CGN Dasheng Export First Electron Accelerator to the European Union

On December 17th, CGN Dasheng Accelerator Technology Co., Ltd.(CGNT), which is the Subsidiary of CGN Nuclear Technology Development Co., Ltd, signed a sales agreement for a "10MeV/20kW Linear Electron Accelerator" with the Institute of Nuclear Chemistry and Technology (INCT) in Warsaw. This marks the first time that CGN Dasheng's electron accelerator has been exported to the European Union.



Signing Ceremony

The Institute of Nuclear Chemistry and Technology is a cooperating laboratory with the International Atomic Energy Agency (IAEA), and it is located in the district where Madame Curie, a Nobel laureate in Physics and Chemistry, once worked and lived. This agreement signifies CGN Dasheng's first breakthrough in accelerator sales in the EU region, laying a solid foundation for the company's expansion in the EU market.

The "10MeV/20kW Linear Electron Accelerator" is a high-tech device suitable for integrated irradiation processing. The high-energy electron beam produced by the electron accelerator can induce physical, chemical, and biological effects in certain materials, effectively killing bacteria, viruses, and pests. It is widely used in fields such as sterilization, material modification, and food preservation, with the advantages of being environmentally friendly, pollution-free, and highly efficient.



10MeV/20kW Linear Electron Accelerator

In March 2023, CGN Dasheng's "10MeV/20kW Linear Accelerator" product obtained the EU CE certification, officially granting the product permission to enter the EU market. In August of the same year, CGN Dasheng handed over the "golden key" symbolizing project transfer to a Turkish customer, marking the successful completion of the first electron accelerator project fully compliant with EU standards, which has laid a solid foundation for the company's expansion into the EU market.



CGN Accelerator Science and Innovation Center

In recent years, CGN Dasheng has actively embraced the mission of "making nuclear technology better for human life," continuously leveraging its technological innovation advantages, and promoting the development and upgrading of high-end products. The domestically developed first S-band 10MeV/32kW linear electron accelerator significantly enhances production line efficiency per hour. Breakthroughs in "high-frequency high-voltage accelerator solid-state power supply technology" have also increased the overall electrical energy conversion efficiency from around 55% to over 80%.

Currently, CGN Dasheng has achieved full coverage of industrial electron accelerators across low, medium, and high energy levels, firmly positioning itself in the first tier of nuclear technology applications in China, with products exported to multiple countries overseas. In the future, CGN Dasheng will continue to accelerate the pace of high-end equipment "going global," aiding CGNT in realizing its vision of "becoming a world-leading nuclear technology application industry pacesetter."

中文原文:

中广核达胜电子加速器首次出口欧盟

当地时间 12 月 17 日,中广核技下属中广核达胜加速器技术有限公司在华沙与波兰核化学与技术研究所(Institute of Nuclear Chemistry and Technology, INCT)签订"10MeV/20kW直线电子加速器"销售协议,这是中广核达胜电子加速器首次出口欧盟。



▲签约现场

波兰核化学与技术研究所是国际原子能机构(IAEA)合作单位,其所在街区是诺贝尔物理学奖、化学奖得主居里夫人曾经工作生活过的地方。此次签约,实现了中广核达胜在欧盟地区加速器销售的首次突破,将为公司加速器业务在欧盟地区的拓展奠定良好的基础。

"10MeV/20kW 直线电子加速器"是一款适用于综合辐照加工的高技术设备,用电子加速器产生的高能电子束照射,可使一些物质产生物理、化学和生物学效应,并有效杀灭病菌、病毒和害虫,可广泛应用于消毒灭菌、材料改性和食品保鲜等领域,具有绿色环保、无污染、效率高等优点。



▲10MeV/20kW 直线电子加速器

2023年3月,中广核达胜"10MeV/20kW直线加速器"产品通过欧盟CE认证,意味着该款产品正式获取进入欧盟市场的许可证。同年8月,中广核达胜将象征项目移交的"金钥匙"交付到土耳其客户手中,标志首个完全按照欧盟标准出口的电子加速器项目顺利完成,为公司拓展欧盟市场奠定了坚实基础。



▲中广核加速器科创中心

近年来,中广核达胜积极践行"核技术让人类生活更美好"的使命,持续发挥技术创新优势,不断推动高端产品研制与升级,完全自主研制的国内首台 S 波段 10MeV/32kW 直线电子加速器,大幅提升产线单位小时产出效能,在"高频高压加速器固态电源技术"上的突破,也使整机电能转换效率从 55%左右提升至 80% 以上。

目前,中广核达胜已实现高中低能全系列工业电子加速器的全覆盖,稳居国内核技术应用第一梯队,产品远销海外多个国家。未来,中广核达胜将继续加快高端装备"走出去"步伐,助力中广核技早日实现"成为世界一流的核技术应用产业领跑者"的愿景。