Because Motion Matters™

When Motion Matters – Kollmorgen Automation Suite™ Makes the Difference

Chris Radley, Senior Product Line Manager Kollmorgen 540-633-3545 <u>support@kollmorgen.com</u> www.kollmorgen.com

Machine builders have numerous choices when it comes to automation system solutions. Many of these solutions take advantage of standard specifications, such as IEC61131-3, to simplify the PLC programming required for machine control. Many automation system providers are also making an effort to expand their product lines to handle motion control.

But making an effort isn't the same as making a difference. When motion is the defining element that differentiates the machine, the smart choice is to rely on a supplier with true motion expertise – and a solution that has motion at its core.

Machine builders who choose Kollmorgen Automation Suite™ have realized substantial benefits using Kollmorgen's exclusive Pipe Network™ motion programming platform, built on Kollmorgen's expertise and powerful tools for tuning complex servo systems.

Quantifiable Results that Matter

When a leading medical products manufacturer wanted to increase machine production rates, its existing supplier could achieve only 80 percent of the new minimum target. Using Kollmorgen Automation Suite, the manufacturer was able not only to meet the maximum production target, but to exceed it by more than 20 percent. Compared with the existing supplier's solution, the Kollmorgen Automation Suite solution produces as many as 1,000 more units per minute.

Even more remarkable, the application that benefits from this enhanced throughput is one that requires high-speed registration, very low dynamic lag error, and precise cam adjustment. Kollmorgen Automation Suite meets the challenge of high-volume throughput in applications that require the most precise motion control.

The Pipe Network Advantage

Using the Pipe Network's drag-and-drop programming environment, machine engineers can quickly and easily translate mechanical systems into a virtual representation of the solution they're building. When evaluating methods to significantly increase machine throughput—on the order of 20 to 50 percent—machine builders benefit from the Pipe Network's intuitive ability to relate the

AdvFF_Smoothing ADD

AdvFF_Smoothing ADD

AdvFF_to_Drive

AdvFF_to_Drive

Pipe Network with embedded feed-forward algorithm

mechanical system to the equivalent software solution.

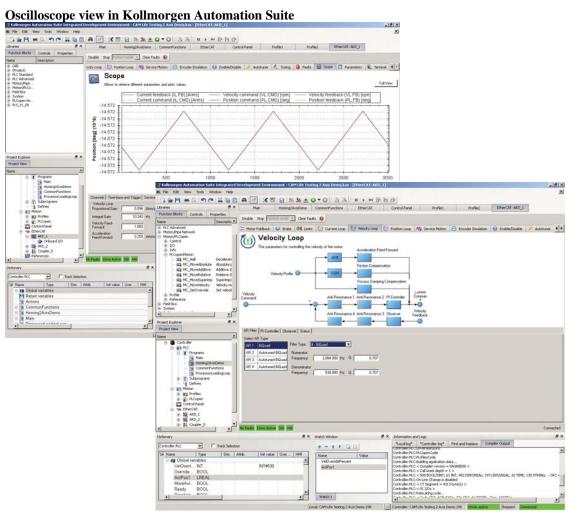
Because Motion Matters™

For the medical products application, Kollmorgen specialists worked with the customer to co-engineer and implement an embedded feed-forward algorithm directly in the Pipe Network. This software-based approach boosted performance beyond the production target while making application development faster, easier and more flexible than could have been possible working directly at the servo drive level.

More Powerful Tuning Capabilities

Kollmorgen servo drives, such as the new AKDTM, offer a variety of technically advanced capabilities such as multi-function Bode plot, high-order observer, bi-quad filters and six-channel "real-time" software oscilloscope. These features provide machine builders with unprecedented flexibility and control for setting up and optimizing motion systems.

It's another breakthrough solution for better motion from the motion leader: Kollmorgen. Because Motion Matters $^{\text{\tiny TM}}$.



Velocity Loop tuning view in Kollmorgen Automation Suite



Because Motion Matters™

ABOUT KOLLMORGEN

<u>Kollmorgen</u> 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 www.kollmorgen.com, email support@kollmorgen.com or call 1-540-633-3545.