



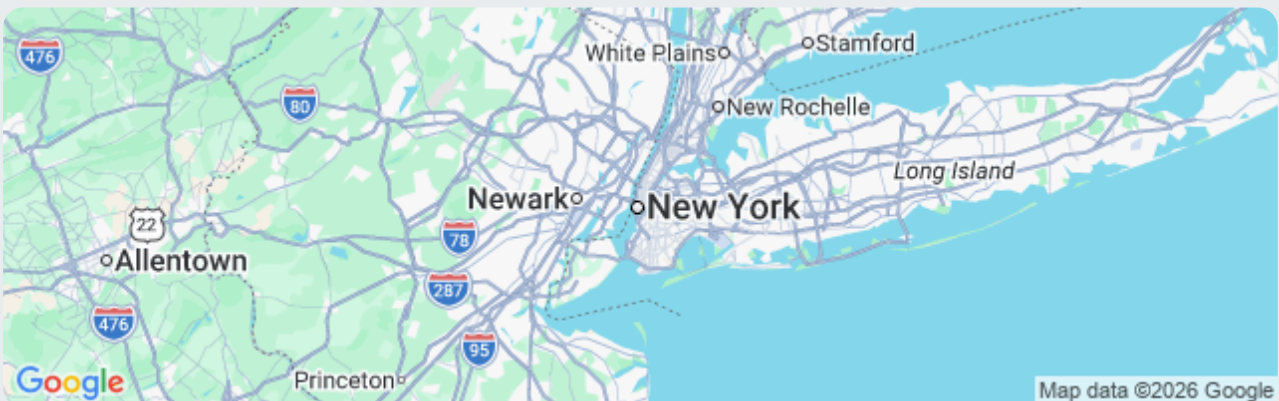
Cobot (Collaborative Robot) Workflow & Safety Integration Checklist 2026

Pre-Installation & Site Readiness

Verifying workspace dimensions, power supply requirements, and floor surface stability for safe cobot placement.

Inspection Date

Production Line/Cell ID

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Power Supply Compatibility Verified

- ☐ Yes
- ☐ No
- ☐ N/A

Required Site Preparation Completed

- ☐ Floor leveling and cleaning
- ☐ Electrical/Pneumatic drop installation
- ☐ Workstation clearance/Demarcation
- ☐ Safety signage installed

Site Constraints & Observations

Write something...

Site Manager Approval

Safety Sensor & Guarding Verification

Testing light curtains, area scanners, pressure mats, and emergency stop (E-Stop) functionality within the collaborative zone.

Safety Sensors Active in Workspace

- ☐ Light Curtains
- ☐ Laser Area Scanners
- ☐ Pressure Mats
- ☐ Safety Mats
- ☐ Presence Sensing Devices

Emergency Stop (E-Stop) Functionality Status

- ☐ Fully Operational
- ☐ Operational with Minor Issue
- ☐ Non-Operational / Critical Failure

Safety Guarding Integrity Notes

Write something...

Last Sensor Calibration Date

Enter date...

Safety Sensor Certification Documents

 Upload File

Safety Officer Verification

Programming & Task Logic Validation

Reviewing motion paths, speed limits, and end-effector (gripper) programming to ensure collision-free operations.

Programming Mode Verified

- ☐ Lead-through Programming
- ☐ Offline Programming (OLP)
- ☐ Script-based Programming

Safety Logic Checks Completed

- ☐ Collision Detection Thresholds Set
- ☐ Speed-to-Separation Monitoring Configured
- ☐ Emergency Stop Logic Validated
- ☐ Software Limit Switches Active

Configured Maximum End-Effector Speed (mm/s)

Enter a number...

Path Deviation or Logic Error Notes

Write something...

Logic Validation Completion Date

Enter date...

Lead Programmer Approval

Human-Robot Interaction (HRI) Assessment

Evaluating the safety of shared workspaces, ensuring human operators can interact with the cobot without risk of impact or entrapment.

Personnel Safety Measures Implemented

- ☐ Physical Safety Barriers/Fencing
- ☐ Visual Warning Lights (Stack Lights)
- ☐ Audible Alarms/Sirens
- ☐ Floor Markings/Demarcation Lines
- ☐ Proximity Sensors/Laser Scanners

Interaction Zone Clearance Status

- ☐ Adequate - No obstruction detected
- ☐ Restricted - Requires temporary barriers
- ☐ Unsafe - Immediate intervention required

Identified Human-Robot Collision Risks

Write something...

Minimum Safe Distance (mm)

Enter a number...

Safety Officer Verification

Force & Torque Limiting Verification

Testing the cobot's sensitivity to external forces to ensure it stops immediately upon detecting an unexpected contact.

Force Limit Threshold Status

- ☐ Within Safety Tolerance
- ☐ Exceeds Safety Threshold
- ☐ Calibration Required

Measured Impact Force (Newtons)

Enter a number...

Sensors Tested During Verification

- ☐ Joint Torque Sensors
- ☐ Skin/Padding Sensors
- ☐ External Force Sensors
- ☐ Collision Detection Software

Last Calibration Date

Enter date...

Force-Torque Test Report

 Upload File

Safety Engineer Approval

End-Effector & Tooling Safety

Inspecting grippers, suction cups, or welding tools for sharp edges, pinch points, and secure attachment to the robotic arm.

End-Effector Type

- ☐ Pneumatic Gripper
- ☐ Vacuum/Suction Cup
- ☐ Mechanical Clamp
- ☐ Magnetic Tooling
- ☐ Specialized Sensor/Probe

Tooling Integrity Status

- ☐ Pass - No visible damage
- ☐ Fail - Requires immediate repair
- ☐ N/A - Not applicable to this tool

Identified Pinch Points or Sharp Edges

Write something...

Description of Observed Defects or Risk Areas

Write something...

Photo Documentation of Tooling Attachment



Upload File

Safety Inspector Verification

Workflow Integration & Cycle Time Audit

Analyzing the seamless transition of parts between manual stations and the cobot to prevent bottlenecks or conveyor jams.

Cobot Station ID/Name

Write something...

Target Cycle Time (Seconds)

Enter a number...

Actual Observed Cycle Time (Seconds)

Enter a number...

Bottleneck Identification

- ☐ None - Workflow is smooth
- ☐ Human-Robot Handover Delay
- ☐ Part Loading/Unloading Delay
- ☐ Sensor/Detection Latency
- ☐ Equipment Downtime

Integration Obstacles Observed

- ☐ Inconsistent Part Positioning
- ☐ Communication Lag (PLC/IoT)
- ☐ Excessive Motion/Path Overlap
- ☐ Inadequate Tooling Speed

Workflow Improvement Recommendations

Write something...

Auditor Approval

Operator Training & Competency Check

Confirming all personnel are trained on emergency procedures, manual guidance modes, and daily restart protocols.

Completed Training Modules

- ☐ Emergency Stop & Manual Override Procedures
- ☐ Cobot Path Programming & Teaching
- ☐ Safety Sensor & Scanner Calibration
- ☐ End-Effector Maintenance & Tool Changing
- ☐ Incident Reporting & Near-Miss Documentation

Training Completion Date

Enter date...

Operator Name

Write something...

Training Certificate or Competency Record

 Upload File

Supervisor Verification Signature

Training Gaps or Additional Notes

Write something...

Maintenance & Software Compliance

Checking firmware versions, sensor calibration schedules, and regular lubrication requirements for robotic joints.

Last Firmware Update Date

Enter date...

Software Version Status

- ☐ Up to Date
- ☐ Update Required
- ☐ Pending Manufacturer Release

Completed Maintenance Tasks

- ☐ Joint Lubrication
- ☐ Sensor Calibration
- ☐ Cable Inspection
- ☐ Battery/Power Supply Check

Maintenance Log Documentation

 Upload File

Technician Verification

Post-Deployment Performance Review

Assessing overall productivity gains, error rate reductions, and adherence to 2026 safety standards after initial run-in period.

Review Completion Date

Enter date...

Post-Deployment Cycle Time (Seconds)

Enter a number...

Defect Rate Percentage (%)

Enter a number...

Overall Deployment Success Rating

- ☐ Excellent
- ☐ Satisfactory
- ☐ Needs Improvement
- ☐ Critical Issues Identified

Discrepancies Between Planned vs. Actual Performance

Write something...

Production Manager Approval

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🏁 Finish

🔧 Generate Sample Report