

Intelligent control module for furniture drives with obstacle detection

To improve the cost-effectiveness and ease of use of an existing furniture movement system, an innovative control module for furniture drives was developed. This new solution not only reduces manufacturing costs, but also significantly simplifies installation and commissioning.



Integrated obstacle detection and absolute position sensing

A key feature of the new motor control system is the directly integrated obstacle detection, eliminating the need for external sensors. This simplifies the architecture and reduces costs. In addition, a cost-effective absolute position detection based on an SSI absolute encoder was implemented. The system can control up to three pieces of furniture simultaneously – flexibly and precisely.

Development from prototype to series production

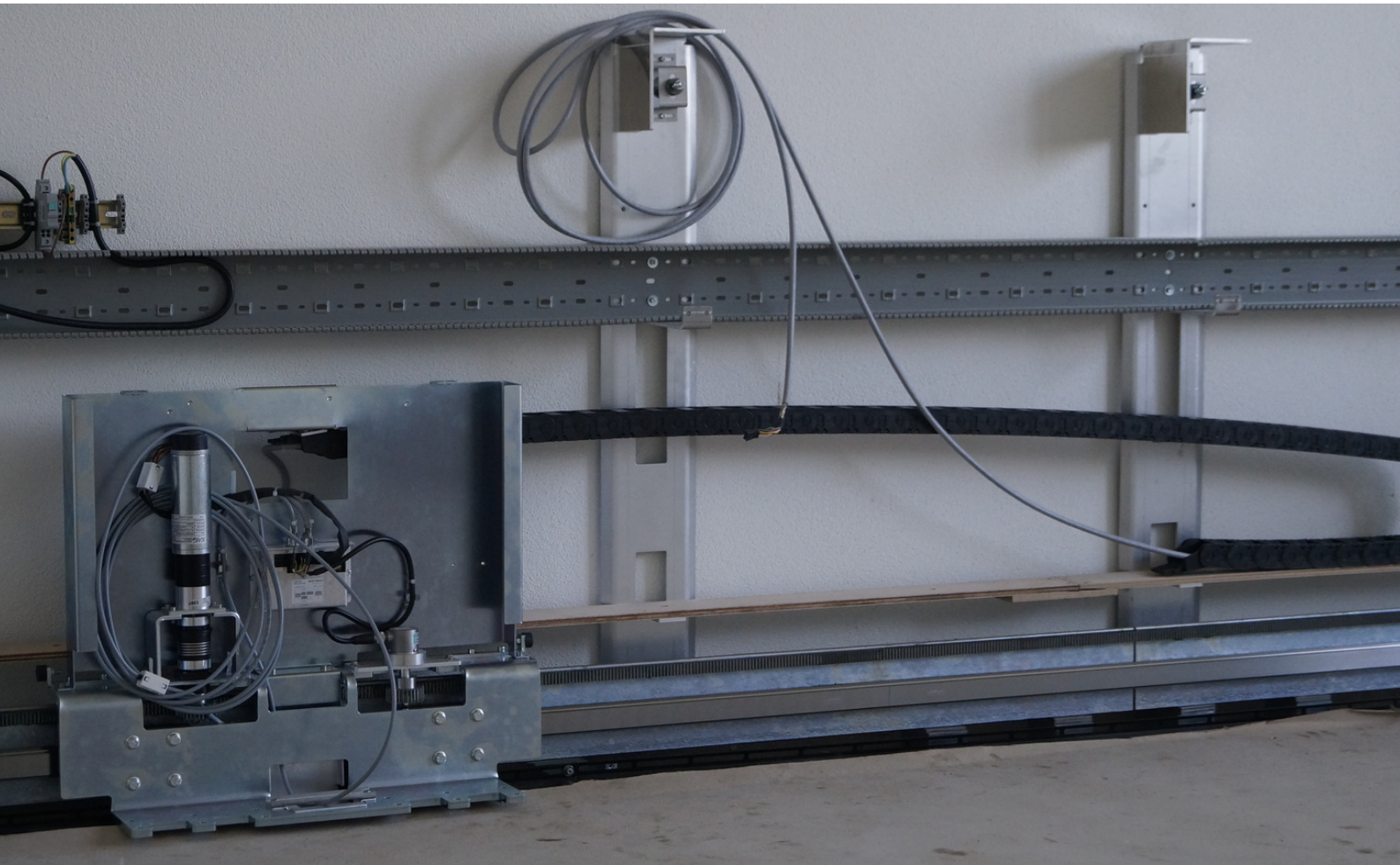
The project included the complete development process – from the initial prototype to a series-ready system. Besides the control unit itself, the communication firmware, wiring, and mechanical interfaces were completely redesigned. For smooth series manufacturing, all necessary assembly and test equipment was provided.

Maximized customer value through system integration

The benefits for the customer are clear:

- Significant cost savings by eliminating external sensors and optimizing the wiring
- Easy installation thanks to a user-friendly design
- Modular structure allows flexible adaptation to various applications





Successfully implemented – from concept to series

With a project budget of CHF 180,000, a duration of 18 months, and a dedicated team of three engineers, a smart, series-ready control module from a single source was developed.

Customer feedback confirms the success: intuitive operation, efficient implementation, and seamless integration from prototype to production.