Test the Motion without Touching the Machine

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Designing and implementing a differentiated machine can be challenging, especially the motion portion. OEMs want optimum performance but don't want to spend a lot of time with trial-and-error testing. High-performance motion means tight tolerances and high speeds; errors in the motion application can result in machine or product damage. Ideally machine designers want to have the motion perfected before implementing it on the machine. One solution is a set-up of the actual hardware in a test environment. This can be time consuming and adds costs to development work. What if there is a better way?

Machine builders using <u>Kollmorgen Automation Suite</u>[™] have the advantage of a built-in simulator that lets them test both PLC and motion functionality. With Kollmorgen Automation Suite, engineers can:

- Gain a clear visual representation of the moving axes of the machine (as illustrated).
- Assign names to each axis and see the operating relationships between axes.
- Verify that an axis is running at the correct speed and in the correct direction.
- Verify synchronization between axes, including gear and cam relationships.
- Eliminate the need to set up physical hardware in a test environment or dedicate a machine just to test out the programming.
- Simulate axes of motion to eliminate the risk of product or machine damage due to a problem with the program.



Kollmorgen Automation Suite Simulator

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In addition to displaying simulated axes, Kollmorgen Automation Suite makes it possible to mix simulated and real axes. This allows a current machine design to be expanded using the real axes as they exist and simulating the axes to be added. The time, expense and potential risk of adding the actual hardware are removed until the developer has tested the solution and is ready for implementation.

Another time-consuming chore can be building a temporary human-machine interface (HMI) or setting up switches and displays to test out the system. Kollmorgen Automation Suite has a built-in control panel function that lets users simply and easily create pushbuttons, switches, meters, displays and other visual tools directly within the programming environment. With the control panel function illustrated below, OEMs no longer need to wire up components to verify program responses or build a temporary HMI to see how the system is working.

Both the simulator and control panel are standard features within Kollmorgen Automation Suite. As part of the development environment, there is nothing extra to purchase and no need to export special files or change programs. Save time and headaches by doing all the development and testing in one environment.



Kollmorgen Automation Suite Control Panel

ABOUT KOLLMORGEN

Kollmorgen is a leading provider of motion systems and components for machine builders around the globe, with over 60 years of motion control design and application expertise.

Through world-class knowledge in motion, industry-leading quality and deep expertise in linking and integrating standard and custom products, Kollmorgen delivers breakthrough solutions unmatched in performance, reliability and ease-of-use, giving machine builders an irrefutable marketplace advantage.

For more information visit <u>www.kollmorgen.com</u>, email <u>support@kollmorgen.com</u> or call 1-540-633-3545.