Robotic Simulation





Overview

Robotic simulation software is an efficient way to validate and optimize robot systems – including application concepts, end-of-arm tooling, parts, and equipment.

Simulations are performed in manufacturer specific software based on customer preferred robot type – Fanuc, Yaskawa (Motoman), ABB, KUKA, Omron, etc.

Software Capabilities & Benefits

Application Validation

- CAD models of relevant tooling, equipment or parts can be imported into the simulation and connected to the robot for realistic simulation of application.
- Support validation of feasibility and cycle time for a concepted solution to the specified application.
- Facilitate accurate project quoting through proper assessment of robot requirements (reach, payload, features, etc.) as well as simulation recording for inclusion as proof of concept.

Operation and Project Efficiency

- Assess ability of designed equipment to meet application requirements and validate there are no design oversights prior to manufacturing.
- Identify the most efficient system configurations and optimize performance before physical implementation of the project.
- Improve equipment implementation times through offline robot programming and potential validation before the cell is assembled/installed.
- Meet and accelerate project timelines by mitigating risk during the planning process.

Continuous Improvement

- Proactively investigate and identify potential areas of improvement of an existing machine while the system is running.
- Reduce risk of unforeseen costly future errors, downtimes, and issues, all while improving overall performance.

