

## Germany@CERN – Finetech presents vacuum die bonding solutions

On October 10-11, 2017, Finetech participated in the Germany@CERN exhibition in Meyrin, Switzerland. The event which is organized by CERN and the Federal Ministry of Education and Research (BMBF) was created to initiate new cooperations between CERN facilities and German companies as well as to enhance existing partnerships.

Whether scientists are looking for neutrinos, measuring cosmic radiation or trying to find the smallest known particles in the universe –the fundamental research conducted at CERN often anticipates technological developments, constantly pushing the limits of what technology can do today.

The number of German technologies currently in use at CERN might be an indicator that German companies are well equipped to meet those challenges. Together with universities and research institutions, they test innovative manufacturing methods and technologies contributing to the success of international research projects.

With its portfolio of high-precision FINEPLACER® placement and assembly systems, Finetech has been a long-time equipment supplier to various European CERN project partners doing research in the field of particle physics. Detector panels assembled on FINEPLACER® systems are currently used in the world's largest particle accelerator, aptly named the Large Hadron Collider.

This year, Finetech put the focus on vacuum die bonding solutions which provide a number of exciting possibilities for fundamental research.

The Vacuum Chamber Module can be easily integrated into a FINEPLACER® system. While retaining full flexibility with regard to assembly technology, placement accuracy, force and temperature, bonds made in vacuum are free from voids and packages can be hermetically sealed. Vacuum-bonded assemblies are particularly durable, resilient and have excellent electric/thermal conductivity, a prerequisite to design miniaturized components and better-performing modern electronic and opto-electronic micro systems.

Highlight of this year's event was a visit by the CERN Director-General, Fabiola Gianotti, together with BMBF representatives. Ms. Gianotti, an experimental particle physicist herself, showed great interest in hearing more about Finetech's contributions in this field.



*Andreas Schmidt, Finetech Regional Sales Manager, in conversation with Ms. Fabiola Gianotti*