Difftech Model 122D



122D Upgrade added to Philips PW 1050 goniometer

Difftech 122D X-ray
Powder Diffractometer Upgrade
(including hardware and software)

Difftech 122D Hardware

The GBC Difftech 122D offers flexibility to drive $\theta/2\theta$ coupled or decoupled goniometers, automatic sample loaders or any XRD system. Traditional single pass scans are complemented by multi-pass averaging scans (with successive scans accumulating to improve measurement statistics and to provide unlimited scan times). Any mode can be selected via the menu.

Analysis is easy with inbuilt automated features that allow for control of auto loaders, multiple axes, special devices, textures and stress goniometers and heating stages.

Difftech 122D Automation Software

The software is PC-based 32 bit and operates with Microsoft Windows operating systems. It consists of two parts.

(1) Visual XRD Data Collection Software

Visual XRD controls the instrument and collects data files. Intuitive and so easy to use that a scan can be set up and seen with a few mouse clicks and entry of a data file name. Pull down menus allow access to Manual mode for computer-aided alignment.

PHA mode is used for counting electronics' setup, auto loader batch mode, MPA mode, multi-range mode and single axis mode among others.

(2) TRACES Screen Processing Software

TRACES allows for screen processing of data files. It is simultaneously intuitive and comprehensive to enable powerful analysis.

TRACES is designed to work with "real-world" data and includes more than 100 functions which range from background stripping and pattern generation to Search/Match. A policy of "Open Access" means that all data is stored in ASCII files. This means data can be readily investigated and adapted to and from other XRD data analysis software, including some excellent public domain programs. In addition, TRACES provides close integration with ICDD PDF-1, PDF-2 and PDF-4 data bases.



122D Upgrade fitted to Siemens D500 Diffractometer