ABB has over 25 years’ experience in robot programming innovation, precise motion control and picking applications — and that experience has been brought together in the Picking PowerPac, an add-on for RobotStudio® and PickMaster 3 software.

As an industrial benchmark for more than 13 years, ABB’s PickMaster software is already the market leader for easy configuration of complicated robotic picking and packing systems. The Picking PowerPac goes one step further and condenses this advanced application experience into a comprehensive and truly easy-to-use compliment to PickMaster 3 that will boost the performance of picking lines with thorough optimization in the virtual world before the line gets built in the real world.

By adding the Picking PowerPac to PickMaster 3 and RobotStudio, both programming and conceptualization of picking systems is simplified. With the Picking PowerPac, risks in designing picking lines — such as the variations in the product inflow — can be tested and minimized, and the complicated task of designing a picking system becomes accessible to more customers than ever. The software even allows for the improvement of existing lines that were configured using Pickmaster 3 by recording current product flow with cameras and then feeding it into the Picking PowerPac to validate and optimize the system.

Based on RobotStudio—the industry leading PC-based robot programming tool

RobotStudio is the world’s most popular computer-based robotic programming tool, enabling the creation of complete robotic systems on your office computer within a 3D, virtual environment that runs exact simulated copies of the software that will run on the real robots and system machinery. In this way, RobotStudio can ensure that the virtual robots are simulated exactly as they will behave in the real world — meaning your programs are accurate, proven, tested and ready to run in production before any costly mistakes are made on the factory floor.
Picking PowerPac

Fast and intuitive programming
The Picking PowerPac combines the precision, power and reliability found in all of ABB Robotics’ software with the ease-of-use and simulation capabilities of ABB’s RobotStudio. The add-on allows both novice and experienced users alike to easily design picking installations and create simulations of the systems that will eventually run in the real world. Within the Picking PowerPac, robots and other system elements are “configured” rather than programmed, saving up to 80% in programming time when compared to traditional methods. At a time when trained and experienced robot programmers are hard to find, the Picking PowerPac addresses a growing need for a simple programming method for complicated picking systems.

From computer to production with ease
With the Picking PowerPac users do not have to write a single line of code. Instead they select product and container types, set simple parameters, such as product sizes, container sizes, and patterns, then the software creates the program ready to simulate, test and fine tune—thereby saving valuable time and proving your solution before real-world mistakes are made. Using the Picking PowerPac during a picking system’s design phase enables you to easily resolve big picture questions such as where to position the robots for maximum output.

In the virtual world you simply move, add or remove robots and move conveyors around until all positions are reachable, optimized and verified within the picking cell. Programs can then be tuned for speed and process efficiency, and cycle times verified and optimized before system build-out or start-of-production.

Secure and maximize your investment
The Picking PowerPac also allows you to export movie clips of the simulated picking cell in just minutes and is therefore an indispensable tool for sharing your ideas with others. When your managers or customers are able to see simulations of your picking solutions in real time and on the spot—with verifiable cycle times—your success rates rise dramatically. PC-based programming and simulation with the Picking PowerPac is the easiest and fastest way to maximize the return on investment for your robotic picking system designs.

Screen recording
Use the screen recorder to make a recording of your work in RobotStudio. This is useful for demonstration, sales and training purposes.

RAPID code editor
Should you need to edit the underlying RAPID program code itself, RobotStudio supports syntax coloring, search and replace, bracket matching, and many more powerful hard coding features.

Highlighted features and functionality
- Camera distribution to multiple robots
- Progressive picking and case filling (ATC)
- Process load balancing of products between robots
- The PowerPac contains many other features for configuration of a robot cell. The features are the same as the ones used in PickMaster 3

Increase uptime and improve productivity
It’s not just new installations that benefit from the ease-of-use of the Picking PowerPac. It is also easy to introduce new products to existing lines without stopping production. New picking routines can be created and process performance parameters predicted and verified in the virtual world without disturbing existing production equipment.