Complex technical products leave production calibrated and fully tested. These days measurement and calibration must be undertaken efficiently, which is usually only possible with automated equipment. The advantages compared to manual methods are increased measuring accuracy, the reliable acquisition and storage of the data, and the immediate availability of the results.

The measurement of physical systems using sensors or actuators is the domain of LabVIEW from National Instruments. The system development software is used in applications that require fast hardware access to measurement and test data acquired and is therefore perfect for Lenord + Bauer. Our engineers automate equipment using LabVIEW and our own positioning system. Our positioning drives in the SeGMo series form the basis for the automated solutions; these drives adjust each test station to suit the related test or measurement.

SeGMo meets Labview

Efficiently automating measuring and test systems with positioning drives using plug-and-play
SeGMo meets Labview

We are specialists for motion sensors and integrated drive technology. Our portfolio includes robust sensors for rail vehicles, high-resolution encoder kits for machine tools as well as solutions for wind turbines and fully automatic format adjustment. In production our products pass through a series of automated test stations and calibration systems.

Each SeGMo is a complete mechatronic unit consisting of a brushless DC motor, 32-bit microprocessor, compact power amplifier and powerful gear as well as an integrated absolute rotary encoder. The drive communicates with the test computer via an Ethernet interface using the Modbus TCP protocol.

It is possible to prepare product-specific measurement solutions with the aid of LabVIEW. The SeGMos are integrated into the software via „virtual instruments“.

The VI developed can be used immediately and is only modified slightly to the related application. The LabVIEW graphic user interface facilitates the preparation of the program code. This is plug-and-play technology – fast and practical, no manual required.

Plug-and-play is also the motto on mounting the drives. Suitable accessories make it easier to equip and set-up the equipment. It only takes a few steps for an automated test station to be ready for use. The efficiency of the SeGMo-System and LabVIEW is not limited to mounting and interfacing, but also extends to calibration, acquisition, storage and preparation of the data for different product series.