SUPPORT SOFTWARE

A number of software features are available that make the robot easier to use by having readily available access to the robot system.

Programming tool **PC-based Teaching Tool**

- **Standard**
  - Software for robot setting, programming and debugging.
  - User can manage setting and program files based on the project.
  - Exclusive editor for robot language.
  - User can easily manage and input signal, position and parameter.
  - User can control the robot without teach pendant.

**User task functions**

- **Standard**
  - Possible to program processes in parallel with robot operations.

**Application example**

- Time consuming calculations and robot operations are processed in parallel to reduce cycle times.
- Various statuses are shown on the screen on the teach pendant.

**Graphic User Interface Flex-GUI**

- **Options**
  - Customizable teach pendant screen menu.
  - Works as a system operation console which can control peripheral devices.

**Offline programming tools Robot simulator**

- **Options**
  - Excellent for initial studies for installing robots.
  - Can be used as an operation instruction tool.

**FD on Desk Regular (option)**

- Offline programming.
- Working envelope & layout considerations.
- Cycle time simulation.
- PLC programming editing.

**FD on Desk Pro (option)**

- Create programs from CAD.
- Multiple control units supported.

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**Robot Monitoring Unit RMU**

- **Options**
  - Safety control unit monitors robot conditions (position and speed).
  - Possible to reduce costs and space.
  - Facilities are safer because the positions and speeds of robots are monitored.
  - Limit working envelope of robot.
  - Minimize size of safety fences.

- **Working envelope of robot and safety fence**

  - Working envelope of robot with limits set using the robot monitoring unit.
  - Safety guard fence when working envelope limits set using the robot monitoring unit.
  - Conventional safety guard fence when robot monitoring unit is not used.

**Supports a variety of fieldbuses**

- **Options**
  - DeviceNet (master and slave).
  - EtherNet/IP (master and slave).
  - EtherCAT (slave).
  - CC-Link (master and slave).
  - PROFIBUS (master and slave).
  - PROFINET (slave).

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