

Innovative all-in-one CAD/CAM/OLP for robots

SprutCAM X Robot is an easy to learn and use offline robot programming software that allows you to program complex robot applications without disrupting the manufacturing process, the need for an on-site robot programming expert and without purchasing a separate CAM system.


SprutCAM X Robot supports various brands and configurations of industrial robots, allowing the user to work in a single interface for programming and simulation, and output code for use in real robotic cell application.

**Experience the powerful all-in-one software
suite for complex and creative robotics tasks**


Streamlined robot programming workflow


Go beyond traditional robotics simulation software. SprutCAM X is a one-stop software package that includes:


1  **CAD**
Design with integrated CAD or import 3D models

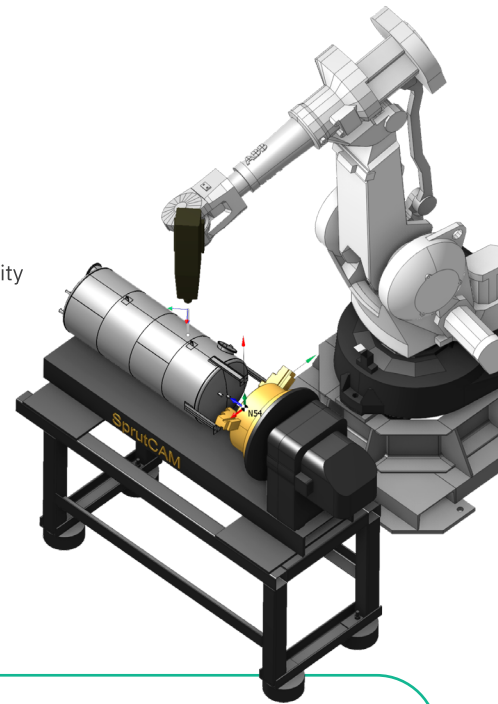
2  **CAM**
Generate toolpath

3  **OLP**
Manage robot kinematics

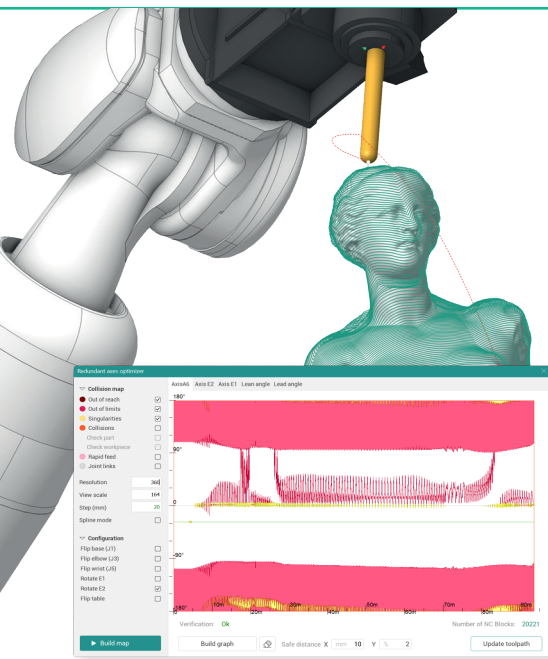
4  **Simulation with Digital Twin**
Simulate a robotic cell of any complexity with high resolution and smoothness

5  **Post-processing**
Generic and tailor-made post processors

6  **Pre-Launch Verification**
Leverage the power of G-code verification



SprutCAM X Robot calculates native 6-axis toolpaths. No additional adjustments required to accommodate the robot's 6-axis kinematics.



Generate toolpath

Generate optimal toolpaths coming from the advanced CAM software, SprutCAM X, customized for robots. As well as robot-specific toolpaths.

SprutCAM X Robot offers an extensive range of toolpath strategies for milling, cutting, welding, additive, polishing, painting, stone roughing, etc.

It supports simultaneous control of a robot and an unlimited number of linear and rotary positioning axes.

Manage robot kinematics

Handle singularities, collisions, reach zone limits and control redundant axes movements with dedicated tools.

Robot axis map

Gain full control over singularities, collisions, reach zone limits, and redundant degree of freedom provided by 6th axis using a dedicated and powerful tool: the robot axis map.

Utilizing rotary tables, positioners, and rails

Leverage the advanced capabilities of SprutCAM X Robot to define the specific behavior of optional equipment with special features.

Simulate with digital twin

Experience full robotic cell simulation with high resolution and smoothness.

Complete robot cell simulation:

SprutCAM X Robot offers advanced simulation capabilities that include the full robotic cell simulation with the utilization of imported geometry such as robots, tables, rails, end effectors, fences, fixtures, and tool magazines.

Material removal, additive, painting:

SprutCAM X Robot provides dedicated simulation modes for material removal, additive processes, and painting, enabling precise result control.

Postprocess

Generic and tailor-made post processors.

SprutCAM X Robot proudly comes with out-of-the-box post processors for leading robot manufacturers such as Kuka, Fanuc, Motoman, ABB, Staubli, Nachi and many more.

In partnership with our extensive dealer network, we're committed to providing a seamless, turn-key experience for every customer. That's why we offer customized, tailor-made post processors designed to meet your unique needs and requirements. Trust SprutCAM X Robot to deliver a streamlined solution that maximizes efficiency and performance.

Verify G-code

Leverage the power of G-code verification.

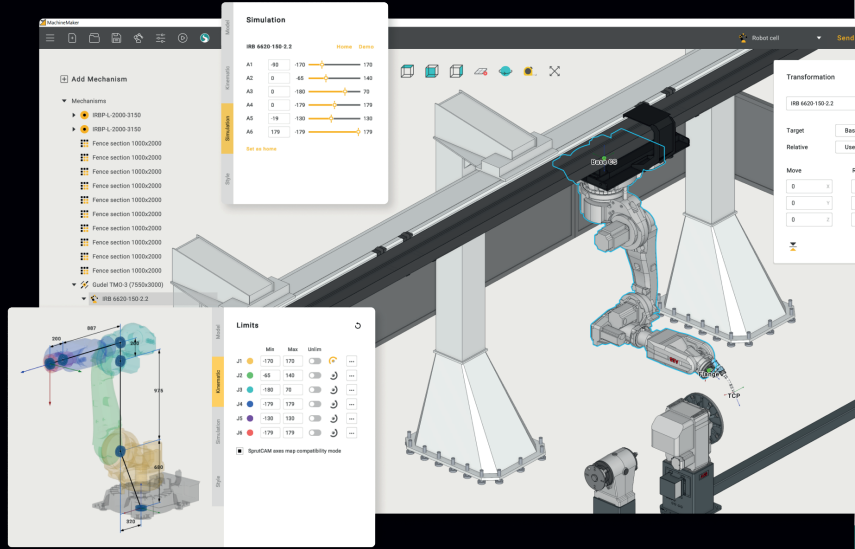
Experience unparalleled peace of mind with our Enhanced Pre-Launch Verification Feature. This cutting-edge technology enables users to thoroughly examine and validate postprocessed control programs prior to launch. As the crucial final step in our safety protocol, this feature harnesses the power of digital twin simulation to ensure your control program is optimized, reliable, and ready for deployment. Don't leave anything to chance – let our advanced verification process safeguard your success.

MachineMaker. Zero code digital twin builder

SprutCAM X Robot allows manufacturers and integrators to create an accurate real-world cell with equipment and production components in a virtual environment, as well as simulate all robot functions on the screen.

The quality of simulation and detailing of digital twins in SprutCAM X Robot is second to none.

A wide range of certified post processors for most makes and models of robots guarantee error-free code. SprutCAM X Robot library of kinematic diagrams supports the largest selection of industrial robot brands. And with the Machine Maker app, you can quickly create an accurate kinematic model of any robotic cell.



Robot library

SprutCAM X provides you with valuable data resources such as online libraries of digital twins of CNC machines and robots.

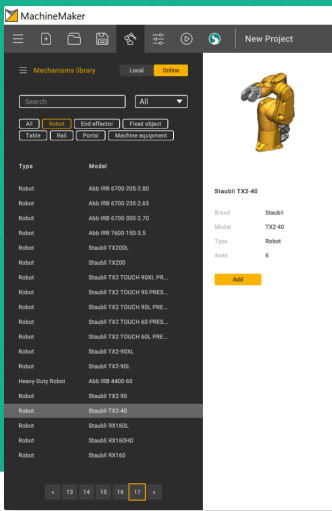
Our libraries contain hundreds of high-quality 3D models of CNC machines and robots from top brands such as ABB, Comau, DMG MORI, Doosan, Epson, Fanuc, Hiwin, Hyundai, HAAS, Kawasaki, Kuka, Mitsubishi, Motoman, Nachi, Panasonic, Staubli, Toshiba, Universal Robots, and many more.

We constantly update the Digital Twins library.

Robot Calibration mobile app

Perform TCP calibration using the Robot Calibration mobile app and transfer the TCP coordinates to MachineMaker using a QR code.

The app is available in AppStore and Google Play.



Applications

Take advantage of offline robot programming. Go beyond traditional simple applications such as pick-and-place. Discover new possibilities with enhanced milling, multi-axis cutting, additive and hybrid manufacturing technologies.

Milling
3–5D milling with redundant axes support

Cutting
Multi-axis cutting with precise tool vector control

Additive
3–5D cladding with advanced layer thickness control

Welding
Simple easy-to-use solution for welding programming

Sculpture/Stone
Stone roughing, disk tool, advanced 5D finishing for mesh models

Pick and place
Collision-free automatic pick-and-place

Spray painting
Simulate and test your painting on your PC

Polishing
Tool-to-part and part-to-tool supported

SprutCAM X Platform

One platform for both worlds

With a single technology solution, programming both CNC machines and industrial robots becomes effortless.

Efficiency and Safety

SprutCAM X optimizes toolpaths in real-time based on the current state of the material (stock), reducing unnecessary movements and cutting time for improved efficiency.

Technological independence

Our platform does not rely on external CAD/CAM modules or algorithms, everything is proprietary, including the CAD data translators.

Phenomenal interactivity

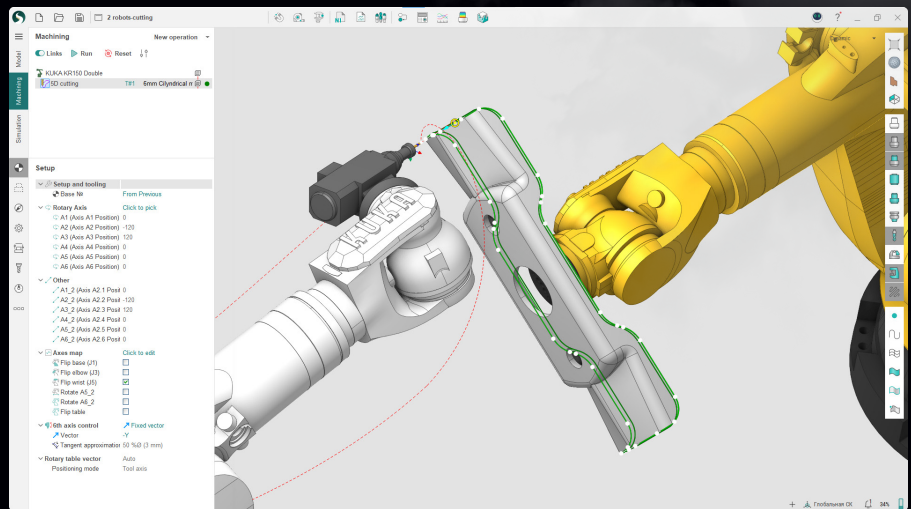
Easily adjust the number of passes, direction, or depth, and change the machining strategy on the fly using the familiar drag-and-drop technology.

Innovations for your manufacturing

We are pioneers in the field of Machine-Aware programming, a technology that considers the movement capabilities and limitations of machines and robots at the initial programming stage.

Unique user experience and interface

We strive to create a workflow that is intuitive and effortless for users. UI/UX designers play a crucial role in the development of SprutCAM X software, as they are responsible for creating intuitive and user-friendly interfaces for the software.



Why SprutCAM X Robot

- Simplify complex robot programming
- Automatically detect and avoid errors
- Program robot systems with complex configurations
- Validate robotic processes through simulation
- Work with multiple robot brands on a single platform
- Streamline your robotic manufacturing processes

What we make

Our flagship product, SprutCAM X, is a widely used CAD/CAM system for programming both CNC machines and industrial robots across various industries and countries. The system's unique feature is a single interface that creates a natural environment for engineers, making complex technological tasks more manageable.

We also offer an extensive network of resellers who provide swift technical support worldwide. Our customers range from small shops with a dozen CNC machines to large international corporations with fully automated production. We strive to provide all of them with the best digital tools at an affordable price.

Who we are

With a deep understanding of industry needs, SprutCAM Tech develops powerful software for programming CNC machines and industrial robots, enabling customers to seamlessly transition from CAD to finished parts with the fastest turnaround time in the industry. With 30 years of experience, we design a user-friendly interface that simplifies and accelerates shop floor tasks. Inspired by nature, our team creates a natural CAD/CAM environment for the next generation of makers.