Robotics

ABB LaserCut K[™] Robotic Laser Processing Solution

LaserCut K[™] is a standardized production solution for laser cutting applications. ABB robots set the standard for robot path performance so it is no surprise that ABB is a leader in robotic laser processing applications. Flexible, configurable and compact, LaserCut K[™] is delivered production ready from ABB.



Flexibility, accuracy

As the use of ultra high strength steel, tubular steel and hydro formed parts becomes more mainstream, traditional laser machines may not be the best solution. Because laser machining centers are large, expensive and offer limited flexibility. The answer?

LaserCut K^{TM} – a flexible, configurable and precise robotic laser solution to meet your cutting needs.

Offline programming & simulation

Integration using RobotStudio[™] also means fast, accurate off-line programming for laser processing applications. Using predefined templates for standard shapes such as circles, rectangles, hexagons, slots and even free-forms saves the programmer hours of complicated work. These shapes can easily be relocated by shifting just a single frame.

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Compact and configurable

Its self-contained modular design—which utilizes compact, pre-engineered cells in a variety of configurations—allows for easy cell transport, minimum set up time, and maximum flexibility in a limited amount of floor space.

Experience

And with almost 200,000 successful robot installations worldwide, you can trust ABB to deliver end to end performance—from planning and installation, to optimization and ongoing support. That's why we're already the choice of many of today's leading manufacturers

Learn about all the ways LaserCut KTM by ABB can help you reduce costs, increase output, improve quality, and give you advantages over your competition by contacting us today.

> Power and productivity for a better world™



Exclusive ABB Features

- Laser cutting software
- Servo Friction Tuning compensation
- ILC Iterative Learning Control
- Absolute Accuracy Calibrated Robot
- Laser BullsEye, TCP Calibration Device
- Advanced Cell Error Handling
- Interactive Graphical Cell User Interface
- Production Manager Software
- Production Monitoring
- Navigator (Integrated Robot CMM)
- Cell/Tool Calibration Software
- Virtual LaserCut K[™] for off-line programming

State of the art software packages

ABB has introduced two new software tools designed to make robotic laser cutting more accurate, more flexible and easier to use. The software, specifically designed for laser cutting, allows users to easily generate & modify cutting programs based on part geometry & CAD models. It also supports simulation and optimization of cutting programs, set up of interface signals, and management of cutting process data.



The Power of QuickMove and TrueMove

ABB's innovative software, rigid arm design, friction tuning compensation and Iterative Learning Control provides the most accurate path creation of any robot in the industry. It has the fastest acceleration and deceleration which translates to shorter cycle times and increased production. ABB's unique QucikMove and TrueMove path planning software enables the robot to meet the demanding path following requirements that are typical with laser applications.











IRB Robot and Controller

ABB offers a wide range of robot arms with different handling capacities and reach. The arm design provides outstanding stiffness maintaining the required path accuracy of the laser head and avoid resonance and vibrations affecting the quality of the laser cutting process.

IRBP K Positioner

This positioner features a twin station solution where the robot works on one side and the operator loads and unloads on the other side. The IRBP K, which comes in six variants, is designed to handle workpieces including fixtures of a weight up to 1000kg.

LaserCut K[™] TCP Bullseye®

Provides the user with a fully automated tool center point calibration giving the highest possible level of utilization, quality and productivity from your robot station. Enables fully automatic TCP checks and updates, reducing down time of the cell to almost zero.

Graphical operator interface

It is easy and efficient to program even complex paths and shapes using the sophisticated Cutting PowerPac add-in. Users can create & test advanced laser cutting programs in an office environment, which maximizes production uptime and resource efficiency.

RobotWare Cutting

This is a robot controller add-in for tuning, calibration, equipment integration and program generation of complex paths and shapes. RobotWare Cutting is compatible with most common laser cutting equipment brands and its intuitive graphical user interface makes it easy to use. You can also use the interface to switch automatically, and rapidly, between different product series, opening up the possibility for fully flexible production, where even short series manufacturing can be made profitable.

Power and productivity for a better world™

