

The invention relates to physical-technical tests and investigation of materials. The device proposed is intended for cooling those and screening at super-sensitive measurements of magnetic susceptibility on basis of superconducting quantum interference devices (SQUID) in strong magnetic fields (up to 10 Tl) for magnetic structuroscopy of structural materials. The device has helium and nitrogen tanks, metal body, suspended radiation screens – helium, heat and two nitrogen ones, those are made of several shells fixed with dielectric plates with high thermal conductivity. The shells are made of separate metal strips that have no electric contact, screen-vacuum thermal insulation between the body, the screens and helium tank. The screens and the body of the helium tank are arranged with account of thicknesses of skin layers of metals at working temperatures of those, minimum of effects on measured signal, minimal duration of decay of electromagnetic pickups. Use of the invention is based on connection between change of structure of material under effect of radioactive radiation and changes of magnetic susceptibility for defectoscopy of structural materials of A-plants and in other areas where defects come to existence due to aging, with radiation one included.