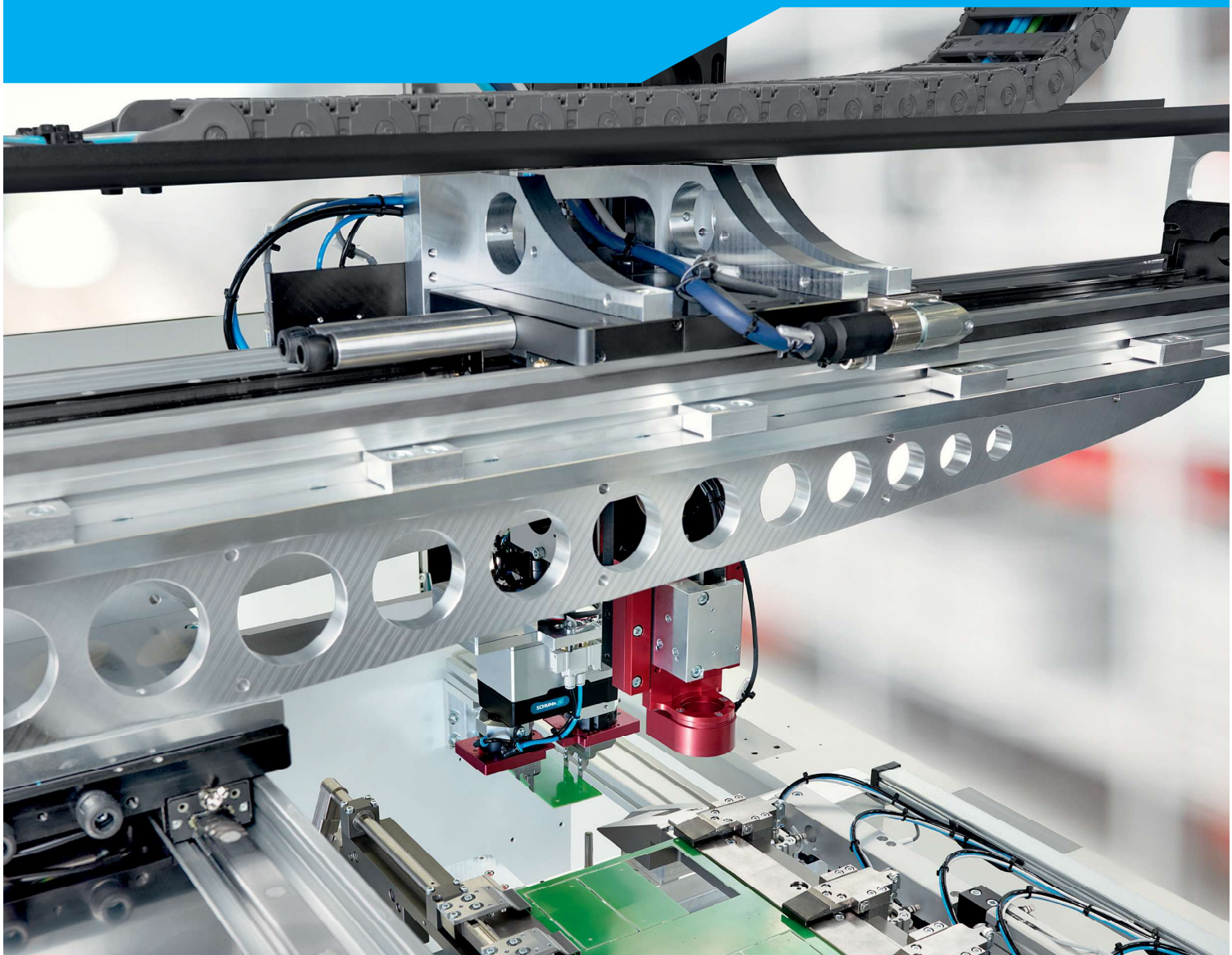
Linear direct axis SLD

Dynamic. Robust. Reliable.

Hand in hand for tomorrow

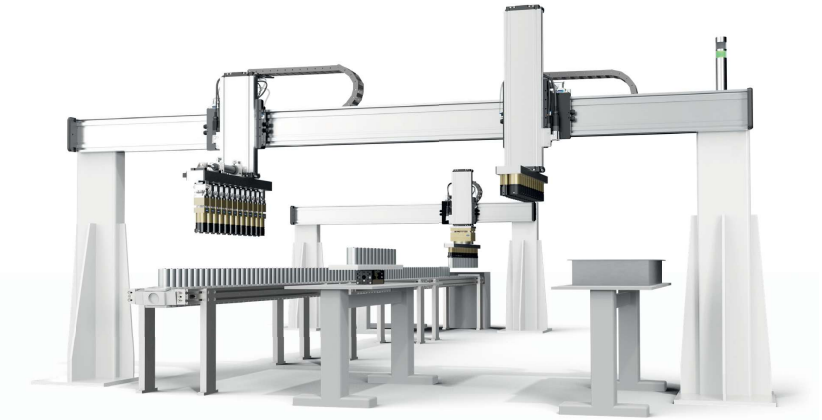


Linear direct axis SLD

In high-speed assembly, the focus is on precise and fast execution of repetitive processes. SCHUNK offers a compact and integrated solution with the SLD linear direct axis, tailored specifically to your application. This dynamic all-rounder axis meets the highest standards of efficiency and flexibility.

The SLD series was developed as a highly dynamic, multi-functional drive that, due to its modular design, meets the demands for high load capacity and longer service life.

The drives can be used in a variety of applications, such as high-speed workpiece clamping, measurement and control technology, electronics, e-mobility, or the life science sector.



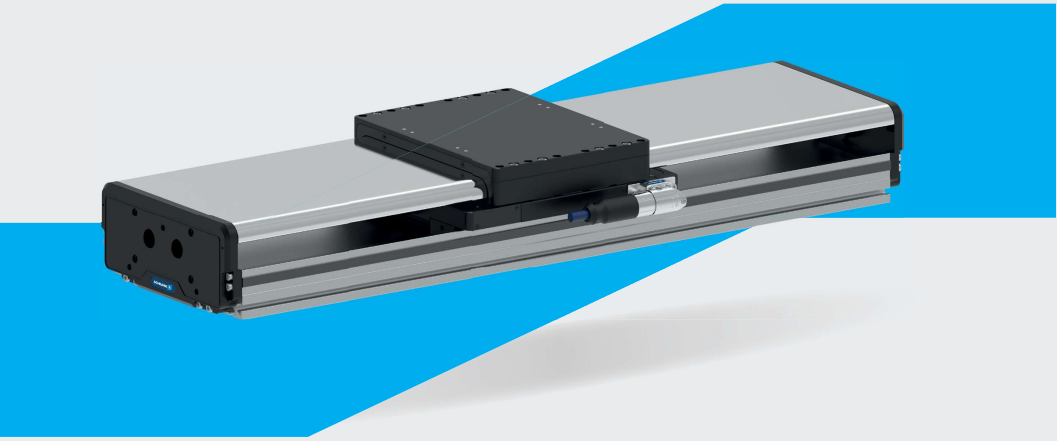
Example of use in the e-mobility sector

With SLD you can create highly flexible applications for fast and precise positioning of cylindrical cells. The dynamic and robust SLD axis assures short cycle times and high positioning accuracy.

Thanks to the use of industrial encoder interfaces, the axis can be integrated into the software environment of different controller manufacturers. In combination with the axis, the RCG magnetic gripper handles the cells. It has a compact design and, depending on the application, is scalable and available in various designs.

Your benefits:

- **Duration and reliability,** almost no components subject to wear
- **No mechanical play between drive components** for flexible response behavior and high positioning accuracy
- **High load ratings** for high bearing load capacity and service life
- **Integrated motor and measuring system in the axis** minimizes interfering contours and space requirements
- **Can be fitted with absolute stroke measuring system** Less programming effort and time saving when commissioning and during operation
- **High dynamics for shorter cycle times** assuring high productivity
- **Optional pneumatic safety holding brake as rod lock** for high requirements on machines and personal safety
- **Upon request, certified safety devices according to SIL2/PLd** for applications with high requirements in the area of machine safety



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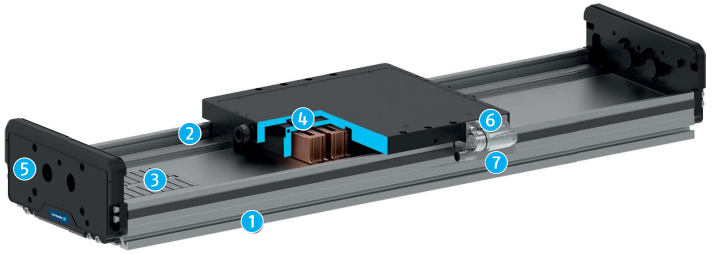

1. **Aluminum extruded profile** Flat and weight-optimized
2. **Pre-loaded profiled rail guide with recirculating ball-bearing guides** for optimal guidance properties and speeds
3. **Integrated secondary parts** with high-power magnets
4. **Compact primary part slide** with mounting surfaces, guidance adjusted without play and integrated measuring system
5. **End plates** with integrated shock absorber elements
6. **Motor plug** Position right/left can be selected
7. **Measuring system plug** Position right/left can be selected

Operation and options

Construction of the linear direct axis
The SLD linear direct axis consists of a motor carrier slide with an integrated primary part and measuring system. The secondary part, consisting of permanent magnets, is embedded in the aluminum extruded profile of the linear axis.

Modular encoder system
The linear module is available with different position measuring systems. The incremental position measuring system features the 1Vss interface. The absolute position measuring systems are optionally available with the HIPERFACE®, HIPERFACE DSL®, or DRIVE-CLiQ interfaces. Additional interfaces are available upon request.

Pneumatic holding brake
Optionally, the linear module is available with a safety holding brake. This holding brake is pneumatically actuated. Its function is activated when unpressurized.

Cable carrier
Matching cable carriers are available as accessories for the linear axes (illustration similar). These are adapted to the respective effective stroke and are delivered with mounting materials and, if needed, pre-assembled.

Cover tape
Optionally, the linear module is available with a cover tape. This prevents dirt from entering the inside of the axis and simultaneously prevents grease from escaping when the axis is mounted horizontally or vertically.

UL certification
The motor of the linear direct axis is UL-certified as standard. The UL safety certification mark facilitates quick market access to North America and other countries.

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Greiftechnik
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