



## Application Kit: **Screwdriving**

**Automates the repetitive task of inserting and tightening screws, bolts, or small fasteners with precision torque control. Ideal for increasing assembly speed, reducing repetitive strain injuries, and improving fastener consistency.**

### IDEAL USE CASES:

- Electronics and electrical enclosure assembly
- Automotive and component subassembly
- Small appliance or panel fabrication
- Medical device or instrument assembly

### WHAT YOU NEED:

**Cobot Arm:** 6-axis collaborative robot with 3–6 kg payload (depending on EOAT weight)

**Electric Screwdriver Module:** Integrated torque-controlled driver with robot mount

**Screw Feeder or Presenter:** Automatic screw dispenser or vibratory bowl for consistent supply

**Programming Software:** Intuitive weld path programming interface with arc start/stop templates

**Welding Table & Fixture:** Heat-resistant table with clamping system or custom part fixture

**Mounting Bracket/EOAT Adapter:** Custom bracket for cobot wrist tool mounting

**Torque Monitoring Software:** Real-time torque feedback and verification system

**Part Fixture or Jig:** Stationary setup to hold part during screw insertion

**Safety Add-On:** Area scanner or cage (for faster movement or exposed bits)

**Training & Setup:** 1 day on-site commissioning + 4 hours remote programming support

### SPECIFICATIONS:

**Screw Sizes:** M1–M6 (larger on request)

**Torque Range:** 0.5–10 Nm (model dependent)

**Cycle Time:** ~2–5 seconds per screw  
(based on screw length and travel distance)

**Reach:** 850–1100 mm

**Repeatability:** ±0.03 mm

**Power Requirements:** 110–240V AC

### PACKAGING OPTIONS:

**Standard:** Cobot, torque driver, basic screw feeder, simple fixture

**Plus:** Adds multi-size bit changer, torque verification module

**Premium:** Includes vision alignment system, high-capacity screw feeder, safety scanner

