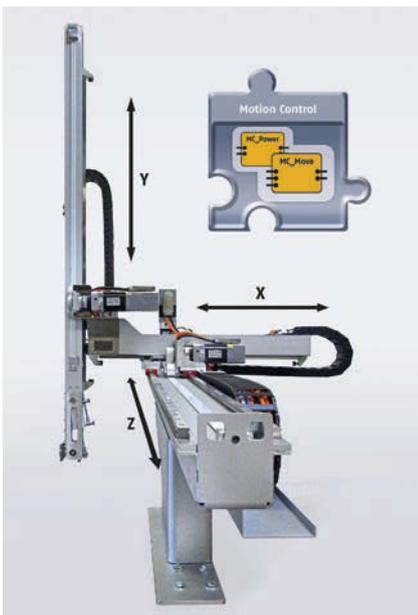




EASILY GETTING FROM A TO B

The gripper gently picks up the yoghurt cup to drop it off accurately in the empty position next to its colleagues.

Almost every production requires handling – in this case it involves yoghurt cups, other times bottles or plastic parts from an injection molding machine. But the principle is always the same. The complete package from Baumüller makes possible to quickly integrate and easily operate a 3-axis handling system.



The software of the handling system consist entirely of software modules of the Baumüller software libraries.

A 3-axis robot is the perfect helper in front of and behind production machines. It passes raw components along for further processing or stacks finished components for transport. That's why this principle is used in innumerable industry sectors and machine builders as well as operators demand an easy and reliable solution.

With its complete package for handling systems, Baumüller's goal is to develop an easily usable and retrofittable solution that is suitable for all kinds of production machines. The entire system functions as in a modular kit. The

machine manufacturer receives a complete package that consists of: motors, converters, control hardware, software and visualization.

The great benefit: its simplicity! In its start-up as well as during the operation. The system offers intuitive operation, automatic check-ups and a helpful assistant function.

INTUITIVELY OPERATED

Even while they created the visualization, the developers focused on simplicity from the start – and this for all user groups, from the programmer to the machine operator. “We put ourselves into the roles of the various users,” says the developer Frank Kästner. “We know from experience that the technical employees are not the only ones who have to understand our visualization. In some cases, machine operators don’t have technical training and have to be satisfied with just a small introduction.” The Baumüller operators therefore took the word visualization literally and visually depicted the control paths in a clear and optically appealing design. And because everything has to work globally too these days, users can also monitor the machine on their tablets or smartphones.

OPTIMAL PATHS

The input of the operating paths and determination of tolerance and restricted areas was very easy with the clear visualization.

The multi-lingual user interface lets the user create individual series of steps in order to specify the removal position, the path, and the stacking position.

All axes can proceed freely and individual movements can be linked. This enables continuous motion sequences without jolts, which permit high speeds and at the same time won’t wear on the mechanics due to the reduction of negative influences such as vibrations. Thanks to the free programming in the space, the optimal paths can also be driven without delays or detours.

The user can find frequently used actions in the toolbox, which can then be accessed directly. There are also templates that simplify the introduction to the parameterization, especially in the beginning. The user can have a watchdog observe the individual steps so that the step sequence immediately stops in case of error and an error message is displayed. The system then verifies the consistency of the input data with an automatic check-up.

To avoid accidents, special software modules provide collision protection to prevent the grip arm from moving into the restricted area.

The integrated palletizing function is especially convenient. For each type of pallet, only the start position and then the screening and

dimensions of the pallets have to be entered. Then the system calculates the remaining stacking positions on its own. Even diagonally standing pallets can be loaded flawlessly and without great effort. Only the angle has to be specified, then the system adapts the stacking positions on its own. And if a problem does arise, the handling system has a practical alarm system and diagnostics. Conditions such as line breaks or drive errors are determined automatically.

These smart functions make the complete package a simple solution for the fast integration into various types of machines and a perfect one for integrated industry. The package covers everything, from the motor to the visualization. Taking all user groups into consideration already during the development made this into an intuitive system with automatic diagnostic and control functions, which saves time and money during the start-up, operation and servicing. ■



The sequence editor is the tool for editing each sequence individually.



The manual mode enables the user to move to positions within a three-dimensional space. A function particularly useful when service needed.