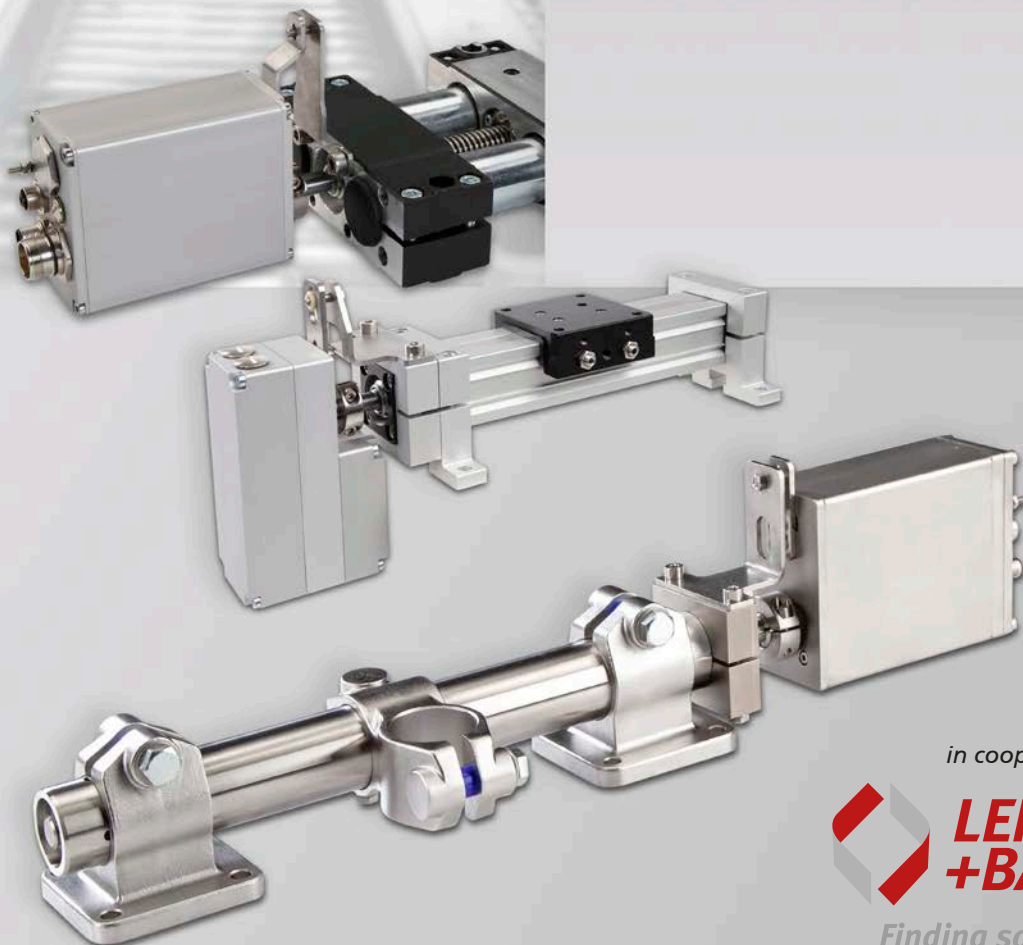


# Automated Format Adjustment

Reliable and precise



in cooperation with



*Finding solutions.  
Founding trust.*

# Automated Format Adjustment

## RK Rose+Krieger and **LENORD+BAUER**

benefit from the synergies that arise from the sensible combination of their product ranges

RK Rose+Krieger GmbH and Lenord, Bauer & Co. GmbH from Oberhausen

both work together to meet customer demands for fully automated infeed axes.

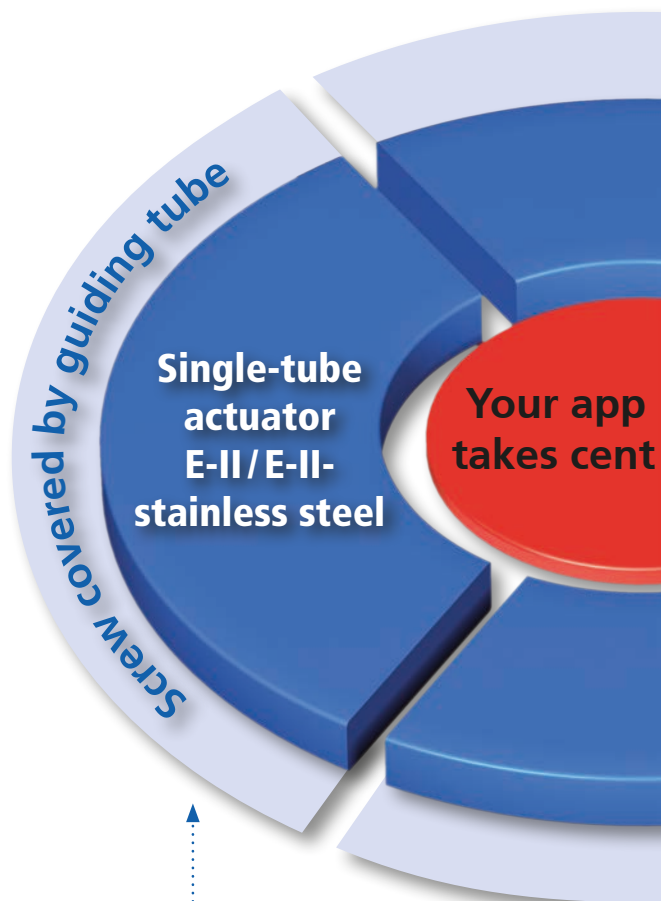
The linear units and actuators complement each other to create a practical complete package.

The package features E-II single-tube actuators, EP/EPX(II) twin-tube actuators and **quad®** EV profile actuators from the Move-Tec range. There is also the option of a short or long actuator with either an aluminium or stainless steel housing. The devices provide a rated torque of 3.5 Nm or 5 Nm.

**Lenord+Bauer** offers the torque supports necessary in fitting the SeGMO to the corresponding linear actuators. Once the torque support has been fitted, the actuator is simply placed onto the axis and pushed into position. A clamping ring fixes the drive firmly onto the drive shaft of the linear unit. In addition to the positive shaft connection, a flexible motor support also forms the necessary floating bearing on the torque support.

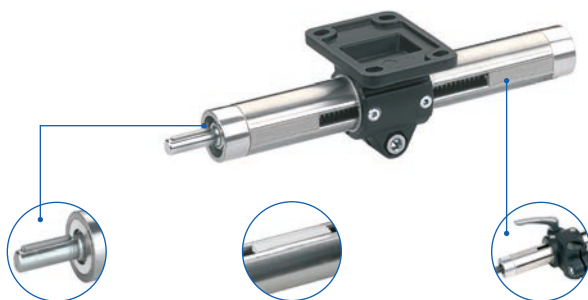
The actuators can be used either as stand-alone components or as a modular overall system, and can be plugged directly into the machine control system using the integrated fieldbus interface. The only things then needed to commission the linear actuator with automatic adjustment are a 24 V power supply and connection to the bus communication.

The two companies also work in close collaboration to fit even complex machines with multiple linear units and a local communication unit. In these cases, actuators with hybrid cables and SeGMO boxes are used, along with a compact PLC control system with operator terminal. Both of these are supplied by **Lenord+Bauer** on request, in the form of a connection-ready module with operator software included. Integration into an existing control environment is really simple, as the SeGMO system supports standard interfaces such as PROFIBUS and PROFINET.



### E-II single-tube actuators – versatile all-rounders

- with a simply unbeatable price-performance ratio
- now also corrosion-resistant in sizes 30 + 40



#### Bearing cover

- ✓ Dust/spray protection on Type 30-60
- ✓ Option of screw with slide bearing (resistant to fine dust/abrasion)

#### Cover clips

- ✓ Slot cover as dust protection or stroke limitation

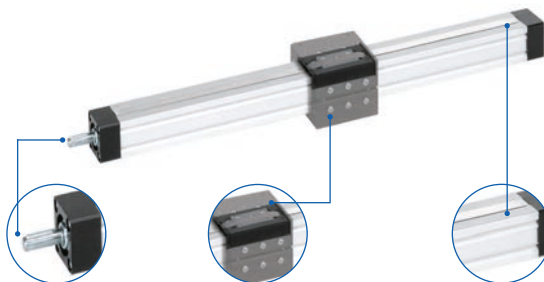
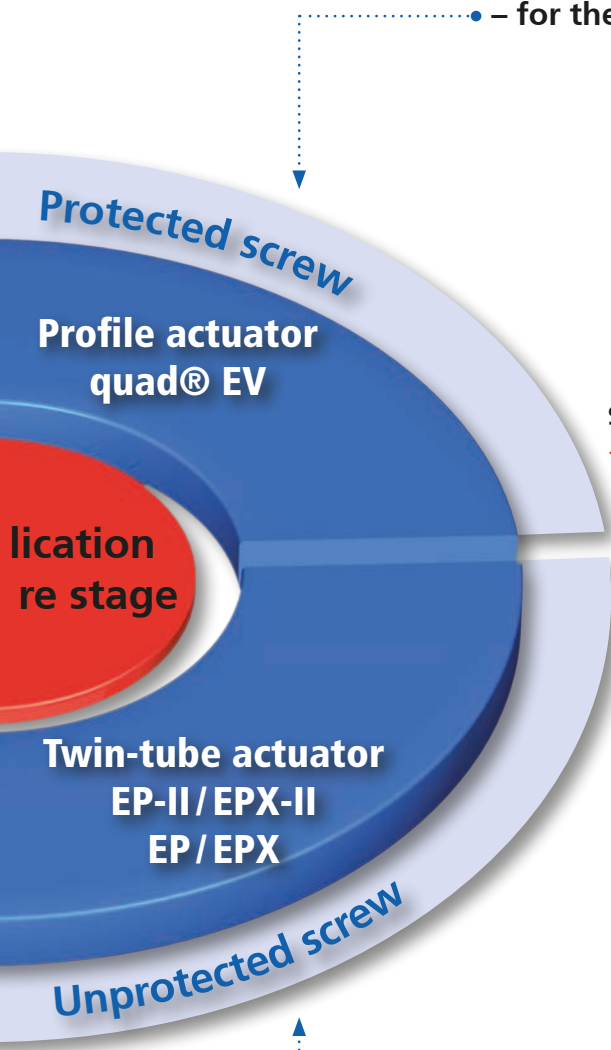
#### Carriages/fixing elements

- ✓ Wide range of models facilitates connection to your set-up

- ✓ Option of carriage with slide bushing (lower input torque, wear minimised)

**48 h**  
ready for delivery

**Compact and versatile quad® EV profile actuator**  
– for the medium load range



**Shafts**

- ✓ Choice of 1 or 2 ball-bearing shafts

**Choice of carriages/fixing elements**

- ✓ Wide range of models for optimal integration into existing structures
- ✓ Adjustable slide guide

**Cover strip**

- ✓ The drive screw is protected against contamination

**The EP/EPX twin-tube actuator generation**  
– compensates for high bending moments  
– now also in the new generation EP-II / EPX-II in sizes 30 + 40



**Screw with choice of slide bearing or ball bearing**

- ✓ Ideal for use in environments with fine dust/abraded particles thanks to slide bearings

**Carriages available with optional slide bushing**

- ✓ Lower input torque
- ✓ Wear minimised on carriage

**Large fixing plate**

- ✓ The EPX version is equipped with two carriages that are connected via a large fixing plate
- ✓ High torque capacity

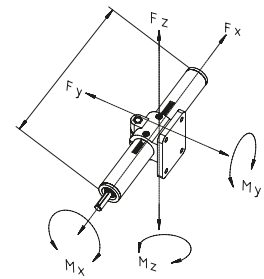
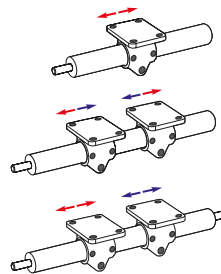
## E-II units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F <sub>x</sub> [N]	F <sub>y</sub> * [N]	F <sub>z</sub> * [N]	M <sub>x</sub> [Nm]	M <sub>y</sub> [Nm]	M <sub>z</sub> [Nm]	
E-II 30	+/- 0,2/300mm	5000	800	500	500	6	15	15	✓ Screw covered by guiding tube
E-II 40	+/- 0,2/300mm	5000	1000	2100	1900	14	40	40	✓ Large selection of carriages and fixing options
E-II 50	+/- 0,2/300mm	5000	1700	3000	3000	30	65	65	✓ Stainless steel guide profile
E-II 60	+/- 0,2/300mm	5000	2500	4500	4500	45	120	120	
E-II 30 stainless steel	+/- 0,2/300mm	5000	800	500	500	6	15	15	✓ Corrosion-resistant
E-II 40 stainless steel	+/- 0,2/300mm	5000	1000	2100	1900	14	40	40	✓ FDA-approved lubricants

\*in relation to an overall length of 500 mm

### Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw (only E-II stainless steel on request)



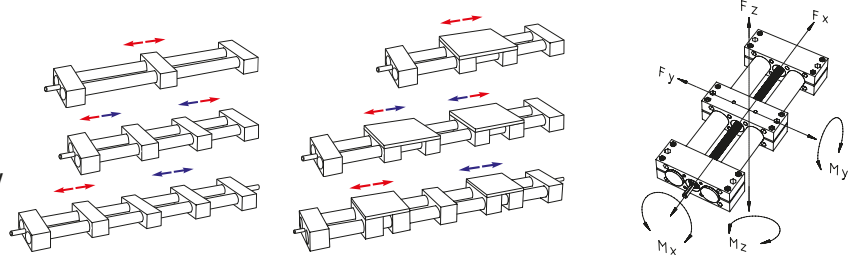
## EP/EPX units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F <sub>x</sub> [N]	F <sub>y</sub> * [N]	F <sub>z</sub> * [N]	M <sub>x</sub> [Nm]	M <sub>y</sub> [Nm]	M <sub>z</sub> [Nm]	
EP 30	+/- 0,2/300mm	5000	800	1000	550	60	60	75	✓ Open screw ✓ Twin tube linear unit ✓ Possibility of high torque load
EP 40	+/- 0,2/300mm	5000	1000	3500	2000	120	130	150	
EP 50	+/- 0,2/300mm	5000	1700	3800	3000	160	200	260	
EP 60	+/- 0,2/300mm	5000	2500	6600	6000	300	340	480	
EPX 30	+/- 0,2/300mm	5000	800	1400	650	80	110	140	
EPX 40	+/- 0,2/300mm	5000	1000	6000	2200	160	190	240	
EPX 50	+/- 0,2/300mm	5000	1700	7700	3300	240	345	510	
EPX 60	+/- 0,2/300mm	5000	2500	11000	7000	520	610	910	
EP-II 30	+/- 0,2/300mm	5000	800	1000	550	60	60	75	✓ Precise / plane mounting surface
EP-II 40	+/- 0,2/300mm	5000	1000	3500	2000	120	130	150	
EPX-II 30	+/- 0,2/300mm	5000	800	1400	650	80	110	140	✓ New guide nut concept
EPX-II 40	+/- 0,2/300mm	5000	1000	6000	2200	160	190	240	

\*in relation to an overall length of 500 mm

### Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw



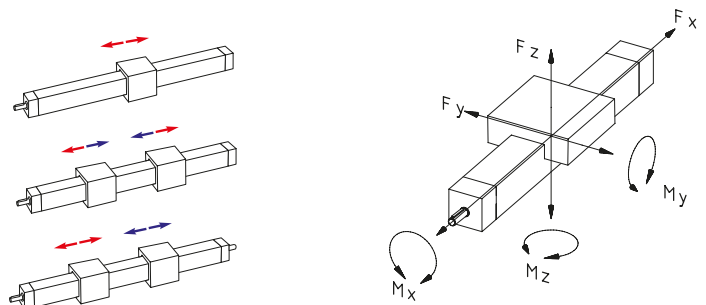
## quad® EV units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F <sub>x</sub> [N]	F <sub>y</sub> * [N]	F <sub>z</sub> * [N]	M <sub>x</sub> [Nm]	M <sub>y</sub> [Nm]	M <sub>z</sub> [Nm]	
EV 30	+/- 0.15/300 mm	6000	800	600	600	6	11	8	✓ Protected screw ✓ Large selection of carriages and fixing options ✓ High operational performance
EV 40	+/- 0.15/300 mm	6000	1200	1500	1480	25	45	30	
EV 50	+/- 0.15/300 mm	6000	1800	2220	2300	55	74	50	
EV 60	+/- 0.15/300 mm	6000	2100	4070	4090	65	100	60	

\*in relation to an overall length of 500 mm

### Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw





# Fully automated drive solution



## The SeGMO reduces the setup times for format adjustment

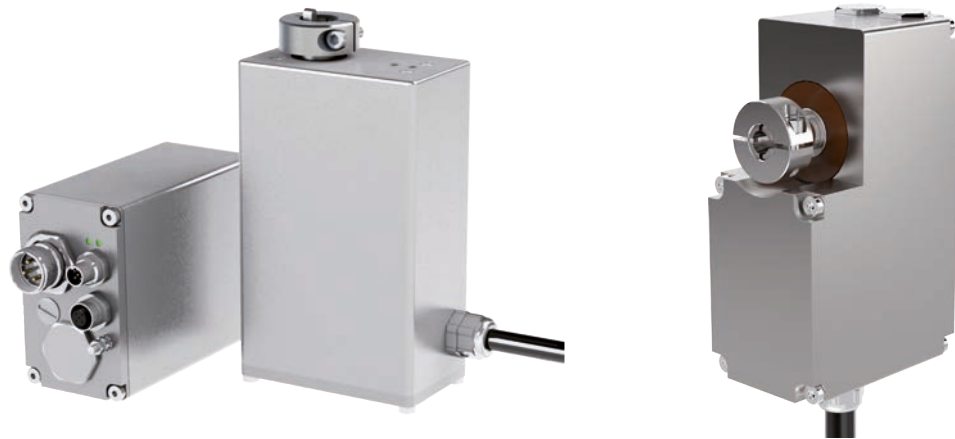
**Lenord + Bauer** offers a modular application for the automation of linear actuators, consisting of:

- Fully automated actuators SeGMO-Positioning and SeGMO-Motion
- Electronic control unit SeGMO-Box for up to 5 actuators
- Pre-packaged software modules SeGMO-Lib
- Single-cable wiring (hybrid cable) SeGMO-Connect

## SeGMO – actuators for RK Rose+Krieger linear actuators

- Fully automated actuators SeGMO-Positioning and SeGMO-Motion
- Sturdy housing in aluminium or stainless steel
- Magnetic multiturn sensor for precise positioning
- Wide temperature range from -10°C to +60°C
- Support-Tool for setup

For further information, please refer to our "SeGMO system" brochure on our website [www.lenord.com](http://www.lenord.com)



## Technical data

SeGMo-Positioning	GEL 6110 compact design	GEL 6110 short design	GEL 6109 compact design	GEL 6109 short design
Dimensions (W × H × D)	60 × 100 × 163 mm	60 × 100 × 125 mm	50 × 125 × 96 mm	50 × 125 × 76 mm
Degree of protection	IP 67			
Housing material	Aluminium (AlMgSi); stainless steel (1.4301)		Aluminium	
Rated torque	2 Nm; 5 Nm; 10 Nm; 15 Nm	1,4 Nm; 3,5 Nm; 7 Nm	2,5 Nm	5 Nm
Screw speed (U/min)	230; 100; 40; 30	230; 100; 40	70	
Position sensor	Magnetic, multiturn (Drive end), batteryless			
Sensor detection range in de-energized condition	342 revolutions			
Motor	BLDC (24 V)			
Gear types	Spur gear			
Operating temperature range	-10 °C bis +60 °C			
Connections	Connector M12; M23; hybrid cable; hybrid connector		connector M12; M23; hybrid cable; hybrid connector; M17 Connector	

## **Lenord + Bauer** support you in implementing your automation requirements with the SeGMO system

Depending on customer requirements and the technical circumstances, the SeGMO system is either integrated into the existing control-system architecture or constructed as a cost-effective parallel system. And if you wish, we can also integrate the system into your machine control system for you. We are on hand with expert advice at every stage of your project.

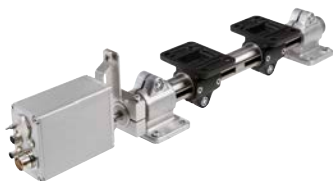
Take advantage of our expert knowledge and benefit from our comprehensive range of consultancy and support services!

**SeGMO-Support +49 208 9963 - 220**  
info@lenord.de



*Finding solutions.  
Founding trust.*

## E-II/E-II stainless tubular linear unit



### Features:

- Units for light to heavy moving applications
- Different sizes can be combined
- Comprehensive range of accessories

## EP/EPX/EP-II/EPX-II tubular linear unit



### Features:


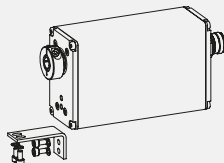
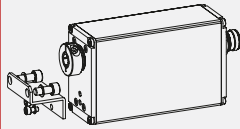
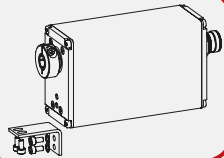
- High torque capacity
- Version available with large fixing plate

## quad® EV linear unit



### Features:

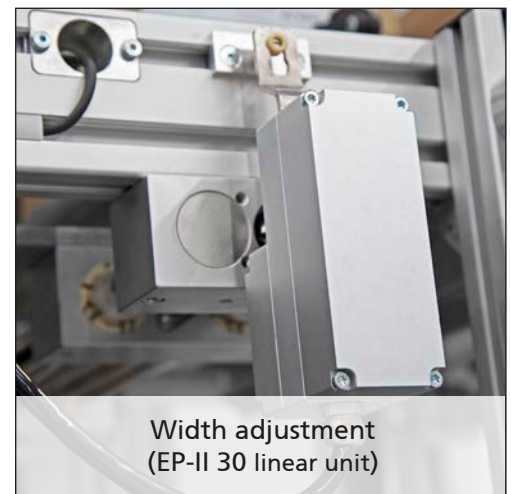
- Screw covered by steel band
- Wide range of available carriages and fixing elements
- Comprehensive range of accessories

RK Rose+Krieger				Size	 SeGMo including torque support
Freely selectable stroke/simple ordering process					
E-II-E tubular linear unit Catalogue page: 44	Choice of carriage models Catalogue page: 54	Choice of axis fixation Catalogue page: 60	Attachment of RH torque support *Catalogue page: 153	E-II 30 E-II 40  E-II 50 E-II 60	
E-II-E tubular linear unit E-II-stainless Catalogue page: 76	Choice of carriage models Catalogue page: 84	Choice of axis fixation Catalogue page: 86	Attachment of RH torque support *Catalogue page: 153	E-II 30 stainless E-II 40 stainless	
EP/EPX tubular linear unit Catalogue page: 100				EP/EPX 30 EP/EPX 40  EP/EPX 50 EP/EPX 60	
EP-II/EPX-II tubular linear unit Catalogue page: 126				EP-II/EPX-II 30 EP-II/EPX-II 40	
quad® EV linear unit Catalogue page: 220	Choice of carriage models Catalogue page: 230	Choice of axis fixation Catalogue page: 234	Attachment of VH torque support *Catalogue page 154	EV 30 EV 40  EV 50 EV 60	

For further information, please refer to our "Linear Technology" catalogue and "Connecting Technology" \*catalogue, on our website [www.rk-rose-krieger.com](http://www.rk-rose-krieger.com) and at [www.lenord.com](http://www.lenord.com)



## Possible applications

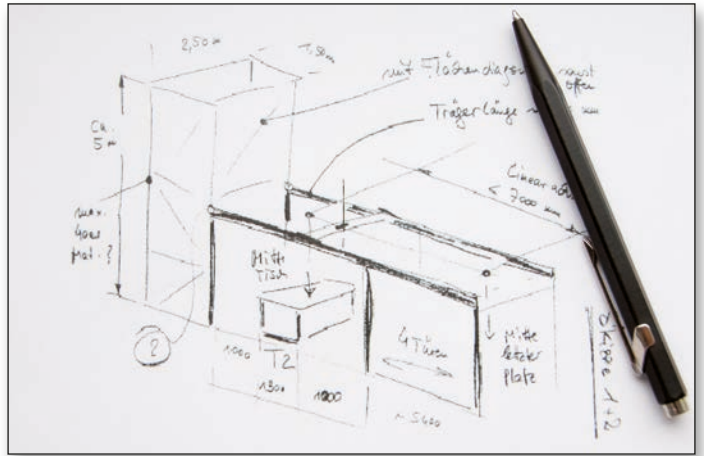


## Our service

If you want to focus your resources on other tasks and are looking for an expert partner you can rely on, our specialists will work closely with you to develop tailor-made solutions. If you wish, we can also assemble and commission the units on site.

**Product Consultancy**    **+49 (0) 571 9335 - 0**  
**[anfrage.vertrieb@rk-online.de](mailto:anfrage.vertrieb@rk-online.de)**

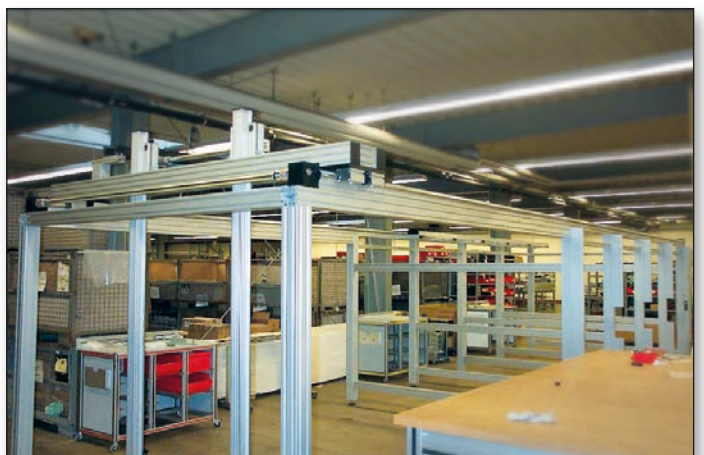
- Just make a sketch of your requirements



- Our product specialists will devise a solution for you



- We can deliver your turnkey solution or assemble and commission it for you on site





### CONNECTING TECHNOLOGY

- ✓ Fittings for the secure clamp connection of round and square tubes
- ✓ Elements made of aluminium, stainless steel and plastic
- ✓ Sizes from 8 mm to 80 mm



### PROFILE TECHNOLOGY

- ✓ The tried and tested BLOCAN® aluminium assembly system
- ✓ Sections from 20 mm to 320 mm for all applications
- ✓ Connecting technology with an unsurpassed combination of flexibility and reliability



### LINEAR TECHNOLOGY

- ✓ Manual adjustment units
- ✓ Electric cylinders
- ✓ Lifting columns
- ✓ Linear axes
- ✓ We can move loads for you of up to 3 t and 12 m dynamically, reliably and with great precision



### MODULE TECHNOLOGY

- ✓ Machine frames
- ✓ Workstations
- ✓ Machine guards
- ✓ Multidimensional linear axis modules
- ✓ Complete drive solutions



**RK ROSE+KRIEGER**

A Phoenix Mecano Company

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