

Innovation is the Drive for MILCO/Welform

创新是 MILCO / Welform 发展的动力

—— Interview with Mr. Jeff Beach, the CEO of MILCO/Welform, and Mr. BK Ooi, the General Manager of Welform (Hangzhou) Precision Machining Co., Ltd.

—— 访美国 MILCO / Welform 家族负责人、全球 CEO Jeff Beach 先生 韦孚（杭州）精密机械有限公司总经理 BK Ooi 先生

□本刊记者 李 莉



美国 MILCO / Welform 家族负责人、全球 CEO Jeff Beach 先生

发展的呢？日前，记者如约采访了 MILCO / Welform 家族负责人、全球 CEO Jeff Beach 先生、韦孚（杭州）精密机械有限公司总经理 BK Ooi 先生。

美国最大的电阻焊接产品制造企业布局中国市场已经十年。Jeff Beach 先生是家族第三代，他介绍说：“Milco 成立于 1950 年，Welform 成立于 1979 年，总部位于美国的汽车



韦孚（杭州）精密机械有限公司总经理 BK Ooi 先生

摇篮——底特律，是一家 60 多年

专注于焊接技术及焊钳制造的专业化的公司，主要服务于汽车制造行业，其设计与制造的机器人焊接焊钳，人工焊接焊钳及配件处于全球行业领先地位。从 2013 年开始，已经在中国研发申请电阻电焊多项专利并获得成功。公司致力于新技术新产品的研发与应用，公司在成立之初就与全球主要的汽车制造商通用、福特、克莱斯勒建立了良好的合作伙伴关系。公司经过半个多世纪的发展，已经成为跨越美洲，亚洲和欧洲的跨国集团。2006 年在杭州设立代表处，2008

年韦孚杭州正式成立，主要负责亚太市场。韦孚（杭州）精密机械有限公司位于浙江杭州市，为企业第一个也是目前唯一的一个海外工厂及事业部。”

李克强总理在“政府工作报告”中多次提及节能产业的发展，明确提出要“坚决打好蓝天保卫战”，其中关于汽车行业环保节能的部分，提出“鼓励使用清洁能源汽车”。BK Ooi 先生说：“杭州市汽车互联网的先导区，也是新能源汽车未来发展的方向，有独特的优势和发展条件。2016 年以来，《杭州市新能源汽车‘十三五’产业发展规划》、《2016



焊接设备利用领域

年杭州市新能源汽车推广应用地方财政补助办法》、《杭州市推进新能源汽车充电基础设施建设实施办法》相继出台，2016 年 4 月 5 日起杭州取消对新能源小客车的限行措施。在一系列政策推动下，杭州新能源汽车推广卓有成效。我们看得出，汽车一定会走向新能源，智能制造+互联网 10 年甚至 20 年都会通行。我们觉得杭州是未来的重点，很多汽车企业都选择杭州发展。事实证明，我们选择杭州投资是正确的。”

BK Ooi 先生强调说，创新是引领发展的第一动力。依靠创新，我们就能走出一条质量更高、效益更好、结构更优、优势充分释放的发展新路。焊接技术是制造业的重要加工手段，它是一种精确、可靠、低成本，并且是采用高技术连接材料的方法。随着智能焊接以及焊接机器人在工业中的广泛应用，为开发新的焊接方法，进一步提高焊接质量是必然趋势。2011 年韦孚（杭州）精密机械

有限公司投入研发设计，7 个研发工程师跟美国是分开的。我们根据亚洲市场有针对性的进行研发，并定期与美国总部交换研发成果，通过本地化实现国际化。我们研发的铝铁焊引领了行业的发展，产品非常广泛，具有四个方面的优势：一是模块化焊钳，枪身采用高强度钢制螺套，以提高性能。所有标准型焊钳部件都可通用。

二是机器人轻量化焊钳，焊钳总重量在 65-70kg，X 型焊钳与 C 型焊钳 90% 部件可以互换，减少整个工位的占地面积。

三是汽车底盘伺服 & 气动焊钳，重量与传统铸铜型焊钳相比，重量更轻，平均重量（含变压器）290 磅（132kgs），重心靠近机器人安装

法兰部位，枪喉最大可达 1000mm，支轴销总成寿命大于 1000 万次。

四是铝焊钳，电导率高，配合世界最先进的控制器和变压器，为时下大力发展新能源汽车和轻量化铝车身提供最新最稳定的智能机器人铝焊钳。

MILCO / Welform 焊钳适用于所有机器人厂家的产品，如 FANUC, ABB, KUKA, NACHI, MOTOMAN 和 COMAU 7 轴系统或任何 6 轴机器人。

Jeff Beach 先生表示：“在业绩上，我们近 5 年来远远超过预期。目前虽然不太景气，但是接下来 10 年我们要在中国扎稳根，从华东到华南、华中发展，也可以考虑靠近客户投资工厂，再辐射

亚太区。”他说：“智能焊接是行业发展的趋势。我们是焊接龙头企业。在中国，同行业的日系来的早，但德系销量高。我们不以量来抗衡，我们的最大优势是售后服务和与客户的服务配合性，从服务做扩展，只要有汽车制造的地方都有我们出现。接下来 3 年，我们会将业务扩展到日企和德企。一带一路让很多中国企业走出去。我们也可以跟上，贴近客户，在泰国、印度等设厂。我们会从中国辐射出去，辐射整个东南亚。”



产品在国内客户生产线

唯改革者进，唯创新者强，唯改革创新者胜。创新是一个民族进步的灵魂，是一个国家兴旺发达的不竭动力，也是在激烈的国际竞争中的必然选择。世界各主要经济体不约而同地在强化创新部署，纷纷提出“再工业化”、“工业 4.0”、“中国制造 2025”等战略目标。创新已成为各国竞争的角力场，谁在创新竞赛中起步快、跑得远，谁就能主导赛场规则和比赛进程。美国 MILCO / Welform 是如何抓创新，谋未来，不断引领行业的

A reformer advances, an innovator rises, and an innovating reformer will lead to bigger success. Innovation is the soul for a nation to progress, an inexhaustible motive for a country to thrive, and an inevitable choice for an enterprise to deal with fierce international competition. Key economies in the world are strengthening deployment of innovation and put forward strategic objectives like "Reindustrialization", "Industry 4.0", and "Made in China 2025". Innovation has become a new arena for contending among countries. The one who firstly stresses and further keeps innovation will lead in definition of game rules and go ahead in competition. How does MILCO/Welform strengthen its innovation process, strive for future development and keep leading in the industry? To get the answer to this question, Multinationals in China interviewed with Mr. Jeff Beach, the CEO of MILCO/Welform, and Mr. BK Ooi, the General Manager of Welform Precision (Hangzhou) Machining Co., Ltd.

MILCO/Welform, one of the biggest enterprises producing resistance welding equipment and components in US, has been engaged in the Chinese market for over a decade. Jeff Beach, the third generation of the Beach family, says: "MILCO and Welform were established in 1950 and 1979 respectively, and the joint company, based on Detroit, has been dedicated to both designs and productions of welding equipment and components for over 60 years, and its key clients are distributed in automobile manufacturing industry.

Since 2013, MILCO/Welform has developed multiple resistance welding technologies and applied for patents in China. The company is devoted to the development and application of new



picture taken in year 1950 at Milco, Detroit

technologies and products, and has built close copartner relationship with major automakers like GM, Ford and Kreisler. In the past half a century, the company has become a multinational group distributing business across Americas, Asia and Europe. The Hangzhou representative office was established in 2006 and Welform Precision (Hangzhou) Machining Co., Ltd. was established in 2008 and now is mainly in charge of the Asia Pacific market. Welform Hangzhou is the first and exclusive overseas factory and business division established by MILCO/Welform."

Premier Li Keqiang mentioned "development of energy-saving industry" many times in the Government Work Report, and put forward the proposal of "fight of protecting blue sky". In the part about automotive industry environmental protection and energy conservation in the proposal, he raised that "to encourage use of clean energy vehicles". "Hangzhou with unique advantages and fine development conditions holds a pilot position in the Internet of Autos and leads the future development of new energy vehicles. Hangzhou released a series of documents including "Plan for Development of New Energy Vehicles

Industry Development in 'the Thirteenth Five-Year Plan' in Hangzhou", "2016 Method for Local Financial Subsidy for New Energy Vehicles in Hangzhou" and "Implementation Measures for Boosting Construction of Electric Vehicle Charging Infrastructure in Hangzhou" in 2016, and canceled the measures of traffic restriction against new energy passenger cars on April 5, 2016. Promoted by a series of policies above, new energy vehicles were popularized effectively in Hangzhou. We foresee that automobile is destined to enter the age of new energy and "Intelligent Manufacturing + the Internet of Autos" would keep a mainstream in the coming 10 or 20 years. We believe that Hangzhou is a key point bearing our future development, and quite a lot of automobile enterprises would choose Hangzhou. Proofed by facts, it is right that we choose Hangzhou" said Mr. Ooi.

Mr. Ooi also stressed that innovation is always valued as the first drive of future development. Welding technique, an important processing means in manufacturing, can connect materials by high technology in an accurate, reliable and cost-effective way. Seeing extensive use of intelligent welding and welding robot in industry,

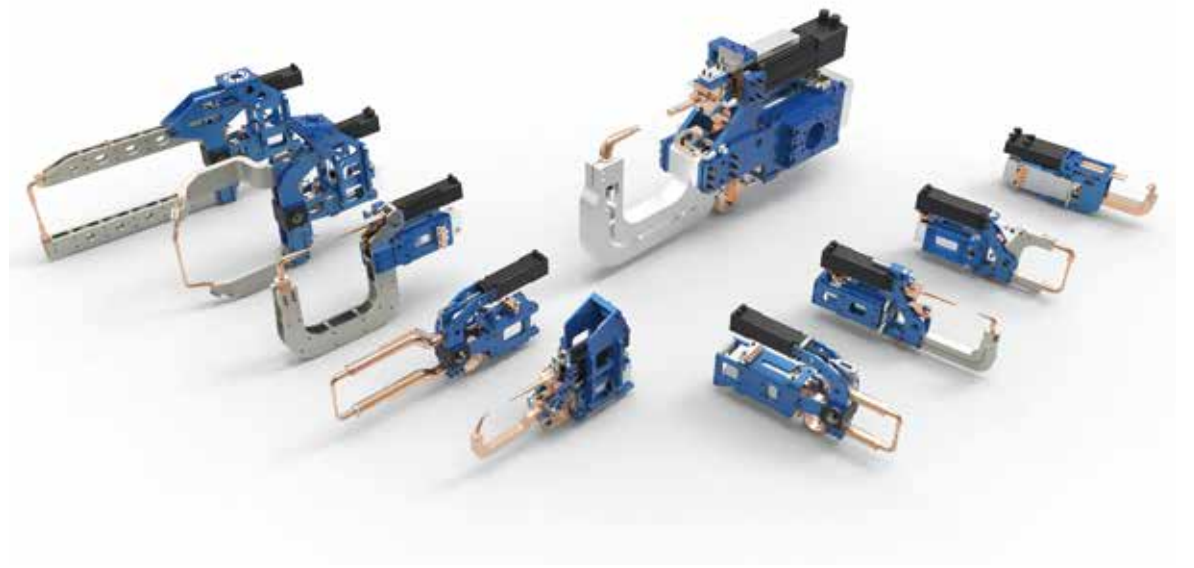
it is inevitable to develop new welding method and improve welding quality further. In 2011, Welform Hangzhou gave more investment in development and design, and supported by a team membered by 7 Chinese R&D engineers. We performed targeted research and development in the Asian market, exchanged R&D achievements with the headquarters, and advanced internationalization by localization. Our aluminum welding technology keeps ahead in the industry, and additionally our complete range of products have the advantages as below:

I. Modular: high-strength steel screw sleeve is used on the holder body to improve its performance; all components are designed as standard to make them compatible each other.

II. Light-weight: robot electrode holder has a total weight of only 65-70 kg; almost 90% components for both Type X and Type C weld gun are interchangeable, which reduces the use space and time for changeover

III. deep throat: weight only (including transformer) about 290 pounds (132 kg); the gravity center is close to the robot installation flange; the holder throat can goes up to 1000mm; and the life span can goes up to 10 million cycles.

IV. Aluminum welding: high electrical conductivity, is equipped with most sophisticated controller and transformer, and remains one of the most reliable and advance aluminum weld gun for new energy vehicles that are being promoted vigorously at present.



range of resistant welding actuator

MILCO/Welform electrode holders are applicable to all 6-axle and 7-axle robot products like FANUC, ABB, KUKA, NACHI, MOTOMAN and COMAU 7.

"Our performance in the last five years was far better than the expected. Despite a little depression in 2016, we will strive for continuous and steady growth. In the next 10 years, we will further extend our business inside China, and also toward some countries within Asia Pacific" said Mr. Beach. "Intelligent welding is a trend in the industry. Although we are the leading enterprise in welding field, as we known, Japanese companies came early into China and German companies made the strong presence. Rather than focus on the sales volume alone, after sales service and client satisfaction are our focus and advantages. We are fully committed to continue serving the automobile manufacturing well for the resistant welding needs. "One Belt and One Road" strategy encourage many Chinese enterprises go out. Accordingly, we will act timely and establish more facilities possible in Thailand, India or other countries. Our business will center on China and radiate to the whole Southeast Asia" added Mr. Beach.



Welform Precision's facility at Hangzhou, China