

# Unlocking international markets for UK SMEs



Science & Technology  
Facilities Council



**SS scientific**  
PRECISION IN VACUUM

**The Vacuum Science Group at the Science and Technology Facilities Council's (STFC) Accelerator Science and Technology Centre (ASTeC) has assisted vacuum component provider SS Scientific in gaining the product certification required to win a lucrative contract in the USA.**

## The challenge

SS Scientific is an SME based in Eastbourne that specialises in vacuum components and systems, providing technical solutions for research and industrial organisations. As a respected player in this field, the company recently had the opportunity to supply their specialised vacuum switches to a government research facility in the USA. In order to win the contract, however, SS Scientific needed to acquire Safety Integrity Level 3 (SIL3) certification to prove that their product met stringent requirements.

## The solution

The UK-based ASTeC Vacuum Science Group at STFC had the knowledge and technical capabilities to provide the required certification. Through existing national networks, SS Scientific were able to identify and approach ASTeC, who then devised and implemented an experimental programme. Utilising ASTeC's test facilities and extensive vacuum expertise, SS Scientific were able to carry out the required trial on a sample of vacuum switches to demonstrate their compliance with the SIL3 standard criteria.

## The benefits

The SIL3 trial concluded that SS Scientific's vacuum switches met the desired criteria, allowing the product to gain the SIL3 rating approval, enabling SS Scientific to win a contract with the national laboratory in the USA. Having now achieved certification for their product, the company will be able to use the results of their collaboration to promote the product to various other international laboratories, such as CERN and the European Synchrotron Radiation Facility (ESRF). Access to the facilities available at ASTeC was vital in order for this UK company to gain access to a challenging and restricted area of the vacuum technology market, and will lead to increased revenue for the company. This new foothold in an international market may also provide the potential for wider global exposure of the company's products.

**"The resources and expertise of the ASTeC Vacuum Group has enabled SS Scientific to project itself onto the world stage and win export business for the UK. This collaboration between industry and STFC is exactly what is required to exploit our combined knowledge, enhance both organisations, and open doors for future growth."**

**– Robin Hathaway, Managing Director, SS Scientific.**

## Work with us

The Science and Technology Facilities Council (STFC) keeps the UK at the forefront of international science and tackles some of the most significant challenges facing society and industry.

We collaborate with industry, the research community and government to develop business opportunities arising from our world-leading science and technology.

With our facilities, capabilities and expertise, we are perfectly placed to solve your high-tech innovation challenges and enhance your competitiveness - whether you are an established global corporation or an entrepreneur with a great business idea.

For more information about how your business could benefit from working with us:

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