

Three-Dimensional Reconfigurable Machining System

Technology Overview

- This technology has been made in an effort to provide a 3D reconfigurable machining system having advantage of three-dimensionally machining a work piece in a convenient manner with a structure enabling the smooth rotation of a pivoting frame, undergoing less change in shape at the time of assembly, and having a main spindle that is reconfigurable in upper/lower/left/right/forward/backward directions.

Core Technologies

- Design & analysis technology for parallel mechanism
- Control Technology for multi degrees of freedom driving mechanism
- Ultra-precision coordinate measuring technology
- Machining and measuring tool technology

Application Area and Advantages

- Arch type parallel mechanism - High rigidity
- Multi degrees of freedom driving mechanism - High flexibility
- Ultra-precision machining area
- Precision medical scanning and surgical area

Accomplishments

- International patents (US, Japan, Swiss, Germany, France, Italy)
- A large number of international conferences and published papers

