



Application Kit:
Assembly

Automates repetitive part fitting, pressing, and alignment tasks in assembly operations. Enhances throughput, improves quality consistency, and reduces the need for manual labor in high-mix, low-volume production.

IDEAL USE CASES:

- Component assembly, repetitive tasks
- Custom assembly workflows
- Screwdriving & fastening
- Inspection & quality control
- Press fit & insertion

WHAT YOU NEED:

- Cobot Arm:** 6-axis collaborative robot with 5–10 kg payload and ± 0.03 mm repeatability
- Multi-Purpose Gripper:** Adaptive 2-finger or 3-finger gripper with adjustable stroke and force control
- Part Feeder or Tray System:** Manual tray, bowl feeder, or smart bin system (optional based on part type)
- Workstation Fixture:** Custom jig or clamp system to hold components in alignment
- Sensor or Vision Add-on:** (Optional) Part presence sensor or vision system for alignment verification
- Force Feedback Integration:** (Optional) Force monitoring to prevent over-pressing or part damage
- End-of-Arm Press Tool:** (Optional) Linear actuator tool for press-fit operations
- Programming Software:** Pre-built assembly routines for pick, place, align, and press steps
- Training & Setup:** 2-day on-site installation + 4 hours of remote programming support

SPECIFICATIONS:

- Payload:** 5-10kg
- Cycle Time:** Application-dependent (typically 15–60 seconds per part)
- Repeatability:** ± 0.03 mm
- Reach:** 1000–1300 mm
- Power Requirements:** 110–240V AC (compressed air if using pneumatic tools)

