

Temperatures

Cryo-Module 80 Kelvin SEM sub-stage

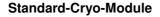


Special Developments for Microscopy



Kammrath & Weiss is proudly represented in Australia & New Zealand by AXT Pty. Ltd. 1/3 Vuko Pl., Warriewood NSW 2102 Australia T. +61 (0)2 9450 1359 F. +61 (0)2 9450 1365 W. www.axt.com.au E. info@axt.com.au







Special Module; air-lock compatible

Cryo-Module (SEM sub stage)

This "Cryo module" can be mounted to the SEM stage "like a large specimen". The temperature exchanger geometry inside the cryostat body, the so-called "whirlpool"-chamber, runs at very low vibration level, and minimum liquid nitrogen consumption. Liquid (or in some applications, gaseous) nitrogen flows through the chamber.

Any temperature from room temperature down to 80 Kelvin can be kept constant using the PID-controller, which is part of this package. With a special version the top of the cold surface holds a dovetail, so that with SEMs having an airlock mechanism, the specimen can be inserted through the loading port.

The holder which fits there, carries the specimen (isolated for specimen current measurement), a Faraday cup, and a 4-pin plug with shielded cables leading to the vacuum feed through at the chamber wall. This facilitates the observation of ICs at low temperatures in voltage contrast. The plug engages with the four electrical contacts at the end of the insertion movement.

This photo shows just an example of cryo modules in its version for the specimen stage of the SEM type JEOL 840 (6300, 6400). There are many other designs available.

Kammrath & Weiss GmbH Special development for microscopy