

Hurco - A Practitioner of Intelligent Manufacturing in China

赫克——中国智能制造领域的践行者

—— Interview with Mr. Scott Yao, General Manager of Hurco China

—— 访赫克中国总经理姚雪先生

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随着美国先进制造业国家战略计划（2012年）、德国工业4.0（2013年）和中国制造2025（2015年）的提出，新一轮工业革命拉开序幕，而这一轮工业革命的核心就是智能制造。“中国制造2025”战略明确智能制造是未来制造业发展的重点，提出提高制造业创新能力的目标。在“十三五”国家科技创新规划中，智能制造行业也成为重要任务之一，其中，高端数控机床与基础制造设备列入国家科技重大专项。赫克作为业界的技术领先者，自主开发并拥有全球最先



赫克中国总经理姚雪先生
Mr. Scott Yao, General Manager of Hurco China

进的智能化控制系统 WinMax。赫克 WinMax 智能控制系统兼容对话式编程及标准 NC 编程，是业内最快将图纸变成零件的控制系统。同时，赫克 WinMax 数控系统是一种基于 Windows 的开放式的数控系统，通过 MTConnect 通讯协议，可以与车间 AGV 小车、立体化仓库、机械手、三坐标等车间生产单元相连，并入智能化信息管理系统（MES 系统），实现生产的智能化柔性化。赫克的核心竞争力体现于创新的控制系统与软件，通过先进控制技术的发展及整合，成为领先于全球的高效能机床供应商，以高品质的机床、先进的智能化控制技术和软件帮助制造企业提高投资收益。赫克中国总经理姚雪先生说，赫克公司自 1968 年创立，于 1978 年诞生

第一台赫克机床以来，始终着眼于技术研发，在机床控制技术上不断革新，为用户提供独特、革命性的软件和数控系统。在过去 50 年中，赫克一直专注于研发能够显著提升用户核心生产力的先进控制技术，能够创造出行业中功能最强大，使用最便捷，人机界面最友好的超凡的控制系统和以高刚性、高稳定性著称的加工中心。赫克机床凭借高刚性、稳定性和可靠性赢得了全球广大用户的信赖。赫克在中国的业务可以追溯到上个世纪 90 年代初期。为满足当时国家建设的需要，通过国家经贸进出口渠道

进入中国。目前，赫克中国营销总部和技术培训中心位于上海自贸区，在北京、东莞、重庆、西安设有销售服务中心。

今年是赫克集团成立 50 周年。赫克在行业中一直走在技术最前沿，从控制系统和软件的发明开始，发展过程的脉络十分清晰。赫克中国总经理姚雪向记者介绍说：“中国政府全面倡导中国制造 2025，其中智能制造最基本的理念是减少对人的技能和专业度的依赖，赫克的主要关注点是在控制系统本身，我们是全球第一家做出人机对话控制技术的公司，目前很多专利技术已经被多家公司使用。赫克中国公司也是在整个赫克集团中最早将工业化和智能制造的一些概念作为落地项目实施完成的。”



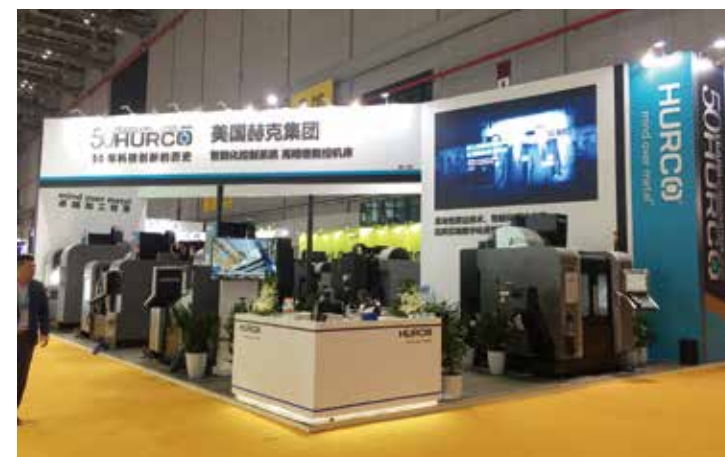
赫克集团总部位于美国印第安纳州首府印第安纳波利斯市



2018 年赫克在纳斯达克庆祝公司成立 50 周年

强大的智能控制技术让赫克在智能制造领域处于领先地位。姚雪总经理剖析：“自 2001 年起，赫克开始尝试性地将高端产品和新技术引进中国，并进入到中国制造业中的高品质和高技术领域。事实证明这个发展策略是非常正确的。赫克有通用和高端两大产品系列，十分可喜的是在 2018 年高端系列销售比例第一次高于通用系列销售比例。我们还可以做更高效率和更高精度的产品，包括制造业的航空航天、医疗器械、汽车零部件等要求比较高的领域。我们的这个变化，正好顺应了国内市场从高速度向高质量的发展转变，帮助中国的产品提高质量，对中国制造业的发展起到了一定的促进作用。”

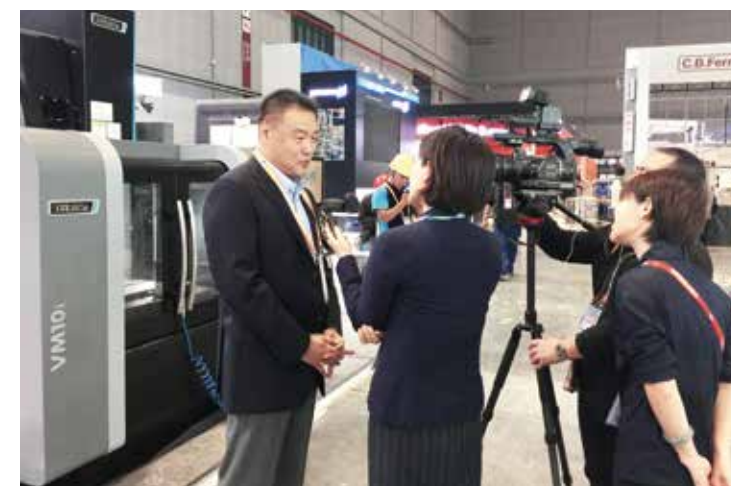
2018 年 11 月，中国首届国际进口博览会在上海隆重召开。赫克集团作为高科技数控机床制造商，携强大的智能控制技术受邀参加，并受到了各界高度关注。在进博会上，赫克展示了独家专利的超级运动控制技术 UltiMotion——基于软件工程学的算法理论，前后历经了 15 年的研发，这是赫克又一次革命性的突破。同时，赫克带来了 6 台加工中心作为展机，通过现场的加工演示让观众感



进博会赫克展台

受赫克智能控制技术的强大之处。姚雪总经理强调说：“通过这次展会，我们让观众和同行们了解到了赫克到底在做什么。我们来到中国，不是跟同行竞争价格和竞争同类产品，而是带来了先进的、极具特色的技术，我们给予了市场和行业一个很清晰的信息——我们有不同的加工解决方案，并且是可以给客户带来低成本的替代方案。用我们的算法技术、软件工程技术可以让制造企业做到少用一半甚至更多的投入，就可以达到要求的加工效果。”

机械制造专业出身的姚雪总经理，曾于欧洲多家顶级跨国公司工作多年，深谙丰富的管理经验，现已任职于赫克公司八年之久。他表示：“我希望通过我的努力，能够将一个品牌从刚进入中国市场非常弱小的状态带到一个平台上面。赫克作为一家科技型公司相对在管理方面比较开放，我们可以做很多的尝试，得到了总部技术层面的全力支持。在中国市场的策略和发展的方向方面，总部没有太多限制。经过这七八年的时间，我们的第一条真正的智能制造生产线已在国



进博会姚总接受央视焦点访谈栏目的采访

内航空航天领域成功实施，这和我们企业的文化氛围是分不开的。”

谈到未来的发展，姚雪总经理充满信心地说：“未来，赫克集团将把中国市场作为一个战略方向，包括从产品研发到商业模式，再到一些技术的研发。我们是最早进入到中国自动化和智能制造领域的公司，在中国取得的成功已成为整个集团公司的战略方向，今后还势必会在技术和研发方向方面得到总部的更大关注。”

中国制造已经走过了 30 年的高速发展期，成为世界第一制造大国。未来 30 年，中国制造需要从重速度轻质量转变为重质量轻速度。制造过程的智能化，需要完成精益化、标准化、模块化、自动化以及数字化的转变。赫克作为智能制造行业的“排头兵”，将继续不遗余力地在研发创新这条道路走下去，继续为中国智能制造贡献一份力量！

A new round of industrial revolution focusing on intelligent manufacturing is kicked off with the introduction of National Strategic Plan for Advanced Manufacturing (2012) of the US, Industry 4.0 (2013) of Germany and Made in China 2025 (2015). In the "Made in China 2025" strategy, it is clarified that intelligent manufacturing is the focus of future development of manufacturing industry, and the objectives are proposed for improvement of manufacturing innovation capabilities. In the "13th Five-Year Plan" for national science and technology innovation, the intelligent manufacturing industry also became an important task. Among other things, high-end CNC machine tools and basic manufacturing equipment were included in national science and technology major projects. As a technology leader in the industry, Hurco invented and possesses the world's most advanced intelligent control system WinMax. Compatible with conversational programming and standard NC programming, it is the fastest control system in the industry to turn print into parts. In addition, WinMax is a Windows-based CNC system and can be connected with the workshop production units such as AGV, stereoscopic warehouse, robot and measuring machine through the MTConnect communication protocol, and integrated into the manufacturing execution system (MES), so as to realize intelligent and flexible production. The core competence of Hurco is embodied in innovative control system and motion-control software. Through the development and integration of advanced control technologies, Hurco has become a leading machine tool supplier which helps manufacturing companies become more profitable with high-quality machine tools and advanced intelligent control technology and software. Mr. Scott Yao, the General Manager of Hurco China, said that Hurco



赫克 Max5 双屏控制器

Company, founded in 1968, has been focusing on technology research and development since its launch of the first Hurco machine tool in 1978, continuously making innovations in machine tool control technology to provide users with unique and revolutionary software and CNC system. Over the past 50 years, Hurco has been dedicated to developing advanced control technology to increase the users' core productivity. Now it can create a control system which is the most powerful, easy-to-use, and user-friendly in the industry as well as a machining center known for rigidity and high stability. Hurco machine tools have won the trust of users around the world with high rigidity, stability and reliability. Hurco started doing business in China in the early 1990s and entered China through trading import and export in order to meet the needs of nation building. At present, the Business Headquarters and Technical Training Center of Hurco China are located in the Shanghai Free Trade Zone, with sales and service centers set up in Beijing, Dongguan, Chongqing, and Xi'an.

This year marks the 50th anniversary of Hurco Group. Hurco has been leading in technology, with a clear development course starting with the invention of control system and software. Scott said, "The Chinese government is fully advocating Made in China 2025, with the fundamental idea of intelligent manufacturing being to reduce the dependence on the skills and professionalism of people. It happens that Hurco focuses on the control system itself as the first company in the industry to develop conversational control technology. Currently, many patented technologies of Hurco have been used by a lot of companies. Hurco China is also the first among the Hurco Group to implement concepts of intelligent manufacturing as landing projects."

Powerful intelligent control technology has made Hurco

a leader in intelligent manufacturing. Scott analyzed, "Since 2001, Hurco has tried to introduce high-end products and new technologies to China and entered the high-quality and high-tech field of Chinese manufacturing industry. This strategy turns out to be correct. Hurco has two product series - general-purpose and performance, and it is gratifying that in 2018, the sales proportion of the latter exceeds that of the former for the first time. We can also make products with higher efficiency and precision for high-demanding fields such as aerospace, medical devices, and automotive parts. This change adapts to the transformation of Chinese market from high speed to high quality, promoting the development of China's manufacturing industry by doing its bit in improving quality."

In November 2018, the First China International Import Expo was held in Shanghai. As a manufacturer of high-tech CNC machine tools, Hurco Group was invited to participate in the event with powerful intelligent control technology and has attracted great attention from all walks of life. At the Expo, Hurco exhibited its patented UltiMotion technology which is based on software engineering algorithm theory and has undergone 15 years of research and development as another revolutionary breakthrough for Hurco. Moreover, Hurco demonstrated six units machining centers, impressing the audience with Hurco's powerful intelligent control technology through machining. Scott emphasized, "We have shown the audience and our counterparts what Hurco is dealing with. We came to China not to compete with our counterparts in price and similar products, but to bring in advanced and distinctive technologies. We send a clear signal to the market and industry - we have different machining solutions, a low-cost alternative for customers, which may realize required machining results for manufacturing companies with half or less of the cost through our algorithm technology and motion-control technology."

Scott, a professional in mechanical manufacturing who used

to work with many top-class European multinationals for years and has extensive management experience, has been working with Hurco for eight years. He said, "I hope that I can bring the brand from infancy in the Chinese market to a platform through my efforts. As a technology-based company, Hurco is open in management. We can make a lot of trials and the headquarters has provided full technological support. The headquarters has little restrictions on our strategy and development direction in the Chinese market. After the eight years, our first practical intelligent manufacturing line has been successfully applied to the aerospace industry, which is indispensable from our enterprise culture."

Speaking of the future development, Scott said with confidence, "In the future, Hurco Group will take the Chinese market as a strategic orientation, including product development, business model, and R&D of the technologies. We are one of the first companies to engage in automation and intelligent manufacturing in China. The success in China has become the strategic direction



赫克五轴加工中心 VMX42SRTi

of Hurco Group. In the future, it will certainly attract more attention from the headquarters in terms of technology and R&D."

After 30 years of rapid development by "Made in China", China has become the world's greatest manufacturing power. In the next 30 years, Made in China will transit from emphasis on speed to emphasis on quality. The intelligentization of manufacturing process requires the transition to make it lean, standardized, modularized, automated, and digitalized. As the pioneer of the intelligent manufacturing industry, Hurco will spare no effort in research and development and continue to contribute to intelligent manufacturing of China!



赫克赞助的美国印第赛车车队



赫克智能制造项目 - 上飞装备



赫克智能制造项目 - 上飞装备

