

## **Upgrade Reconstruction of Rigaku D/Max Series X-Ray Diffractometer**

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The principle of industrial controlling was adopted in this project. General interface-hardware plate and corresponding software had been designed for Rigaku D/max series X-ray diffractometer. It's successful to replace former outdate CASIO computer system and controlling table with compatible IBM-PC. A new microcomputer controlled system for X-ray diffractometer had been built.

The New system, controlling rotation of goniometer and data collecting, is precise, accurate and reliable. Either of all functions, precision and resolving power of former instrument are kept, or function of automatic calibration optical zero position is added in new system. Therefore, the functions such as graphic and data process are stronger and more convenient. Some new functions can be expended easily according to needs of users.

At meantime, this system is applicable to any X-ray diffractometer drive by step motor. Operation system is MS-Windows'95.