



Application Kit: **Sanding Deburring**

Automates the sanding, polishing, grinding, or deburring of parts with consistent force and motion. This kit improves surface finish quality, reduces operator fatigue, and minimizes dust exposure for workers.

IDEAL USE CASES:

- Metal part edge deburring
- Plastic or composite surface smoothing
- Wood sanding and polishing
- Finishing cast or machined parts before painting or coating

WHAT YOU NEED:

Cobot Arm: 6-axis collaborative robot with medium to high payload (7–10 kg recommended)

Sanding/Polishing Tool: Electric or pneumatic orbital sander, grinder, or polishing head

Force-Torque Sensor: Integrated wrist sensor for precise contact pressure control

Dust Extraction System: Portable dust collector or extraction hose interface: Workpiece Fixture: Clamping jig or adjustable part holder for secure positioning

Motion Programming Software: Path planning and force-feedback integration software

Tool Mounting Kit: Mount for sanding tool and cable/hose routing system

Safety Add-on (Optional): Area scanner or workspace curtain (especially with high-RPM tools)

Training & Setup: 2-day on-site setup and sanding process tuning + 4 hours remote support

SPECIFICATIONS:

Tool Types Supported: Orbital sanders, angle grinders, flap discs, polishing wheels

Force Control Range: 5–50 N (with active sensor)

Cycle Time: Application-dependent (generally 15–60 seconds per part)

Repeatability: ± 0.05 mm

Reach: 1000–1300 mm

Power Requirements: 110–240V AC (compressed air if using pneumatic tools)

PACKAGING OPTIONS:

Standard: Cobot, sanding tool, basic jig, and cable routing setup

Plus: Adds force-torque sensor and motion programming interface

Premium: Includes dust extraction, enclosure curtain, and quick-change tool mount

