

SCHOTT wins BAE Systems' first Supplier Performance Award for nuclear penetrations

Hermetically sealed penetrations are vital for reactor safety onboard BAE's nuclear submarines

Barrow (UK), Landshut (Germany), April 10, 2013— At its First Annual Supplier Forum, [BAE Systems Maritime – Submarines](#) has recognized [SCHOTT's Electronic Packaging](#) Business for ten years of outstanding cooperation. The specialist for [glass-to-metal sealing technology](#) provides hermetic power, control, and instrumentation penetrations for BAE's Astute-class submarines. The components safely conduct electricity and data through the containment structure of the submarine's nuclear reactor.

“Since 2003, SCHOTT has consistently been one of our top-performing suppliers,” said Jeannette Medati, BAE Systems Maritime – Submarines Head of Supply Chain Category Management. “The cross-functional, cross-business, and multinational teamwork with SCHOTT serves as a benchmark for what can be achieved by working together with joint aims, open and honest communication, and a will to perform to the highest levels. We hope to continue in a spirit of true partnership for many years to come.”

Contracted by the UK Ministry of Defence, BAE Systems is currently building the seven Astute class nuclear submarines for the Royal Navy. The performance and hermeticity of the electrical penetrations aboard the vessel are critical to safely running and controlling the boat's reactor, which provides the submarine's power. With its patented compression glass-to-metal seals, SCHOTT offers a unique technology that maintains the pressure boundary integrity of the reactor's containment structure in all conditions.

“Building a Space Shuttle is probably less complex than building this nuclear submarine,” said Malcolm Bardsley, U.K. Sales Director at SCHOTT Electronic Packaging. “Its more than one million components are engineered to serve for decades under the most demanding circumstances. Technical expertise, on-time delivery, and unflinching product performance are keys to such sophisticated projects. We are proud to contribute to the most capable submarine ever built for the Royal Navy.”

Since the early 1960s, SCHOTT's glass-to-metal sealed electrical penetration assemblies have been used in naval vessels ranging from civil icebreakers to aircraft and LNG carriers, as well as dozens of active nuclear power plants around the world. In rigorous testing—including seismic simulations and severe accident test programs beyond conditions believed to have occurred in 2011 in Fukushima—the robust

components have proven their heat-, pressure-, and radiation-resistant hermeticity and integrity.

“The pressure barriers of our penetrations basically consist of a metal housing, the sealing glass, and the conductor pins. Pressure resistance and hermeticity are achieved by compression of the glass due to the considerably higher coefficients of thermal expansion of the housing material,” explained Dr. Oliver Fritz, Head of Technology at the Nuclear Safety Division of SCHOTT Electronic Packaging. “Unlike polymer seals, glass is inorganic and therefore non-aging. The penetrators remain functional and hermetic far beyond the ship’s service life of 25 years with no need for maintenance or replacement.”

Additional information can be found at www.us.schott.com/epackaging.

About SCHOTT Electronic Packaging

SCHOTT Electronic Packaging is a worldwide leading manufacturer of electrical penetrations for harsh environment applications like LNG vessels, terminals and nuclear power plants. With 1,500 employees at 5 production locations and several competence centers worldwide, local customer support and co-developments are the heart of the business. Drawing upon 125 years of experience, SCHOTT’s feedthroughs for submerged pumps are installed in storage tanks, LNG vessels and in power generators for CNG. SCHOTT’s feedthroughs are ATEX-certified and remain maintenance-free over decades. They are based on the proprietary glass-to-metal sealing technology, which is deemed to be the safest technology available today.

About SCHOTT

SCHOTT is an international technology group with more than 125 years of experience in the areas of specialty glasses and materials and advanced technologies. SCHOTT ranks number one in the world with many of its products. Its core markets are the household appliance, pharmaceuticals, electronics, optics, solar power, transportation and architecture industries. The company is strongly committed to contributing to its customers’ success and making SCHOTT an important part of people’s lives with high-quality products and intelligent solutions. SCHOTT is committed to managing its business in a sustainable manner and supporting its employees, society and the environment. The SCHOTT Group maintains close proximity to its customers with manufacturing and sales units in all major markets. Its workforce of around 16,000 employees generated worldwide sales of \$2.6 billion (approximately 2.0 billion euros) for the 2011/2012 fiscal year.

Download-link to ZIP-file containing the picture in printable quality:

<http://www.schott-pictures.net/presskit/195078.bae-supplier>



Photo no. 195618: Malcolm Bardsley, Sales Director UK at SCHOTT Electronic Packaging, with the Supplier Performance Award that the company received from BAE Systems Maritime—Submarines for ten years of outstanding performance. Source: BAE Systems



Photo no. 17518: Astute Class Submarine at sea. Source: BAE Systems



Photo no. 17521: Astute class submarine, cutaway image. Source: BAE Systems

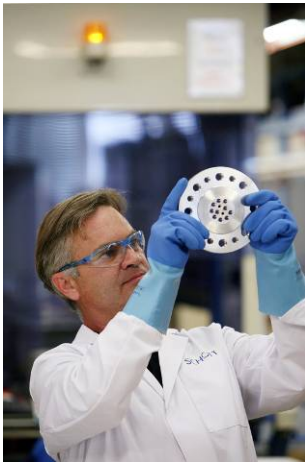


Photo no. 13239: Penetrations by SCHOTT: Dr. Oliver Fritz, Manager Technology for Large Scale Feedthroughs at SCHOTT, examines a Large Scale Feedthrough in the galvanic station. Source: SCHOTT.

More press pictures can be downloaded at: www.schott-pictures.net

Sales contact:
Electronic Packaging
SCHOTT North America, Inc.
Joe Hale
Director of Sales & Marketing
Phone: 508.765.7487
E-mail: joe.hale@us.schott.com

Press contact:
Mike Lizun
Gregory FCA
Senior Vice President
Phone: 610.642.1435
E-mail: Mike@gregoryfca.com