

SPECIFICATION OF PELTIER COOLING AND HEATING STAGE

Peltier cooling and heating stage is based on the thermoelectric (Peltier) effect. If current passes through contacts of two dissimilar conductors in a circuit, a temperature differential will be created between them. One of the surface contacts is then cooled and the other is heated. The heated surface undergoes subsequent secondary cooling via forced-liquid-cooling circuit.

Peltier cooling and heating stage can be used with TESCAN scanning electron microscopes equipped with a large (LM), extra large (XM) or analytical extra large (GM) chamber*.

Temperature range: -50°C to $+70^{\circ}\text{C}$

Temperature accuracy: $\pm 0.5^{\circ}\text{C}$

Temperature stability: $\pm 0.2^{\circ}\text{C}$

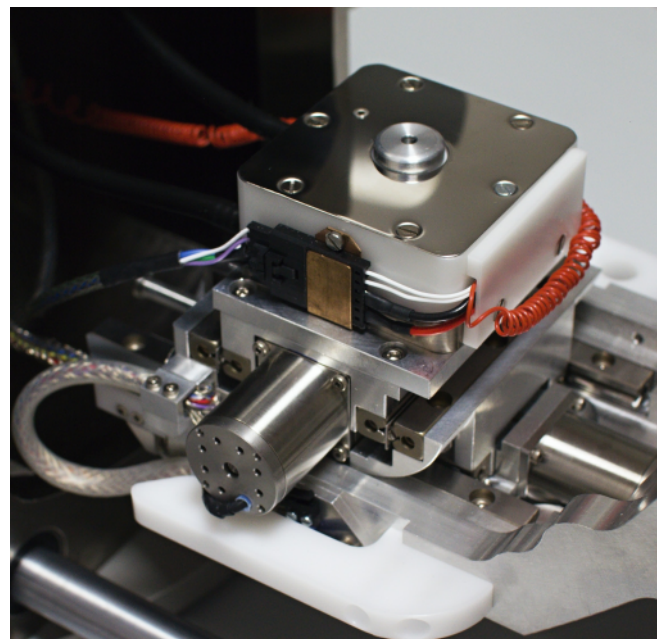
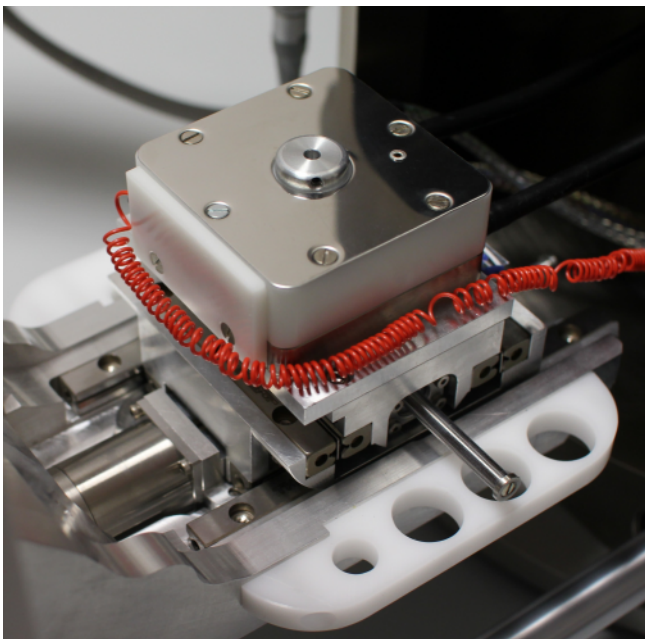
Maximum cooling speed: 30°C per minute

Regulation of the cooling/heating process: automatic, set by the microscope software

Cooling of the Peltier module: closed loop cooling system** (filled with proprietary coolant)

Diameter of the specimen holder: 12.5 mm

Power Input of Peltier cell: 50 W



*TESCAN Peltier cooling and heating stage cannot be used with TESCAN SEM equipped with a small chamber (SB).
**Closed loop cooling system is part of the delivery.