李培根

华中科技大学

2016 7

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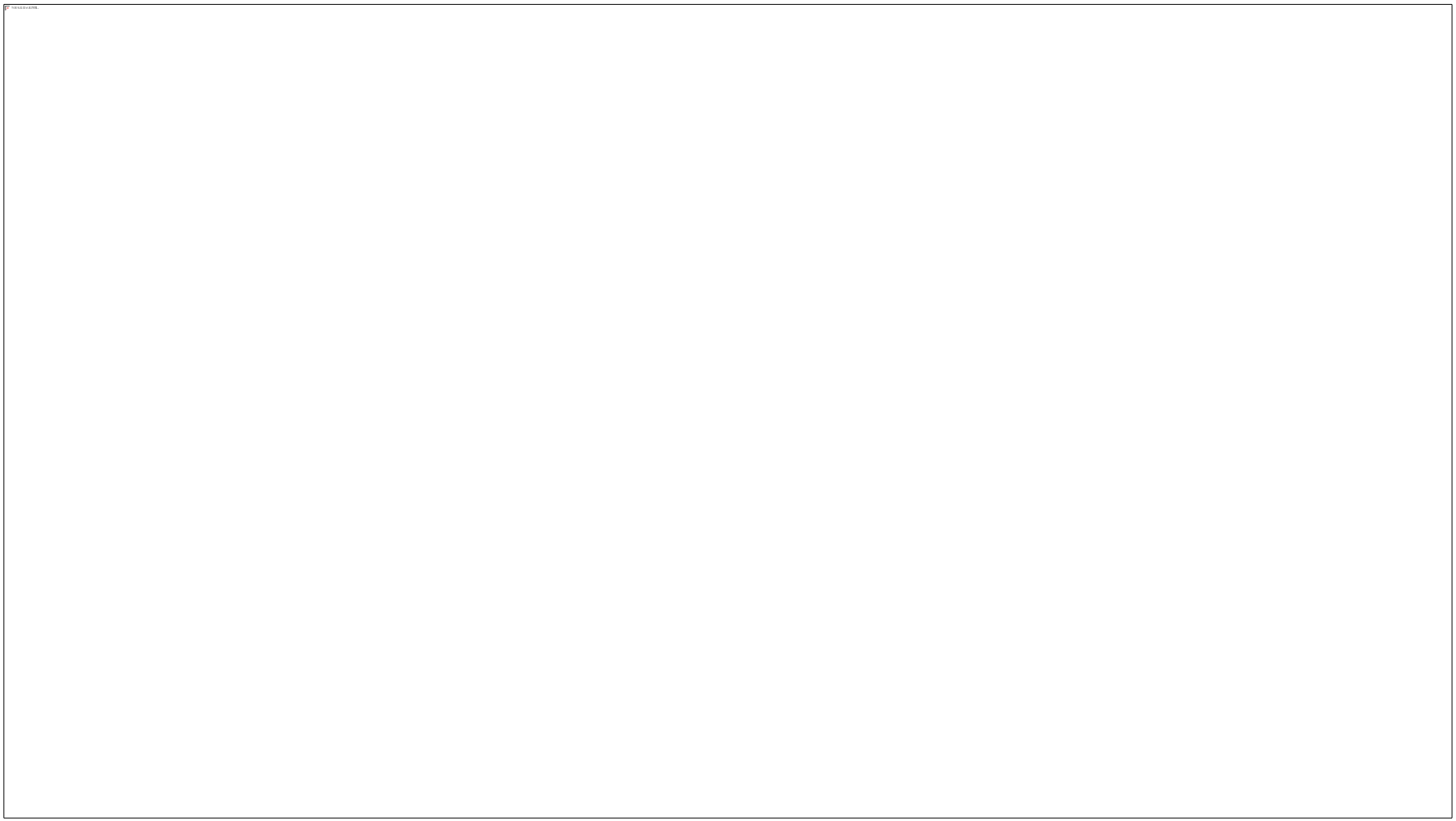

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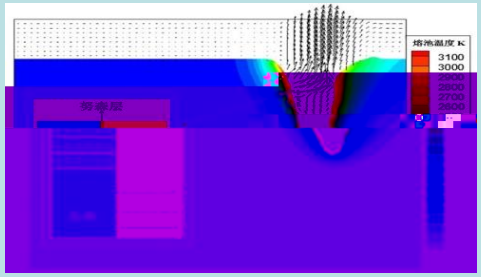
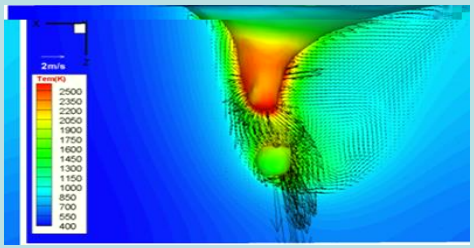
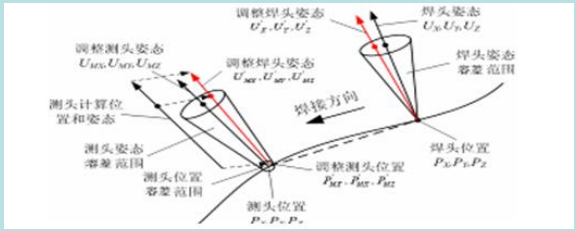
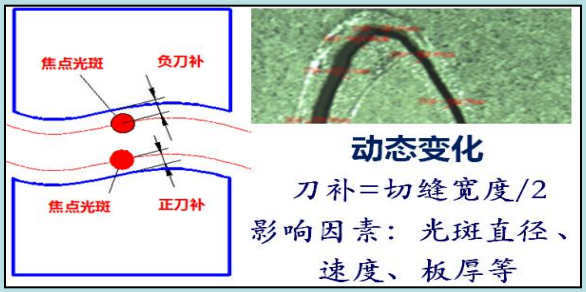


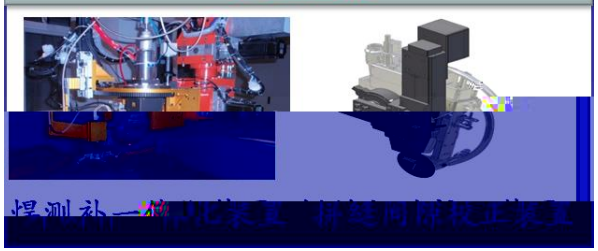
$$\rho\frac{\partial \vec{U}_l}{\partial t}+\rho(\vec{U}_l\cdot\nabla)\vec{U}_l=\nabla\cdot[\mu_l\nabla\vec{U}_l]-\frac{\mu_l}{K}|\vec{U}_l|\vec{U}_l+\rho_l\vec{g}\beta(T-T_{ref})-\frac{C\rho_l}{\sqrt{K}}\vec{U}_l$$





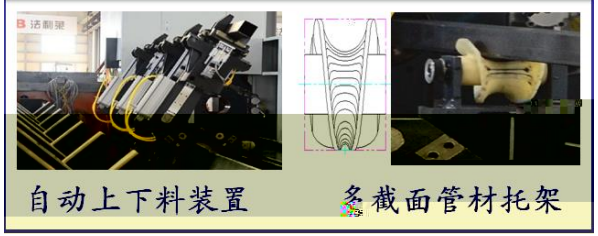


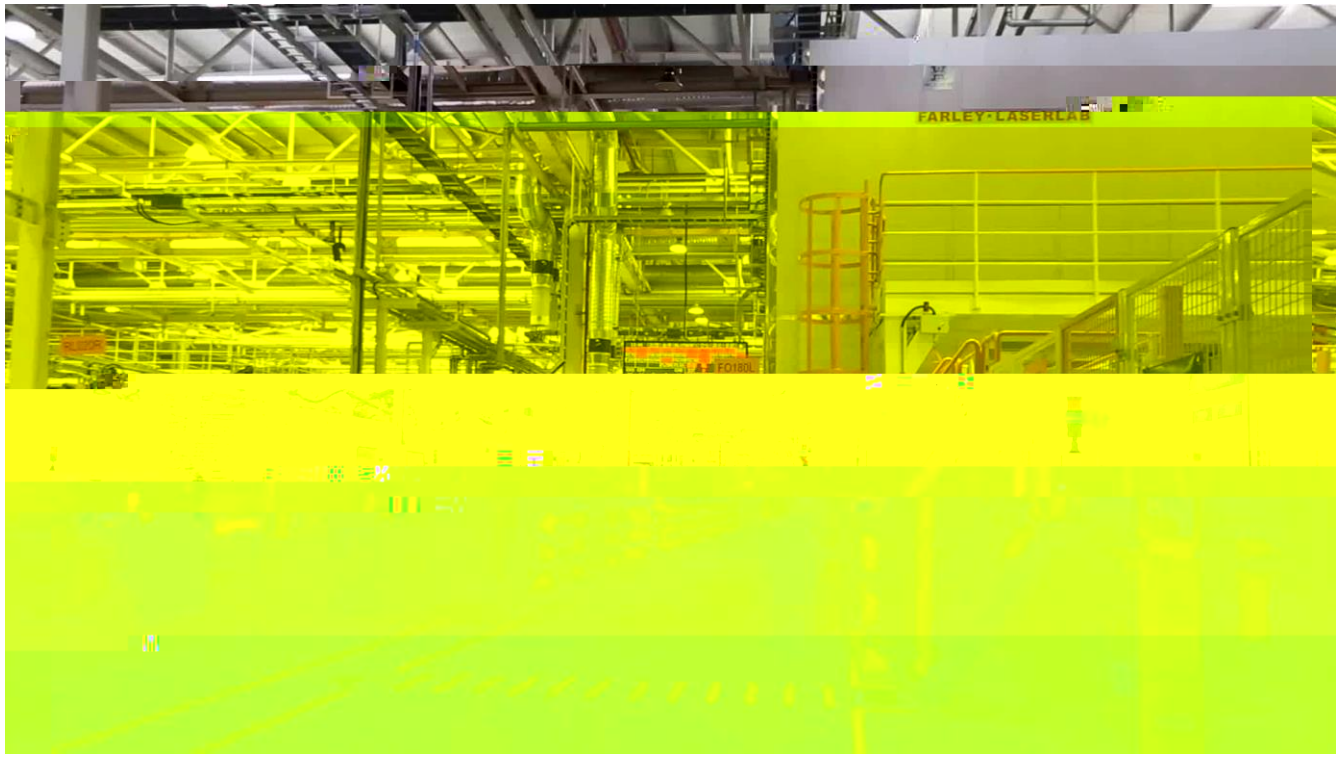
形性控制



精确装夹

自动化和生产柔性

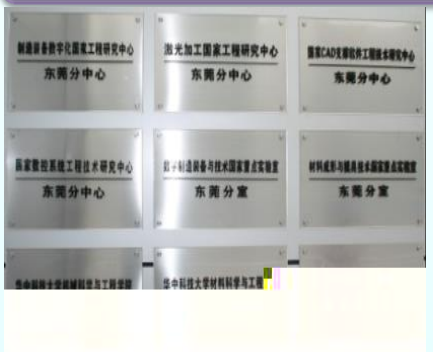



FARLEY·LASERLAB


东莞市人民政府·华中科技大学共建东莞华中科技大学制造工程研究院
东莞松山湖科技产业园区管委会·东莞华中科技大学制造工程研究院投资项目协议
东莞市
人民政府
华中科技大学


东莞华中科技大学

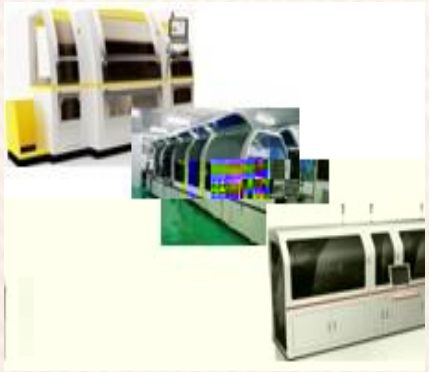

国家技术发明奖
证 书

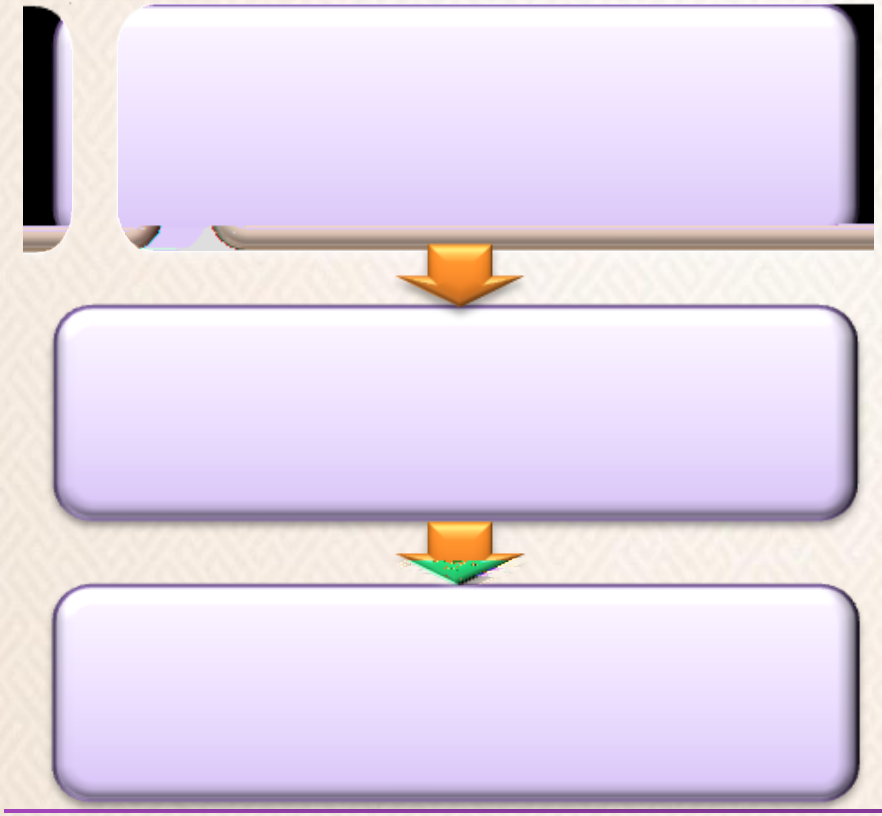

东莞分中心
东莞分中心
东莞分中心
东莞分中心
东莞分室
东莞分室

科技不仅要支撑产业，更要引领产业。

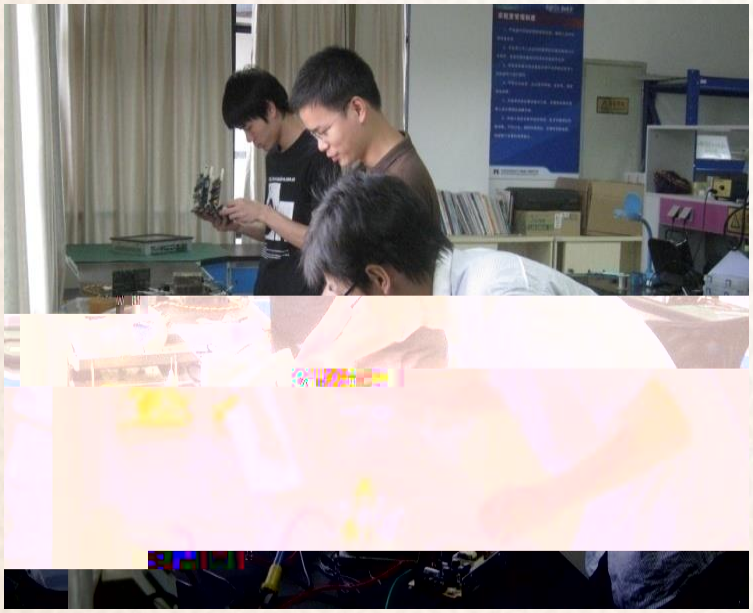
——李培根


E line






华科精机
Huatinova



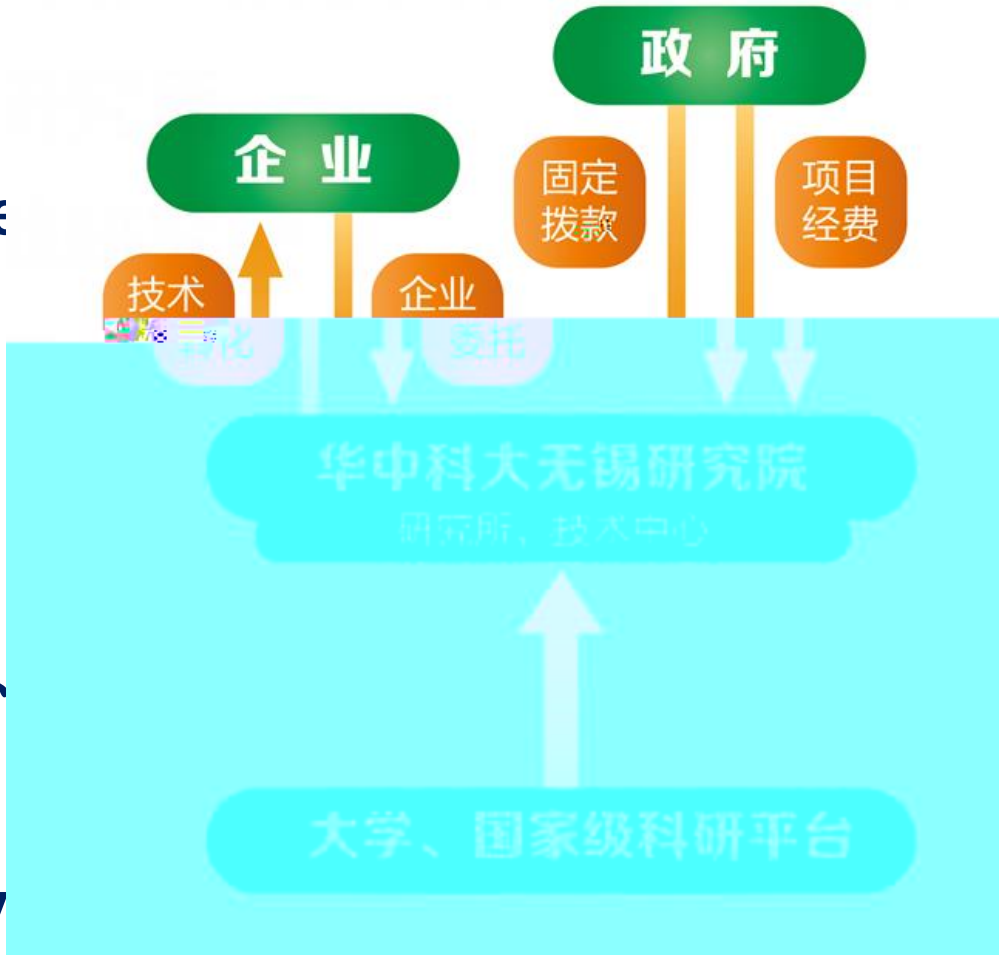

“东莞工研院杯”创新创业大赛

High efficiency and high precision processing technology

Technology for intelligent control equipment

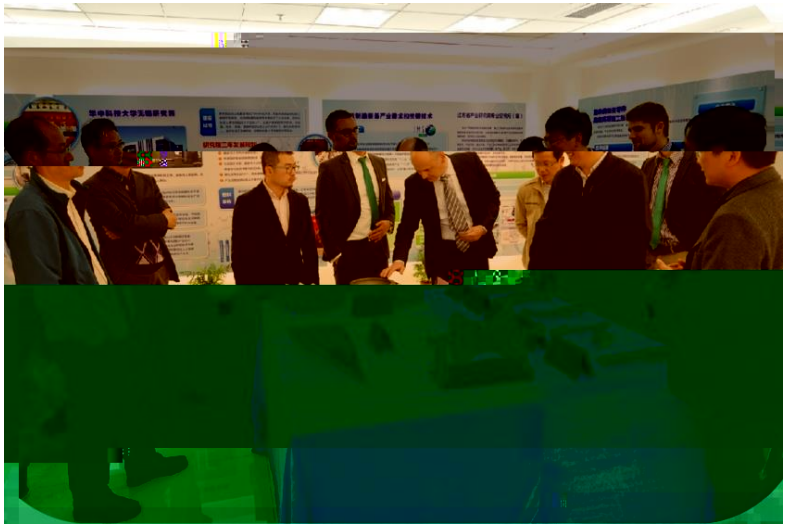
Technology for intelligent manufacturing automation system

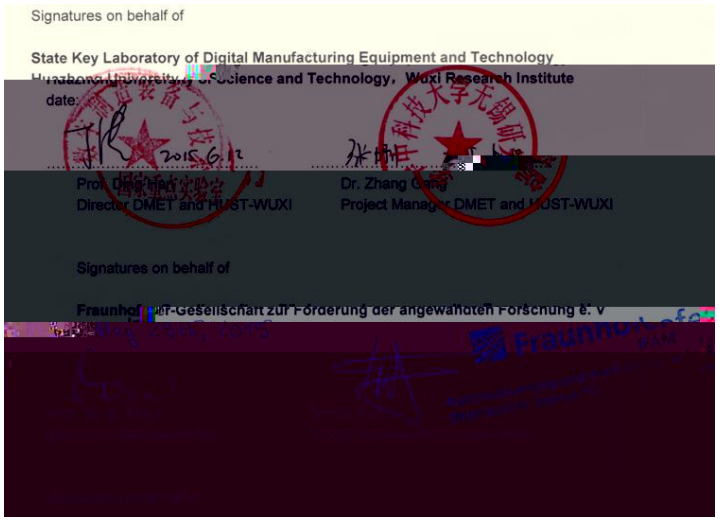
Learning from the Fraunhofer-gesellschaft mode, the institute guide talents, technology and funding elaborately balanced and stimulate scientific achievements、products and service transforming to industry



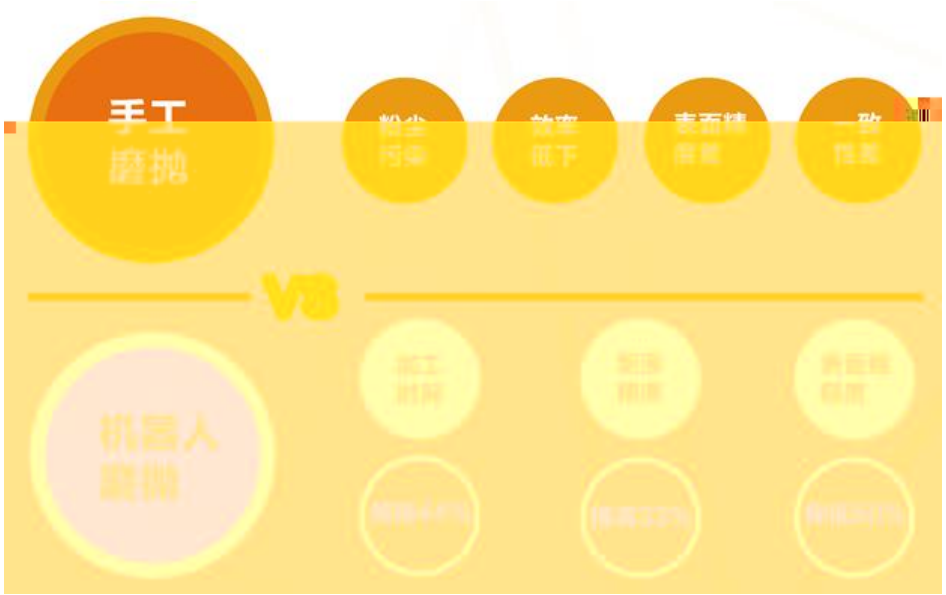
Case Studies WRI

International cooperation by working with experts from American, Germany and Japan in research and development, as well as personnel training.

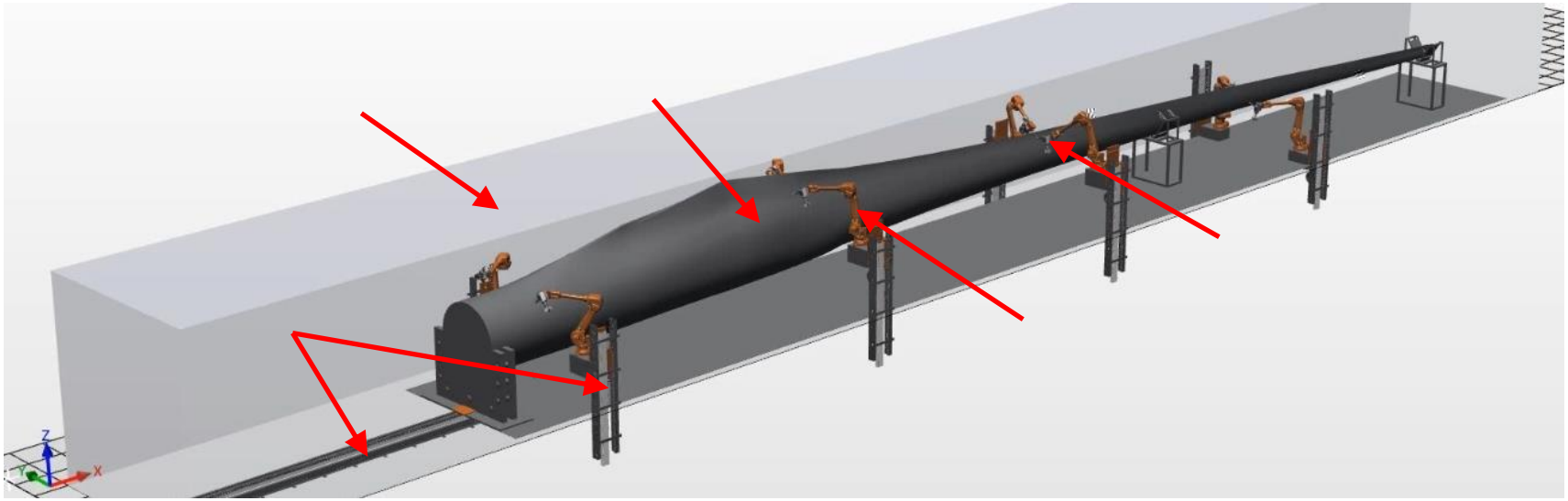




During the 3 months cooperation with WTB, the institute had successfully processed 7 OGV blades and had finished continuous process production of 5 OGV blades in the second batch production (over 200 dimensional parameters all meet requirement, for with WTB has not reach this level of standard after two years of development)

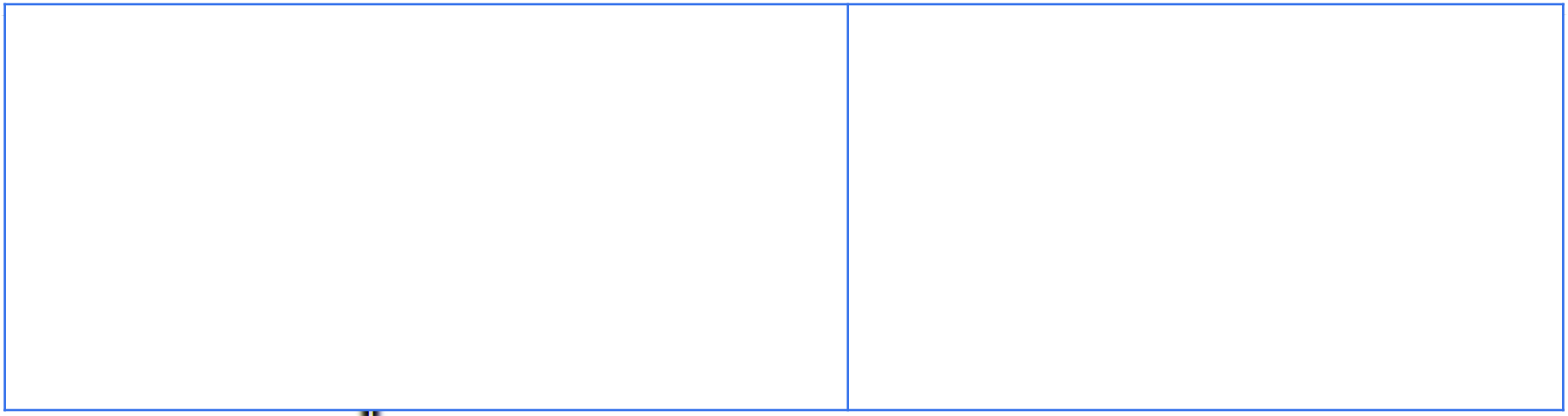

手工
磨抛
粉尘
污染
效率
低下
表面精
度差
一致
性差
VS
机器人
磨抛

low production efficiency, poor working conditions ,high cost of large wind power blade, ——multiple cooperative robotic grinding system for wind turbine blades composite material ,over 40 meters long




智能化生产控制中心
智能化仓储运输物流

Case Studies WRI



华中科技大学-武汉钢铁集团联合实验室

(HUST-WISCO Joint Laboratory)

The joint laboratory was founded in 2009, aims at new technology, new process, new materials, patent transformation and talent cultivation.


技大学—WISCO联合实
签约
华中科技大学
武汉钢铁（集团）公司


华中科技大学—WISCO联合实验室
联合实验室

(1) 51 cooperation research projects (32 finished), 60 million cooperation fund, average 300 million direct profit per year;

(2) 42 joint patent applications, 5 software copyrights, 7 achievement identifications, 100 high-level research papers, multiple national/provincial projects.

(3) Trained 700 more talents, held 200 more forums, approved the graduate workstation by Hubei province and the national demonstrative university-enterprise joint training base for graduate students.

（ to utilize waste industry water, reduce consumption of new water,）

(Provide technical support to utilize waste industry water, reduce consumption of new water, decrease pollution.)

(Confirmed by field test and water quality analysis, the total amount of reused water increased from 1500 to 12800 m^3/h, saving 100 million tons new water per year)

人才培养与培训 (Talent cultivation and training)

谢 谢！