Human hands teach motions and techniques by moving the end effector. Accumulated know-how is digitized through direct and intuitive teaching.

Experience "Direct Teaching" of Proficient Skills
Soft and firm — Parallel Link Robot for assembly process innovation

Flexible posture control for delicate work
Firm support of productivity enhancement and cost reduction

**Major applications**

- **Parts insertion**
- **Sheet application**
- **Assembly**
- **Coating application**
- **Wiring**
- **Soldering**

**Sheet application using spatulas**
- The robot automatically folds a sheet along the workpiece contour and applies it using four spatulas.
- All processes for folding and applying the sheet can be taught by direct teaching.

**Example 1**

**CPU transfer, positioning, and removal**
- The robot automatically transfers, positions, and removes CPUs using a CPU nozzle and a holder opening/closing bar.
- The holder opening/closing operations are taught by direct teaching.

**Example 2**

**FPC board insertion into a connector**
- A camera recognizes the FPC board position, and a special chuck holds both ends of the board.
- The held board is slid and inserted into a connector and then locked.
- The insertion and locking operations are taught by direct teaching.

**Example 3**

**Label application**
- The label nozzle picks up a label and removes it from the liner from one end to the other.
- The nozzle applies the label to a workpiece, and presses it to prevent removal.
- The removal and pressing operations are taught by direct teaching.

**Example 4**

**Optional functions**

- **Palletizing function**
  - A position in a grid pattern can be easily specified.
  - Up to 127 divisions can be set for each axis.

- **Direct teaching offset function**
  - Offset playbacks of direct teaching are available.
  - Offset playbacks are available in the translation directions (X, Y, and Z) and the directions of rotation around the robot hand (θX, θY, and θZ).

- **Multi-tool function and special end effector**
  - Multiple operations can be performed without tool change work.
  - Multiple tools can be attached to the special end effector.
  - Coordinate system switching: Cartesian system/Tool system
  - Maximum tool coordinate systems: 64

- **3D recognition correction function**
  - Offset operations in relation to the teaching coordinates are available in the translation directions (X, Y, and Z) and the directions of rotation around the robot hand (θX, θY, and θZ).