specializes in R&D, production and sales of high-end fasteners and precision parts. The company imported dozens of new equipment exclusively for high strength non-standard bolts, the automotive industry, and mechanical engineering. The company sits in the central area of Jiangsu, Zhejiang and Shanghai near all levels of clients. Shenjiahu highway is adjacent to the company, so traffic and transport is convenient, offering advantage in real-time shipment.

Chite Enterprises (Taiwan) is a major shareholder of Zhejiang Cowin Fastech. Chite cooperates and integrates with its affiliates to provide all clients with the best fastening solutions. In the future, Zhejiang Cowin Fastech will invest a total of USD 85 million to expand the plant to 220,000 m<sup>2</sup>, and increase the capacity to 2,400 tons of high quality fasteners per month.

Zhejiang Cowin Fastech mainly sells fasteners domestically. General Manager London Yang sets his goal for being "Top automotive fastener maker" and "The 1st automotive plant to have acquired Taiwan Excellence Awards". The company adopts green policies and aims at becoming a "blessed company" that connects clients, shareholders, suppliers, and employees. The company has 60 fastener forming machines and has marvelous production capability. It has also acquired critical certificates like TS16949, ISO6001, A2LA, and SHSAS8001.



General Manager London Yang (Zhejiang Cowin)(left)  
群展总经理 杨荣德先生(左)



## 浙江群展精密紧固件有限公司

浙江群展精密紧固件有限公司成立于2011年，第一期投资金额为3,000万美元，占地面积86,700 m<sup>2</sup>，厂址位于嘉善县干窑工业城，目标设定高端紧固件、精密部件的研发、制造和销售。特别针对汽车业、工程机械、高强度非标螺栓的专业生产，投注数十套全新进口设备。公司地处「江、浙、沪」核心区域，接近各级配套客户，申嘉湖高速公路紧邻公司，交通往来、运输便捷，供货及时性极高！

台湾尚余集团是浙江群展的主要股东之一，集团内关系企业，分工合作、资源整合，凝聚出强大的向心力，誓为国、内外所有客户提供最佳的紧固件解决方案。未来，群展公司总投资额为8,500万美元，全厂面积为220,000 m<sup>2</sup>，群展将提升到每个月2,400吨高品质扣件。

群展公司紧固件以内销为主，杨荣德总经理以「世界第一流汽车紧固件制造厂」及「第一家获得国家品质奖的汽扣厂」为目标。厂区内落实公园绿化，目标朝向「幸福企业」的美名，做好「客户、股东、供应商、员工」关系。车间内60部紧固件成形机，生产能量惊人。在迈向目标之路，已经取得TS 16949、ISO 16001、A2LA、SHSAS 18001等关键认证。



## Hung Li Machinery



President Lien-Kum Juam (Hung Li) (left)  
鸿利董事长 阮连昆先生(左)

Hung Li produces heat treatment facilities and anti-pollution equipment. It takes an enormous market share in the heat treatment industry. Based on the spirit of research advancement, it has been improving surface

treatment technology to ensure product quality since 1985. In 1989, it developed electroplating equipment called PP rollers which acquires multiple patents and contributes a lot to semi-conductors, computers, automobiles, fasteners, hardware, sanitary wares, and sporting accessories. The rollers' durability is admired by domestic and overseas clients. As the business expanded with good reputation, Hung Li discovered the lack of human resource and land area. Therefore, it built the 2nd plant in 1991, the 3rd plant in 1996, and the 4th plant in Zhejiang in 1997. The total area of all plants is 60 thousand m<sup>2</sup>. The company hopes to develop products of higher quality and precision technology, and offer the industry better equipment and service.

Hung Li's sales cover the whole world including Japan, Korea, Hong Kong, China, Singapore, Thailand, Indonesia, Philippines, Malaysia, Vietnam, Sri Lanka, Turkey, Iran, Ghana, South Africa, Jordan, Germany, Netherlands, Mexico, Brazil, Argentina, etc.

In regard to the market trend, chairman Lien-Kum Juam (Taiwanese Chamber of Commerce in Jiashan) thinks the business opportunity of automotive fasteners will be huge within this decade. If you plan to tap into this market and make investment, it is better to focus on the local sales rather than to export to other countries through China. If you export automotive fasteners in China, you will have to deal with problems like tax, appreciated exchange rate, high labor cost, and conditions of material processing. For Taiwanese equipment makers in China, they face problems such as knockoff equipment, price-cutting competition from machines made in china, and increased labor cost. These indicate that Chinese investment environment for foreigners is not the same as what it was anymore.

## 鸿利机械工业股份有限公司

鸿利(鸿毅)机械工业股份有限公司主要以制造表面处理整厂设备及防治环境污染设备等一贯作业之工业机械为主,在台湾的表面处理业占有极大的市场。其自1985年创建以来本着精益求精,突破研究开发的精神,以提高表面处理技术,确保产品品质上的需求,1989年进而自行开发电镀设备PP滚桶之设计并享有多项专利,尤其对半导体电子、电脑、汽机车、螺丝五金、卫浴、运动产业等周边设备有更大的贡献,其耐用性深受国内外客户一致赞赏,由于业务扩展迅速,信誉深受各界好评,实感于人力、土地不足,于1991年创建二厂,1996年增建第三厂,即又于1997年在中国浙江扩建第四厂;全部厂房总面积达6万平方公尺。以期能发展更高品质及精密技术之产品,为业界提供更完善的设备及服务。

公司业务销售实绩遍布世界各地,如日本、韩国、香港、中国大陆、新加坡、泰国、印尼、菲律宾、马来西亚、越南、斯里兰卡、土耳其、伊朗、西非迦纳、南非、中东约旦、德国、荷兰、墨西哥、巴西、阿根廷...等。

观察市场动向,目前为嘉善地区台商联谊会会长的阮连昆董事长认为这10年之内汽扣商机可观,国人若有意前往投资开发市场,不妨以直接内销而非间接外销的形式进行投资生产计划,也就是若于中国投产,则以中国市场为主。目前在中国从事汽扣外销将面临税收、汇率升值、人才成本高、加工条件等问题,另外,他也点出目前台商从事设备业者于中国所面临的中国设备山寨版、低廉削价竞争、大陆本地车台技术水平提升、劳动成本架高等困境与难处,外资经营环境大不如前,压力非常大。



## Zhejiang Yeswin Machinery

Zhejiang Yeswin is a joint venture invested by Taiwanese Lian Shyang Industries Co., Ltd. and Yeou Heuy Machine Co., Ltd. It was established in 1997 with the total investment of USD 8 million. On the net floor of 100 acres, it has started to operate since the year end of 1999. Its location in northern Zhejiang offers the convenience of transport. Major products are multi-



President Chi-Li Chu (Zhejiang Yeswin)(left)  
友信董事長 朱启礼先生(左)

station cold forging machines, pneumatic 4 spindles tapping machines, and non-standard cold forged parts, most of which are sold domestically. Its annual revenue is nearly RMB0.3 billion.

Lian Shyang Industries, with 30 years of experience and technical development, is a well-known Taiwanese manufacturer of cold forming machines.

Yeswin possesses superior manufacturing techniques inherited from Lian Shyang and provides customers with various quality outstanding forming machines including 5 dies/ 6 dies high speed bearing nut forming machines, 6 dies/

7 dies long cold forging machines, 3 dies/ 4 dies bolt formers (basic, long, super long), nut formers, bolt formers, electric chain hoist, etc. These sets of equipment can be used to produce fasteners, auto parts, hand tool components, construction hardware, non-standard parts like nuts, plugs, socket wrenches, sleeve anchors, etc., as well as process materials including low-to-medium carbon steel, stainless steel, low alloy steel, copper, and aluminum alloy. It can also redesign machines for customers that suit their actual demand in production.

It has recently devoted to the production of 13 sets of multi-station cold forging machines and has cumulative experience in developing products. Products manufactured include sleeve anchors, sleeves, furniture screws, automotive nuts, high-strength flange locknuts. It is able to process parts with diameters from 8mm to 28mm and up to 65mm in length. Its machines are mostly used to process fasteners applied to automotive, machinery, and defense industries.

## 浙江友信机械工业有限公司

浙江友信机械工业有限公司是由台湾连翔工业股份有限公司和友汇股份有限公司共同在大陆投资组建的台商独资企业。公司成立于1997年，总投资为800万美元，占地100亩，于1999年底投入生产，地处浙北，交通方便。主要生产多工位冷锻成型机、气压式四轴攻牙机；非标异型冷锻零件，以内销为主，目前年营业额将近3亿人民币。

连翔工业股份有限公司是台湾知名的成型机制造商，有三十多年的丰富经验及技术。友信公司继承台湾连翔工业的优秀制造工艺，向客户提供品质超群的各类成型机，包括：五模、六模高速轴承式螺帽成型机，六模、七模加长型冷锻成型机，三模、四模螺栓成型机(普通型、加长型、超长型)，螺帽类零件成型机，螺栓类零件成型机及电动链条吊车(钢索链条)等多种设备。这些设备可用于生产紧固件、汽机车零件、手工具零件、建筑五金件、非标异型件如螺母、火花塞、套筒扳手、壁虎管等等。可加工的材质包括中低碳钢、不锈钢、低合金钢、铜、铝合金。公司还可根据客户的特殊需要，更改机械设计，使之适应客户的生产需要。

目前已投入十三台多工位冷锻成型机用于非标异型冷锻零件的生产，并从中积累开发产品的经验。生产的产品包括：壁虎管，套筒，家具螺丝，汽车螺母，高强度法兰锁紧螺母。可加工直径从8mm到28mm，长度可达65mm的零件。多为汽车、机械、国防领域扣件提供专用生产设备。

## Ching Chan Optical Technology



Delegation at Ching Chan Optical Technology  
参观团于精湛公司前的全体合影

Ching Chan Optical Technology Co., Ltd. (former Ching Chan Machinery Co.,Ltd.) was established in 1992 and is headquartered in Kaohsiung, Taiwan. In the beginning the company focused on the development of various vibratory feeders and related machines for screws and nuts. With the persistence on technological innovation and quality upgrade, the team of the

## 精湛光学科技股份有限公司(昆山全盈自动化设备有限公司)

精湛光学科技股份有限公司(原精湛机械)创立于1992年，总部位于台湾高雄市(原为高雄县)。公司成立之初主要为开发螺丝和螺帽用之各式工业用震动送料机及其他相关机械；在公司专业团队秉持以“技术创新”及“品质提升”的理念下，不断地积极研究螺丝螺帽筛选设备，终于成功地开发出新一代CCD影像筛选机。而为使得产品品质更加完美，公司同时成立螺丝筛选代工部门，以实际的长期使用来测试产品的品质，并持续研发改进。精湛不断的以专业设计、创新研究、开发新技术、提升品质的精神，推出高精密密度及高品质的筛选检测设备给从事紧固件制造的所有客户，并且用“以顾客需求为导向”的信念，大举进入国际市场，并获得支持与肯定，现在国内外的许多知名紧固件厂商都已成为精湛的客户。



company devoted to the research of screws & nuts sorting equipment and successfully developed the new-generation CCD image sorting machine. In order to further enhance the quality of products, it sets up a division for outsourced screw sorting and tests the quality of its products by putting them in long-term practice with continuous development and improvement. Ching Chan follows spirit of professional design, innovative research, technological development, and advancement of quality to offer high precision and high quality sorting and inspection equipment to fastener manufacturers and expands business worldwide always with a customer-centric belief, which has been widely recognized and admired. Many well-known fastener companies are now Ching Chan's customers.

### History of Ching Chan

- 2000.04 Development of screw image sorting machines.
- 2004.10 Began selling PS-1500-C2 image sorting machines to fastener factories.
- 2005.03 Successful development of PS-1500-C3 screw image sorting machines with 3 cameras detecting head cracks and marks.
- 2009.04 New product demo of PSC conveyor image sorting machines, PSE conveyor image sorting machines, PSE eddy current sorting machines, PSG glass dial image sorting machines, PSD long screw (250mm) image sorting machines.
- 2011.05 Release of PQA~C first article inspection machines, PSC-3500 conveyor image sorting machines, PSG-6500 dual-glass dial image sorting machines which have been distributed by local agents in Germany, Japan, S. Korea, USA, and Brazil.

So far it has developed inspection machines of over 60 kinds, certified or patented in Taiwan, Europe, and Japan. Its self-developed inspection software can help customers customize their inspection. Many well-known automotive fastener manufacturers use machines from the company.

### 精湛公司重要历程：

- 2000.04 开始螺丝影像筛选机之研发。
- 2004.10 开始销售PS-1500-C2影像筛选机至国内外螺丝工厂。
- 2005.03 成功开发第三镜头之螺丝影像筛选机：PS-1500-C3检测头裂、文字等。
- 2009.04 PSC输送带影像筛选机、PSE涡电流筛选机、PSG玻璃盘影像筛选机、PSD加长型螺丝影像筛选机(250mm)新机发表会。
- 2011.05 新机发表正式推出PQA-C首件品检报告机、PSC-3500 输送带影像筛选机、PSG-6500双玻璃盘影像筛选机。

与德国、日本、韩国、美国、巴西等多国代理配合直接销售当地市场。目前厂内已开发超过60项量测设备，取得台湾、欧洲、日本等多国多项认证及专利，自行研发的检测软体，提供客户可自行量身定制，国内外多家知名汽扣大厂都是使用该公司的检测设备。



## Eagle Metalware



## 鹏驰五金制品有限公司

鹏驰五金制品有限公司是香港福鹏投资有限公司在中国大陆所投资的一家集生产、研发、销售为一体的专业紧固件制造商，是全球最大12.9级高强度螺丝制造商之一。公司两大生产基地分别设在广东东莞和江苏昆山，各自占地面积为50,000多平方米，拥有数百套世界先进水准的全套紧固件生产设备，运用先进的ERP系统进行管理，专业生产『EG』品牌德标 (DIN)、美标 (ANSI, ASME)、国际标准 (ISO)、国标 (GB)、日标 (JIS) 等标准件及非标准件高强度螺栓及高级膨胀螺栓，产品广泛应用于高铁、汽车、机械、模具、电子及建筑领域。产品行销全国，远销欧美、日本及东南亚。

Eagle Metalware is a specialized fastener manufacturer that combines production, R&D, and sales together and is one of the manufacturers for Grade 12.9 high-strength screws. It has two major manufacturing bases in Dongguang and Kunshan (each has hundreds of advanced fastener manufacturing systems on the net floor of over 50,000 sqm). With the advanced ERP management system, it can produce EG branded standard/non-standard high-strength bolts and high-class expansion bolts according to DIN, ANSI, ASME, ISO, GB, and JIS standards, which are widely used in high speed rail, automobiles, machinery, molds & dies, electronics, and construction and are sold to Europe, America, Japan, and Southeast Asia.

On Nov. 8, 2003, Eagle Metalware finished the construction of its first manufacturing base in Dongguang with the annual capacity up to 20 thousand tons; in June 2011 it finished another manufacturing base in Kunshan with the annual capacity of 30 thousand tons. Now its Grade 12.9 fastener business takes the lead across China.

In order to guarantee the highest quality of every "EG" fastener, it has installed the entire set of fastener quality inspection machine compliant with standards required by the National Testing Laboratory to monitor all process from raw material procurement to deliveries of finished products. The company has been certified by ISO9001:2008 and TS 16949. In order to satisfy customers' demand, it set up modern warehouses and delivery systems in southern, eastern, and northern China. The inventory is kept above 70,000 tons. So far with the complete marketing system, it has had 58 sales branches in China as well as sales networks in Asia, Europe, and America.

In addition, Eagle pays much more attention to nearly 80,000 direct users, distributors, hardware shops in domestic sales and offers one-stop purchasing service to the largest manufacturer or the smallest supplier, making customers enjoy the service with the best price and quality. Its Grade 12.9 fasteners and bolts represent up to 60% of the total domestic market share in China. The domestic sales also represent 92% of the annual revenue of the company while the rest of sales are in export.

President Chow confidently said that the company plans to set up 100 sales branches and the 3rd manufacturing base by the end of 2015. After that, Eagle will become the largest fastener manufacturer in the world with products and service for automobiles, high speed rail, vessels, and aerospace and the annual production will be 100 thousand tons.

Last but not the least, President Chow appreciated the support and assistance of Taiwanese fastener industry, as 100% of its equipment and operation management were introduced from Taiwan, which impressed the visitors a lot.

2003年11月8日，鹏驰集团第一个生产基地—东莞鹏驰五金制品有限公司建成投产，年产能达到2万吨；2011年6月，鹏驰五金（昆山）有限公司建成投产，年产能达到3万吨。在全国的12.9级紧固件行业中占领龙头地位，在同行业中起到着举足轻重的作用。

为保证每一颗『EG』品牌螺丝的最高品质，公司按照国家实验室标准要求，装备全套进口专业紧固件品质检测仪器，实现从原材料采购到成品出货的全程管控。公司通过ISO9001:2008和TS 16949品质体系认证。为满足客户需要，分别在华南、华东、华北地区建立现代化的立体仓库和配送体系，常备库存保持在70,000吨以上。公司拥有完善的行销体系，目前在国内已建立58家销售分公司，及亚洲、欧洲、美洲销售网路。

除此，鹏驰公司在内销体系重视小客户（直接使用者、批发商、五金商店等近80,000家客户群），从一个最大的制造商到最小的供应商，提供一站式采购服务，让客户享有最优惠的价格及最好的品质服务。12.9及螺栓国内市占率高达60%，内销比例也占该公司年营业额92%，其余为外销。

周启胜董事长非常有自信指出2015年前，公司计画成立100家销售分公司及第三个生产基地。届时，鹏驰集团将成为全球最大的紧固件制造商，产品服务涵盖汽车、高铁、轮船、航太等领域，届时年产量将达到10万吨目标。

最后，周董事长非常感恩及感谢台湾螺丝业界朋友的支持和协助，全厂100%台制设备及营运管理，现代化标准设备，相信让所有参访人员留下非常深刻印象。 □



President James Su (Wellfly)(left) and President Chih-Sheng Chow (Eagle Metalware)  
本团团团长 苏深贤先生(左)及  
鹏驰公司董事长 周启胜先生

