



See Us At:



ICSS-17, ICN+T 2019,
NanoForum 2019
1st-5th July, 2019
Malmö, Sweden



The Diamond Light Source
29 August, 2019
Diamond House, Didcot, UK



Vacuum Expo
9th-10th October, 2019
Coventry, UK

TSL Products:

- [UHV Viewports](#)
- [Anti-Reflective Coatings](#)
- [CVD Diamond](#)
- [Glass to Metal Seals](#)
- [Atom Trap Chambers](#)
- [Aerospace Vacuum Optics](#)
- [X-ray Anodes](#)
- [Biomedical Coatings](#)
- [In-Line Monochromator \(ILM\)](#)
- [Synchrotron Products](#)
- [Electron Optical Components](#)



Thin Fused Silica Viewports for CERN

When CERN required a special mini-flange UHV viewport, Torr Scientific found the solution. Their engineers required that the viewport had a large view diameter, yet was as thin as a standard DN16CF mini-flange. They also needed them to have a 316LN flange with a metal brazed fused silica optic. Torr's engineers produced prototypes which met the specifications, these prototypes were then tested and approved by CERN's experts. CERN have since placed several orders for both these special viewports and other 316LN based viewports from the Torr product range. If you want your vacuum system to have the same performance as CERN then please request quotations for viewports manufactured at Torr Scientific.



SWARM Satellite Phosphor Screens

Over 10 years have passed since Torr Scientific processed and supplied phosphor coated fibre optic faceplates for the launch of SWARM, a three-satellite constellation in low Earth orbit as part of the European Space Agency's Earth Observation Programme. Torr Scientific's Richard Enck continues to provide expertise and support in collaboration with scientists from ESA and The University of Calgary regarding the investigation EFI (Electric Field Instruments). The mission is surveying the Earth's geomagnetic field to gain new insights into many natural processes, from those occurring deep inside the planet to weather in space caused by solar activity. Torr Scientific supplied the key phosphor screen which is part of the Canadian Electric Field Instrument (CEFI) sub-assembly. This instrument is a particle detector that is characterising the electric field about the Earth. Torr's phosphor screen converts incoming ions that pass through a particle focusing system into light that can then be analysed to provide extensive data about the electric field.



X-ray Source Refurbishment Service

Torr Scientific is pleased to offer a refurbishment service for all X-ray Sources which is a cost-effective solution to replacement. All refurbishment work is carried out in clean-room conditions by experienced UHV technicians and services include:

- Anode recoating for both mono and dual anodes
 - Densified films in Aluminium, Magnesium, Zirconium, Titanium, Yttria, Platinum
- Inspection reports, helium leak testing and water cooling flow testing
- Re-tipping service
- CVD diamond tip and coating for enhanced performance
- Filament and aluminium window replacements



For further details, please contact Torr Scientific sales@torrscientific.co.uk.