



By combining Motion, Logic and Robotics in IndraMotion for Packaging, the system solution with multi-kinematics capability, Rexroth makes it easier to integrate robots in fully automatic plants. The control system operates up to 16 kinematic chains, each with a maximum of 8 interpolating axes for positioning, orientation and belt drive. In this way the Italian Cama Group greatly reduces the automation effort for integrating a variety of its own robot families in secondary packing plants.

Cama uses the multi-kinematics capability of IndraMotion for Packaging for the efficient and speedy integration of one or more robots. The control system covers all plant layouts from the stand-alone machine to the fully automatic packing line, thus accelerating the project planning and commissioning.

Both the newly developed MN-530 2-axis robot and the high-end Triaflex delta robot with four controlled axes are integrated by Cama without an additional robot control system. The new, cost-effective MN-530 robot uses an up to 600 mm wide pick-up tool to move loads of up to 15 kg at a product-dependent rate of 65 cycles per minute. The Italian manufacturer places the compact MN robot alongside the machine frame, thus saving the high expense of a ceiling-fitted arrangement.



The machine control cabinet accommodates the entire power electronics for all Cama robot families in minimum space. This reduces not only the amount of installation space required but also the amount of cabling work. IndraWorks, the standardized engineering software from Rexroth, makes it easier for Cama to program its own kinematic chains. SERCOS III, the internationally standardized Ethernet-based real-time system for control communication, provides greater freedom where complex plants are concerned. The Cama Group can interlink and synchronize any number of axes using the real-time cross-communication between several controller-based Rexroth control systems.

The system solution enables the simple integration of camera systems and the straightforward retrofitting of robots in existing plants.