Made-to-measure robotics

LCTech GmbH has a long association with Tecan Systems, and has been using its Tecan Cavro[®] components for many years. The Company's latest sample preparation workstation, the FREESTYLE, uses a Cavro Omni Robot and Cavro XLP Pump to provide automated preparation of foods, feeds and environmental samples.

LCTech, based in Dorfen, Germany, has been developing and supplying products and methods for sample preparation and analysis since 1998. Focusing on trace contaminant testing of foodstuffs and animal feeds – as well as quality control testing for the pharmaceutical industry – the Company's in-house developed product range includes both semi and fully automated systems designed to simplify preparation of samples for analysis.

Dr Uwe Aulwurm, a Managing Director of LCTech, explained: "We have had a long relationship with Tecan, and have always enjoyed good support from our local representative. Our latest system, the FREESTYLE, is designed for laboratories preparing complex samples for quality control testing and contamination screening. To meet the varied workflow demands of our customers, we wanted a modular solution that combined a general purpose liquid handling system with a range of different processing devices, including options for solid phase extraction, gel permeation chromatography and evaporation. We weren't looking to reinvent the wheel by developing our own XYZ robotic system. The Cavro Omni Robot was perfectly suited to our needs, providing a very robust instrument which could be easily modified to access individual processing modules, as well as for planned future developments."

"Liquid handling is performed by a single Cavro XLP Pump equipped with a 10 ml syringe for all three current applications. This pump is well matched to the needs of our customers in terms of liquid handling performance and long-term stability, and uses Cavro ceramic valves – either 9- or 12-port configurations – to ensure solvent compatibility. This set-up provides very consistent operation and maximum flexibility for our customers' applications, and the seamless firmware and software compatibility with the Cavro Omni Robot made it the logical choice."

"Use of Tecan Cavro components has allowed us to develop the FREESTYLE system to "We have had a long relationship with Tecan, and have always enjoyed good support from our local representative."

closely match the needs of our customers, which can vary significantly from day to day. The platform is already in routine operation with several customers, and they all appreciate the different options offered by this compact and easy-to-use XYZ robotic system. Our cooperation with Tecan has been vital to achieving this flexibility, and we look forward to working with the Tecan team to develop further applications for the FREESTYLE system."

To find out more on Tecan's Cavro components, visit www.tecan.com/components

To learn more about LCTech, go to **www.lctech.de**







Dr Uwe Aulwurm (left) and Michael Baumann (right), the managing directors of LCTech, with the FREESTYLE system