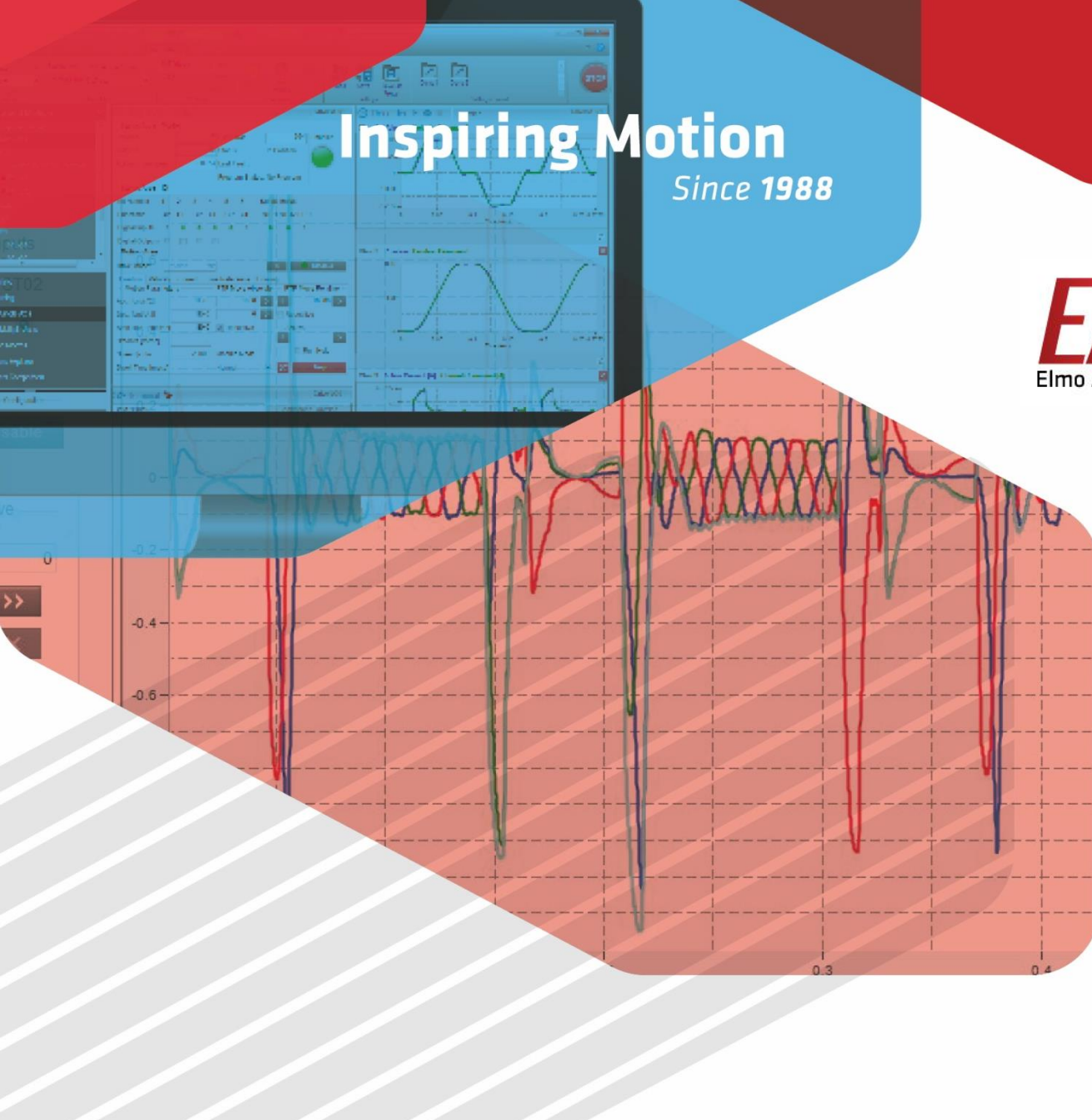


Inspiring Motion
Since 1988

EASII
Elmo Application Studio



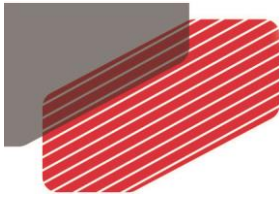
EASII: Precision Motion in Minutes

The Latest Elmo Application Studio

The definitive motion control software, producing the ultimate in results.

www.elmomc.com

Elmo
Motion Control



It doesn't get more challenging than setting a new machine in motion, from start to finish. The system is complex, servo needs are tough and your budget is tight – and time is of the essence. What do you do?

Getting your machine to precise, coordinated and efficient motion takes time and knowledge – and there are no short cuts.

The Elmo Application Studio (EASII) is the all-in-one software tool solution for motion implementation on any machine. Not only does EASII shorten application development time, it also tunes your machine to its optimal performance level, and provides you with a one-stop-shop application for the ultimate in results.

Faster Setup, Better Performance

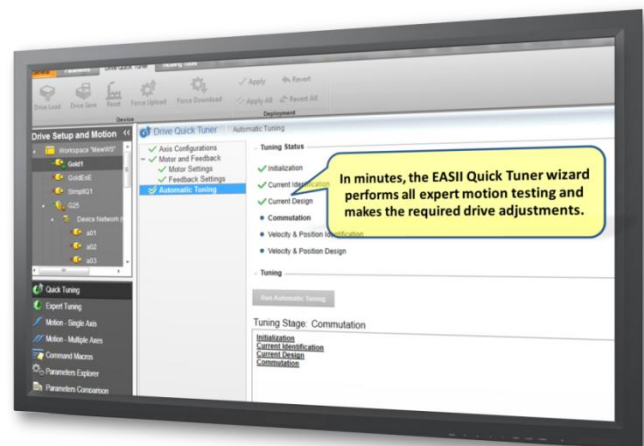
EASII shortens development time by providing simple-to-use and fully automated multi-axis configuration, as well as straightforward tuning and motion tools, meaning that you get the ultimate results faster, no matter how large or complex your challenge.

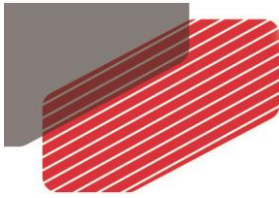
A complete engineering platform, EASII walks you through all processes, enabling you to flexibly test and review progress at every stage, answering questions and executing simultaneous automated testing. EASII helps you set up and configure your initial iteration, as well as tuning, updating, recording and optimizing the system.

Simplify Your Process, End-to-End

EASII is the result of Elmo's 25 years of motion control experience, and was created to simplify motion control in any machine. We understand your work processes, and have delivered a customized tool that will suit you. Trust us.

Regardless of your machine's load, the number of servo drives or feedbacks used, EASII makes getting to precision motion faster. A single, super-intuitive platform, EASII designs, executes and tests your multi-axis motion sequences using a streamlined process from start-to-finish, usually without even entering a line of code.





EtherCAT Network Auto-Configuration

With a single click, EASII identifies and configures all Elmo servo drives on an EtherCAT network. Your distributed multi-axis network can be up and running without having to manually assign IP addresses and so on for each drive.

Quick Tuning Wizard

EASII sets up and tunes the servo drives using an intelligent, step-by-step wizard interface, which efficiently tunes the drive initialization, current assignments, commutation, and assignments of velocity and position. The wizard also performs expert motion testing, making any required drive adjustments in minutes

EASII guides you through each step of the tuning process and does all the 'heavy work' required for custom drive setup, with integral expertise to serve most scenarios:

- **Mechanical load adjustments.** EASII simplifies fine-tuning your drive by inspecting mechanical load performance variations and limits
- **Any Feedback.** EASII provides instant access to any feedback sensors, internal or external, using a unique socket mechanism to flexibly assign and manage feedbacks.
- **Dual Loop Tuning.** The EASII socket mechanism swiftly and easily creates dual loop configurations and dual loop tuning, that meet the requirements for high performance.

EASII can automatically determine the correct gain values for velocity and position feedbacks in dual loops.

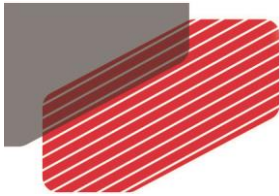
Advanced Motion Tools

Once the system is tuned, EASII can produce fully synchronized, multi-axis motion sequences for Elmo's motion controllers and servo drives, faster and much more simply.

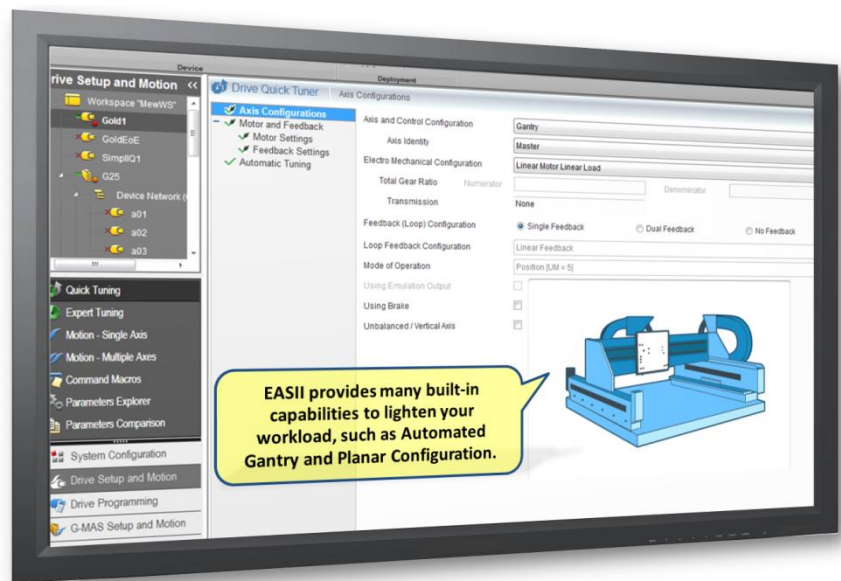


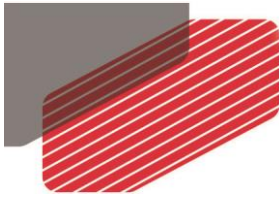
Among the advanced motion control tools that EASII puts at your fingertips are:

- **Gantry and Planar Controller:** An automated MIMO-based controller to create Gantry and Planar configurations.
EASII enables quick setup and easy control of two axes with a Master that calculates and performs separate synchronized operations. Following the basic Master-Slave setup, EASII supports full tuning as well as error mapping capabilities.
- **Advanced Commutation Options.** EASII supports a variety of advanced external commutation methods, with or without absolute commutation sensors.



- **Virtual CANopen Gateways.** EASII enables the configuration of a virtual gateway to all servo drives on a standard CANopen network. The virtual gateway can be used to separately tune a drive, upload critical data to it, as well as receive data from it in certain profiles.
- **Non-Linear Friction Compensation.** EASII enables easy configuration of non-linear compensation to overcome friction at the start of a motion. EASII provides numerous ways to assign compensation, including use of an offset filter command or a gain scheduling table.
- **Three-Step Gain Scheduling in Real Time.** EASII provides an easy way to achieve three-step fine control over drive motion using real-time data. Gain scheduling enables control over servo motion, velocity and positioning, enabling on-the-fly changes.
- **Configurable Master-Slave Follower.** EASII provides simple, fully-configurable Master-Slave Follower functionality for applications that require coordination between multiple servo motors or for multi-axis applications that use multiple groups of synchronized axes.





Elmo's Clear Path to Productivity

EASII: A unified platform that simplifies Elmo's complexity

Implementation tools that help you to work smarter and optimize your results.

Intuitive Workspace, Smart Navigation

EASII uses the fully customizable visual workspace concept found on today's Windows® operating systems, providing an intelligent, intuitive interface. We've enhanced EASII operation with stepped navigation that clearly defines the motion implementation process for any level of user.

Expert Tools for Analysis and Optimization

For the experienced engineer, there is no more powerful, more flexible platform available today than EASII. Among the expert motion tools at your fingertips are:

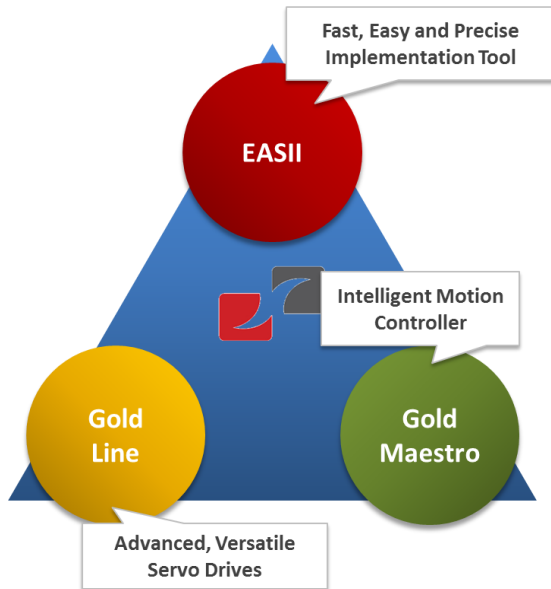
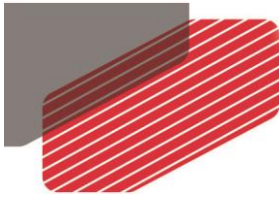
- **Interact with Time and Frequency Domains in Real Time.** EASII enables highly intuitive, real-time analysis in the time (Step Response) and frequency (Nichols, Bode) domains.
- **Advanced Filter Scheduling.** EASII interactively provides comprehensive filtering and filter scheduling, including low pass, notch and anti-notch, lead lag and general second order filters. EASII also enables filter adjustments via gain schedules, using specified conditions of velocity, position or profile, and other fully automated methods.

- **Motion Sequencing, Recording and Verification Tools.** EASII provides extensive tools for building sequences, recording motion in real time and measuring performance. Engineers benefit from detailed control over motion implementation, from design stages through testing and verification.



Gold Maestro Motion Scripts

We've built our **G-MAS Script Manager** directly into EASII, giving you instant access to both simple and advanced scripting capabilities. This can control all axes motions in EtherCAT or CANopen networks using standard PLCopen Function Blocks, as well as supporting modules for administration, iteration and conditional operations. From within EASII, engineers can construct, execute, load, save, and debug machine sequences, and create motion trajectories quickly, using any of the advanced capabilities in our **Gold Line** Servo Drives or the **Gold Maestro** Motion Controller, and even other industry options.



IEC 61131 Programming at Your Fingertips

EASII provides a native IEC 61131-3 PLCopen programming tool, supporting all five IEC languages (graphical or textual) in full accordance with the standard. Engineers can design and implement a complete range of motion solutions. Elmo's tool can also be used to build code libraries for reuse in multiple projects, and includes standard motion libraries, abundant sample code and templates.

Discover How 'Fast and Easy' EASII Can Be, Right Now

The best way to see how EASII streamlines your motion development and gets your machine to peak performance is to experience working with EASII directly.

Elmo makes it possible to operate experience EASII remotely from your own browser in a real hardware emulation environment.

With our online EASII Remote Practice System (RPS), you can build your own motion control solution and understand the intuitive, automated power of EASII for yourself.

To try the EASII Remote Practice System, contact your Elmo representative, or register as a remote EASII RPS user directly from:
<http://www.elmomc.com/support/elmo-rps.html>

Elmo Motion Control, *Inspiring Motion Since 1988.* Elmo Motion Control develops and markets a wide range of cutting-edge servo drives and network-based motion controllers that deliver a complete solution for any motion control application. With millions of drives installed and operating in a vast range of industries, Elmo enhances the success of its customers worldwide.