

ScreenMachine

A fully functioning, compact X-ray Crystallography System and the newest member of the Rigaku protein line of integrated solutions. The ScreenMachine is a turnkey, low-maintenance home x-ray diffraction system that enables screening and data collection on a range of protein crystal samples.

The ScreenMachine is fully capable of collecting high-quality data sets for solving macromolecular structures in the home lab. In addition the hardware configuration and accompanying software have been optimized for screening of macromolecular crystals prior to synchrotron trips, optimizing cryoprotection conditions, as well as easily identifying important crystal parameters such as diffraction resolution, mosaic spread, etc.

The time-proven inverted phi axis allows the easiest mounting and recovering of frozen crystals, an important consideration in allowing students and new researchers to handle valuable macromolecular crystals.

The ScreenMachine was designed to complement and support data collection activities at synchrotron facilities by providing hardware that is optimized for ease of use, allowing researchers to prepare the best crystals for synchrotron data collection in the fastest, most efficient way possible. The micro-focus sealed tube X-ray source provides X-ray flux in a low maintenance package. In labs that already have access to a high-powered home-lab X-ray source, the ScreenMachine provides an instrument that can be used to prepare for synchrotron data collection without interfering with ongoing in-house projects.