



„High-precision control for accurate filtration and everything from a single source? **That’s when I called Elektrosil.**“

A control system for membrane chromatography: We developed a precise control system that could be operated intuitively via touchscreen and delivered it to the customer ready for shipment.

### THE CHALLENGE

Membrane chromatography is an efficient filtration technique for separating biomolecules such as proteins, nucleic acids and other biological substances in laboratories and medical practices. To make the most of this process, the membranes need to be controlled very precisely. The customer, a membrane manufacturer, required a device with high technical specifications: the output voltage had to be particularly precisely controllable and the system had to be easy and intuitive to operate via a touchscreen. In addition, the customer wanted to be able to read and write data via an external storage medium. In addition to developing the device, suitable connection cables for the membranes and a suitable power supply unit were also required.

### THE SOLUTION

In accordance with the customer’s strict specifications, we developed the hardware and software for a high-precision function generator with touchscreen, which not only enables precise voltage control but also ensures user-friendly operation and allows data records to be read and written via a data interface to an external storage medium.

In addition, we provided all necessary components, such as suitable connection cables for the membranes and a suitable power supply unit, and took care of the necessary approval and certification for the EU and the USA.

After calibration and functional testing, we delivered the entire system as a complete, ready-to-use solution – ready for use directly from the factory. The customer benefited from a custom-developed, technically sophisticated solution from a single source.

### OUR STRENGTHS

- Development expertise – tailor-made and technically sophisticated hardware and software solutions
- Device manufacturing – in-house production ensures optimal coordination of all components
- Everything from a single source – from the initial idea through development and approval to the packaged, calibrated end product, including accessories and documentation

**Are you also looking for a custom-fit solution for your system and a competent partner? Then give us a call: +49 40 840001-0.**

### Project information

- Client: Manufacturer of filter technology
- Industry: Biotech
- Product areas: System integration
- Services: Hardware and software development, certification, serial manufacturing

### Elektrosil’s services

- Application consultation, development assistance, design-in support
- Quality assurance
- Engineering and production
- Completely customised applications