

Innovation & Breakthrough— Chun Zu's CBF-164UL Bolt Former

Release Banquet

by Chien Chun Chen, Fastener World Inc.

Celebrating the 40th anniversary of the company prior to Wire Düsseldorf and Taiwan International Fastener Show, Chun Zu Machinery developed the longest CBF-164UL bolt former. The release banquet was given on March 28, 2014 with the attendance of over 800 loyal customers, VIPs, and guests from India, Malaysia, Germany, Turkey and so on. 108 tables were set up catering to all participants. Fastener World Inc. was very lucky to be one of the invited guests to witness the debut of the machine, and would like to express our gratitude to those anonymous heroes making such a great achievement.

The new machine not only symbolizes Chun Zu's technical advancement, but is also a major revolution in the global fastener industry. Fastener World specifically interviewed general manager Hu Chan Fei of Shanghai Chun Zu, vice general manager Ho Yen-Wen, and R&D manager Huang Yao Chin of Taiwan Chun Zu, who explained features of the new machine and how it was different from other models.

- 1. A team of 15 designated people took one and half years to create this hermetically sealed machine. Based on clients' requirement for quality, the machine operates with cold forging production, totally replacing other hotforging machines in the market. It can eliminate the secondary processing after hot forging while saving time and increasing efficiency. Furthermore, it is equipped with safety covers for the safety of operators.
- 2. In terms of innovation, the machine is able to produce thin and long 18-inch bolts. Unlike other traditional thin and long bolts prone to deformation or defection, the machine overcomes this issue by utilizing the mechanism of pole vaulting and the specific design to improve the rigidity/inertia ratio to reduce the rejection rate and waste of resources.
- 3. In order to cope with different requirements of clients, the machine can also be customized as per client's request with appropriate optional equipment in addition to standard ones mentioned above.

4. During the onsite demonstration, the machine showed its capacity to produce 30 pieces of bolts per minute, weighing 45 kilograms (each piece weighs 1.5 kilograms). Its monthly capacity can reach 300 to 400 tons. The bolts produced are widely applied to components for car wheels, ATVs, and SUVs that demand high quality. The first CBF-164UL machine has been bought by one Kaohsiung-based company. Buyers from Turkey, Germany, and other markets have also contacted for inquiries.

During the interview, it is clear that Chun Zu dedicates itself in R&D. The company starts from improving thin and long bolts, then extends the focus to simplifying manufacturing procedures, and finally integrates and puts up the all-in-one machine to satisfy clients' need for one-stop purchase. Clients report user experience and problems to developers, who later develop the most requirement-compatible machinery for clients. This is the example of a market-oriented economy that achieves targets in a more efficient way.

One way to increase profit in globalization is to go after clients' demand and offer satisfying service. As long as Chun Zu keeps following local cultures and paying attention to market trends, it will certainly drive the development in other regional industry segments and discover more long-term partners.

About Chun Zu in Taiwan and Shanghai

Chun Zu established in 1973 is located in Gangshang, Kaohsiung. Its factory covers the area of 20,859 square meters with 202 employees. In order to gain presence in the international market, it established a branch in Qingpu Shanghai, covering the net floor of 21,128 square meters (and another 4,000 square meter is under construction) over a 30,800 square meter land. Its main products are bolt machines, nut machines, part formers, headers, threading machines, and molds. Its business in China also offers turnkey projects.









春日公司为因应公司40周年厂庆及德国杜赛道夫线缆材 暨管材设备展及高雄螺丝展,特别开发CBF-164UL超长型新 机,并于2014年3月28日成立新机发表会。会中除了台湾重要的 爱用户、重要扣件厂贵宾外,并力邀印度、马来西亚、德国、土 耳其等国共800多位来宾、席开108桌(其中20桌为慰劳厂内的 员工,88桌感谢来宾的参与)庆祝新机落成,为的就是让所有 人见证历史的一刻。惠达杂志社很幸运的亦在此次邀请的名 单里面,亲眼见证新机发动的那一瞬间,更要为我们台湾的无 名英雄说一声: 您辛苦了!

本次新机落成不仅是属于春日机械在技术发展的一大里 程,也是全球螺丝产业界的一大革新。本杂志社特在发表会 中采访上海春日机械工业有限公司总经理胡展飞、台湾春日副 总经理何炎文及研发部黄耀庆经理等三人为我们做此次的专 访,让我们能一探春日新机的特色以及奥妙,兹将我们访问三 人的内容统整如下:

1.本次新机器设备共由15位工作团队历时一年半的时间 研发,机身为一密闭式的成形,基于客户对品质的要求,制品 生产过程采冷锻处理,取代市面上的热锻机器。省去热锻完 之后续处理工作,不用再二度加工,如此可以节省时间、增加效 率。更有为了工作人员贴心加装的安全护罩,以防操作时发生 丁作意外。

> 2. 就创新的开发关键点而言, 此机台冷打 出来的螺丝为细长型,长度18英吋,因传统细 长型螺丝制造出来后会有变形或缺陷等缺点, 此机台克服了此问题,参考撑竿跳特性,使用 提升(刚性/惯性)比之设计方法,减少产出淘 汰率以及资源的浪费。

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3.为了量身打造客户不同的需求,除了以上介绍的标准配 备外,另外还有选用的配备,客户可依自身情况,选购适当的 设备,打造属于自己的机台。

4. 展示期间,此机器生产每分钟可生产30支、每支1.5公 斤、共45公斤螺丝,一个月约可生产300~400吨的产量,生产 出来的螺丝广泛应用于对品质有高度要求的汽车、沙滩车、休 旅车等轮胎的零件。现已有台湾高雄大富金属公司抢先购入、 土耳其、德国等国厂商亦积极洽谈此机台。

其实从访谈的历程中,可以看得出春日集团对产品开发的 用心,由一个创新的点(细长型螺丝问题的改进),延伸到线 (生产动线流程的节省),最后扩张到面(机台一体成形,满 足客户一次购足的服务),借由客户在锻造扣件的使用经验中 所发现的问题,经由市场机制反应给机器开发商,研发出符合 顾客需求的机台,可谓市场导向的经济,以更有效率的方式达 成工作目标。

在走向全球化,提升利润的手段之一,即为追随客户需 求、满足所需的服务。春日如能在全球化的脚步中,配合当地 国情,继续重视市场导向,相信在有朝一日必定能带动其它地 区产业的发展, 觅得更多长期合作的公司。

-台湾及上海春日简介-

春日机械工业股份有限公司位于高雄市冈山区,创立于 1973年, 厂区占地约6, 310坪, 厂房面积2, 580坪, 员工202人; 另外为因应进军国际市场之故,春日于1999年选择上海青浦区 进驻大陆,地坪约30,800平方公尺,厂房面积为21,128平方公 尺(另4,000平方公尺扩建中)。主要产品为螺丝机械、螺帽机 械、零件成形机、打头机、辗牙机、模具等,大陆地区还提供整 厂输出技术。 П

