Review of Recently Supplied Oxford Instruments UHV/ULT Cryostats (LT26)

Simon C. J. Kingsley, H. Jones, H. Agrawal, A. Matthews, G. J. Batey, and M. Cuthbert

Oxford Instruments Nanotechnology Tools, Tubney Woods, Abingdon, Oxfordshire, OX13 5QX, UK

Oxford Instruments has recently experienced an increasing demand for UHV sample environments for both its traditional 'wet' Kelvinox, and Triton cryofree TM range of dilution refrigerators.

This demand is often accompanied by requests for particular sample handling mechanisms - usually designed to prevent the need to break the hard-won vacuum when changing samples - and other application-specific features to be integrated into the systems.

We have recently installed systems for a wide range of applications including STM, magneto-optical tapping of atomic clouds, and for use on synchrotron beam lines. In this paper we review three such systems and their novel features that we have installed in laboratories in Europe and the USA in the last few years.