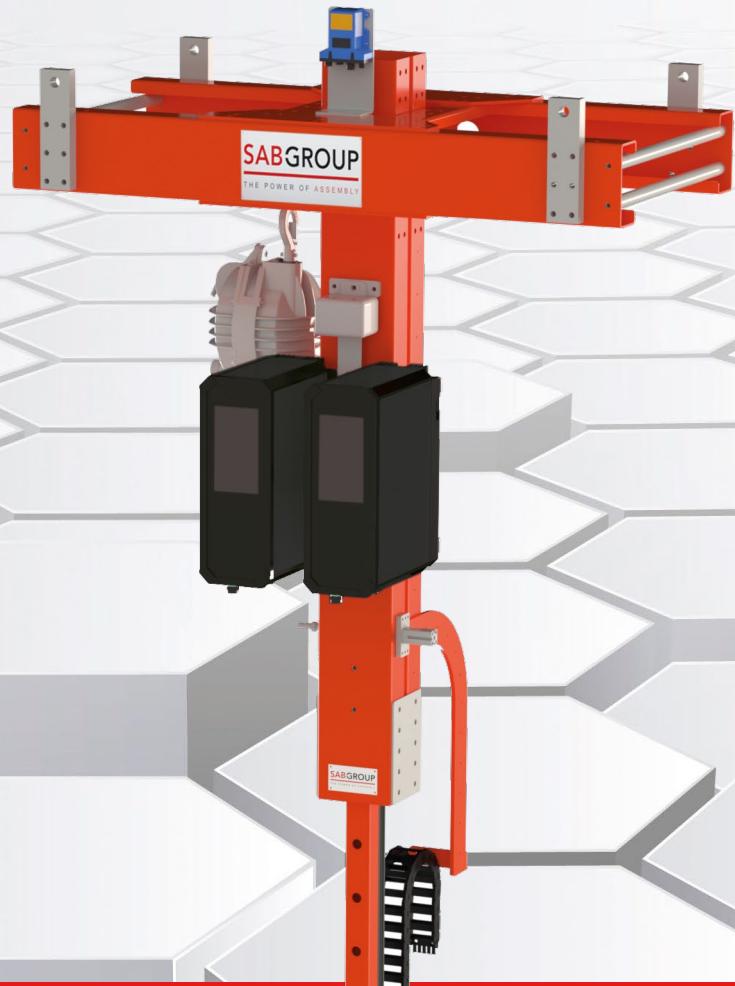


# SAB GROUP

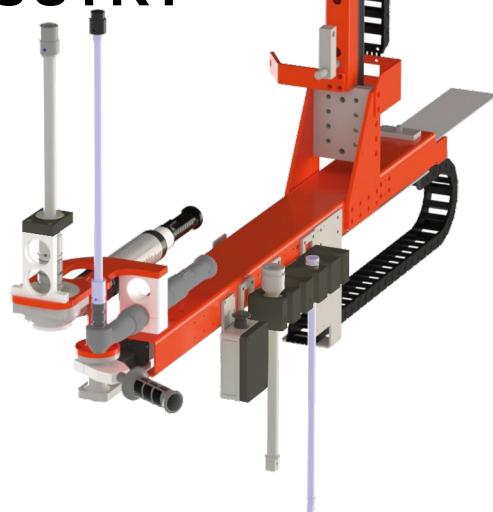
THE POWER OF ASSEMBLY



## REACTION ARMS FOR THE ASSEMBLY INDUSTRY

## CATALOG

A comprehensive range of reaction arms for automotive manufacturing, assembly and production processes.



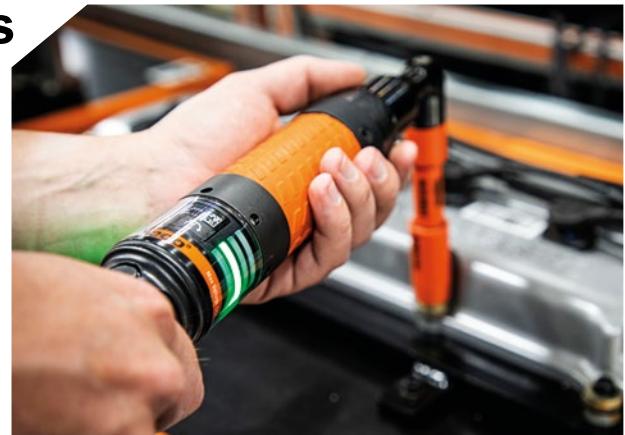
## About us

### We are the **tightening** specialists

SAB-group is active on the market since 2003, specialized in industrial tightening systems.

We are your supplier for industrial tools and standard components for industrial assembly lines, your reliable partner in automotive, electronics, engine building, aeronautics and general assembly.

We are at your service to give a suitable solution !



### We think along **to suit your needs**

We always work in a consultative manner, thinking with you. In addition to our standard solutions, we also offer customized solutions.

We design and install customized systems that are fully tailored to our customers' specific needs and requirements.

Our quotations are customized and our engineers draw out the plans. We visit you first to see the situation.



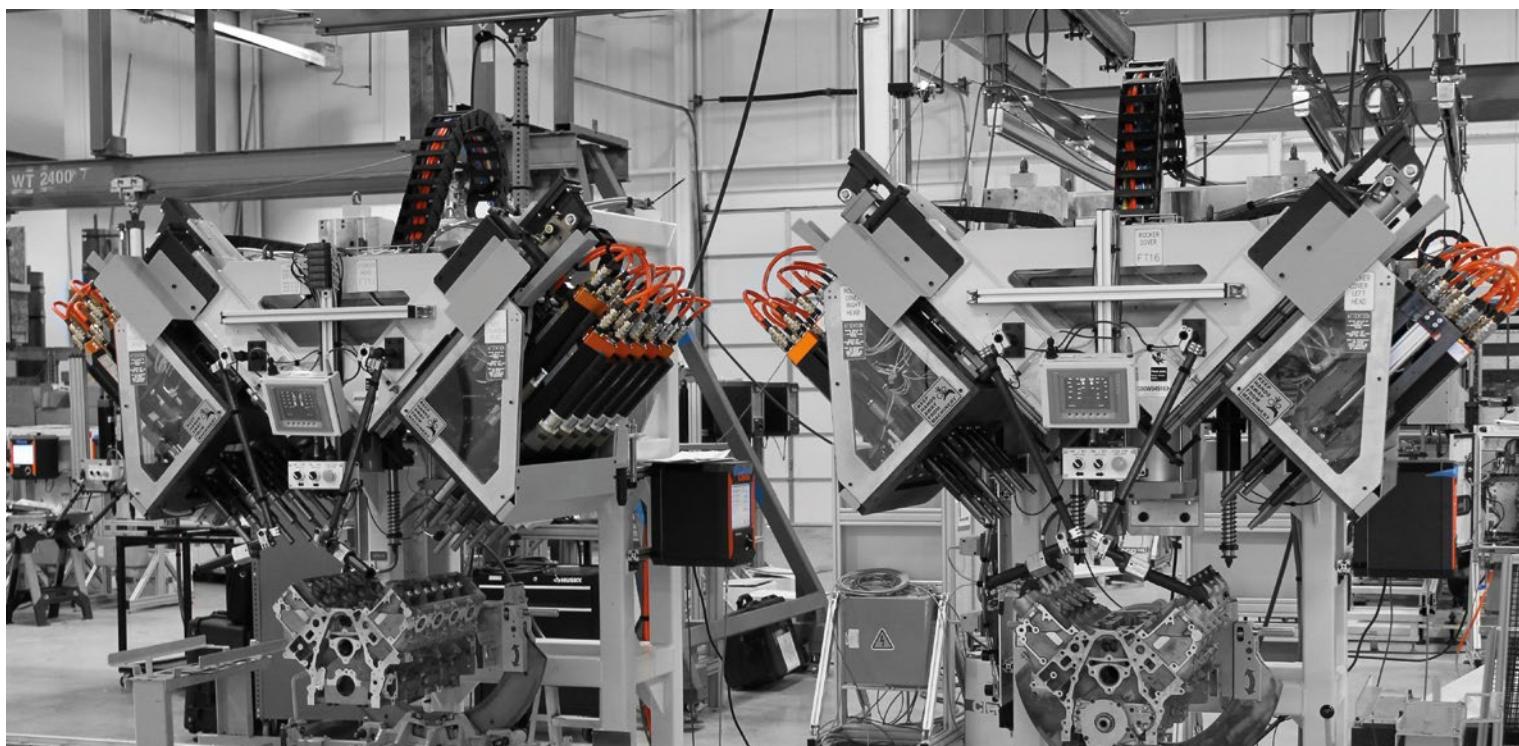
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## Low torque reaction arms

## magnesium telescopic arms



- Telescopic arms in magnesium
- Designed for every type of tool
- Different attainable lengths (min. 45cm - max. 212cm)
- Double terminal coupling to guarantee high hardness
- Easily installed everywhere



## Low torque reaction arms

## telescopic arm with bracket from top

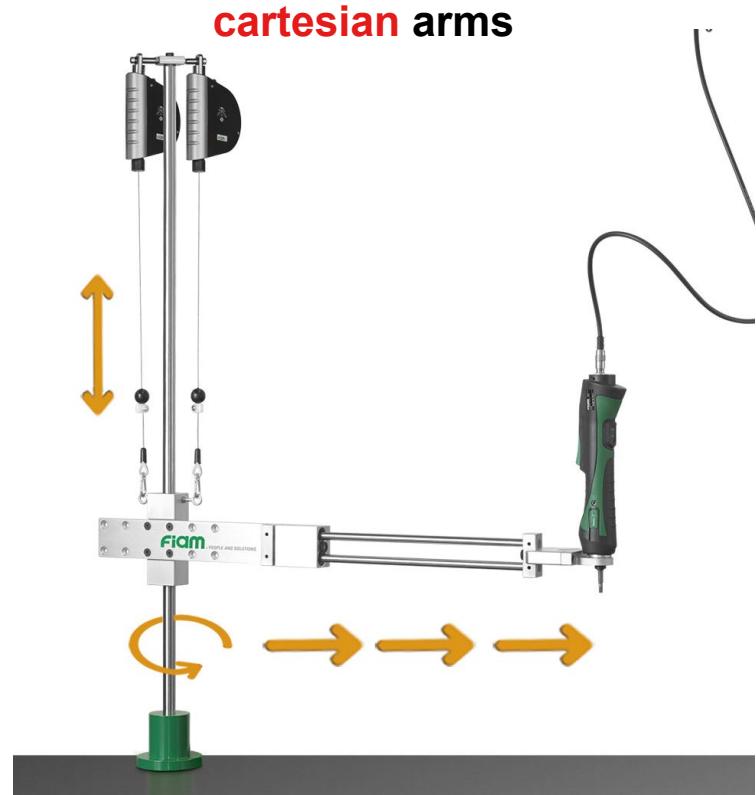


- To be installed on the top of the workbench
- Ergonomic layout for effortless work by sliding the tool along the vertical axis of the arm
- NO SPIN anti-rotation device which prevents the arm from rotating on its axis
- Supplied with a tool clamp for use with air and electric tools, both straight and pistol grip

## Low torque reaction arms

### cartesian arms

- Designed for every type of tool
- Max. Ø 50mm and weight up to 11kg thanks to the universal clamp
- Available in various versions:
  - Cartesian arms
  - Articulated Cartesian arms
  - Assisted Cartesian arms
  - All above can be provided for table or top mounting



## Low torque reaction arms

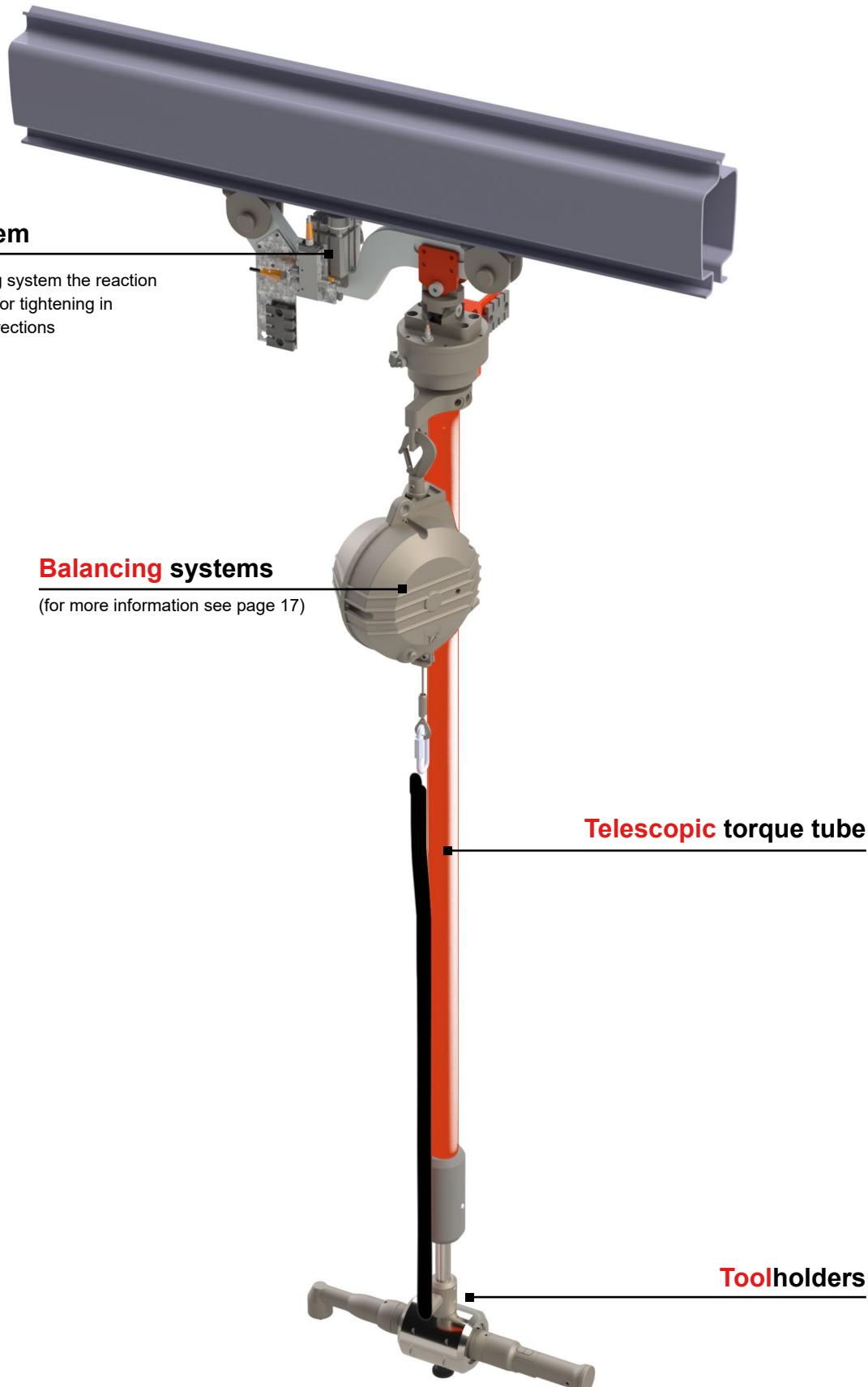
### assisted cartesian arms

- With **pneumatic push device**:
  - For manual lever start tools
  - Assists the operator in the tightening phase pushing downwards and in ascent phase returning automatically in rest position
- With **pneumatic locking device**:
  - Special device that counteracts the "recoil" caused by the tool bit during tightening
  - Redirects this force to the mechanical arm rather than that of the operator



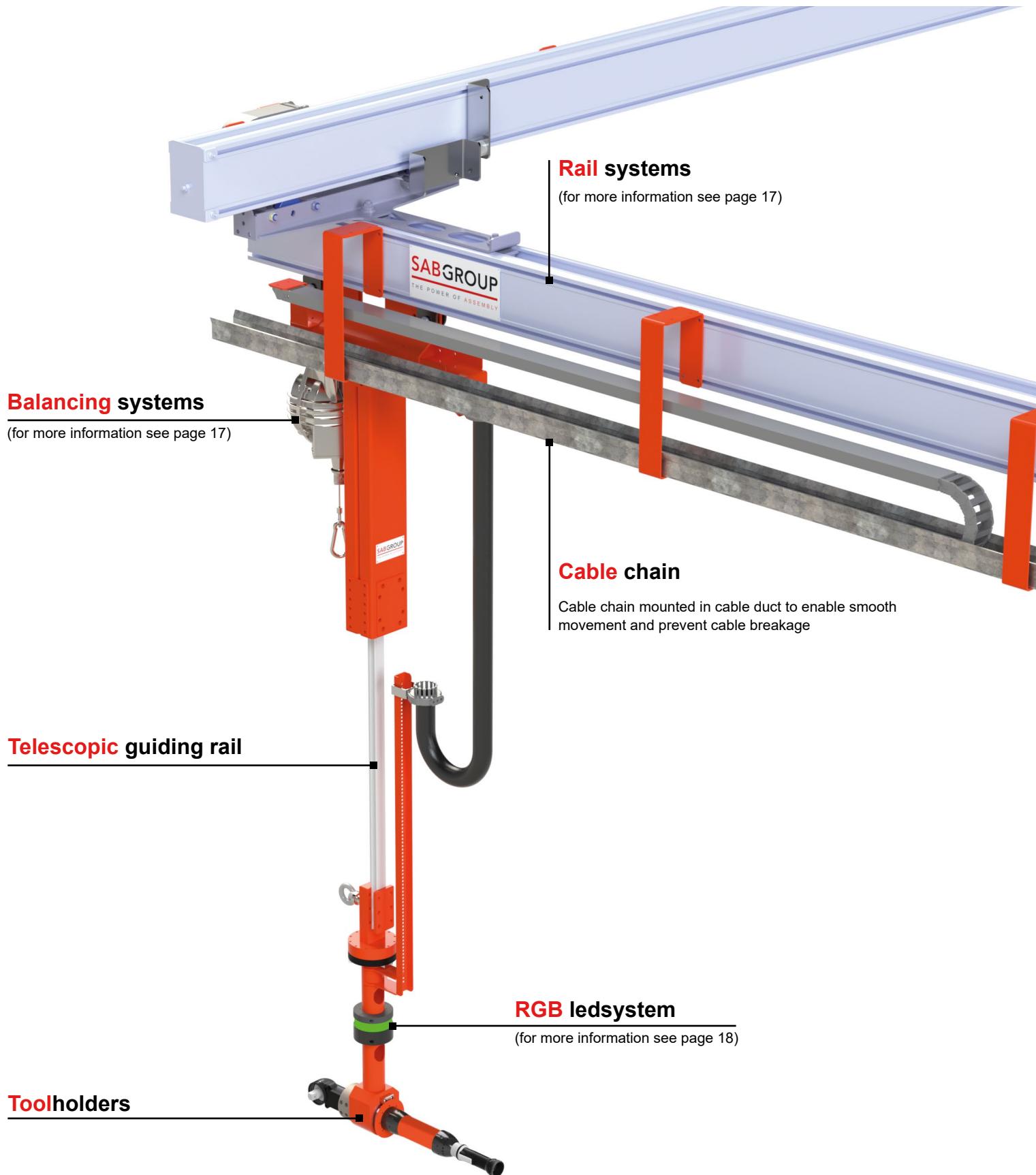
## Telescopic torque tubes

— rail mounted - from 10Nm to 200Nm



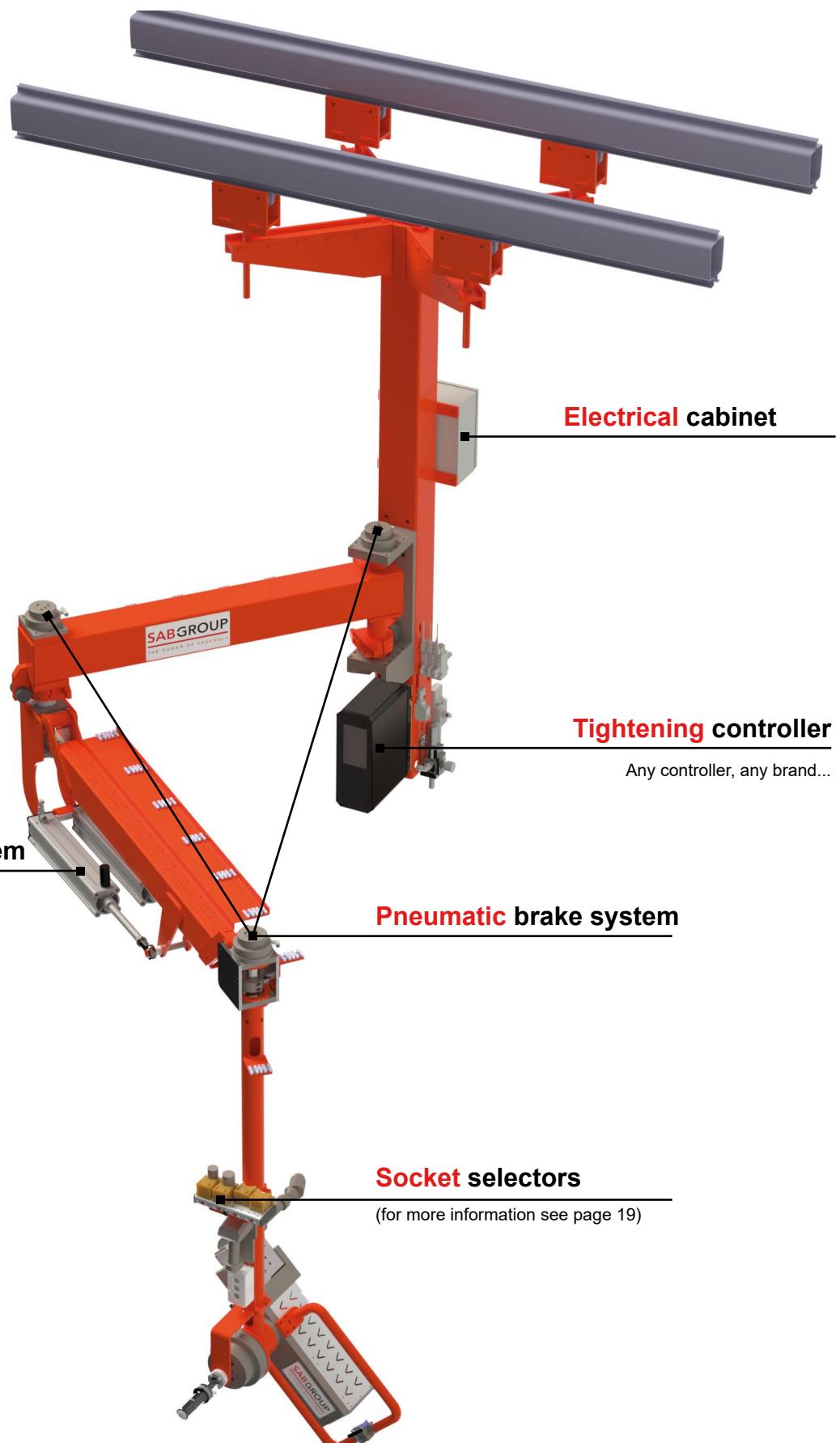
## Telescopic reaction arms

— rail mounted - from 200Nm to 1000Nm



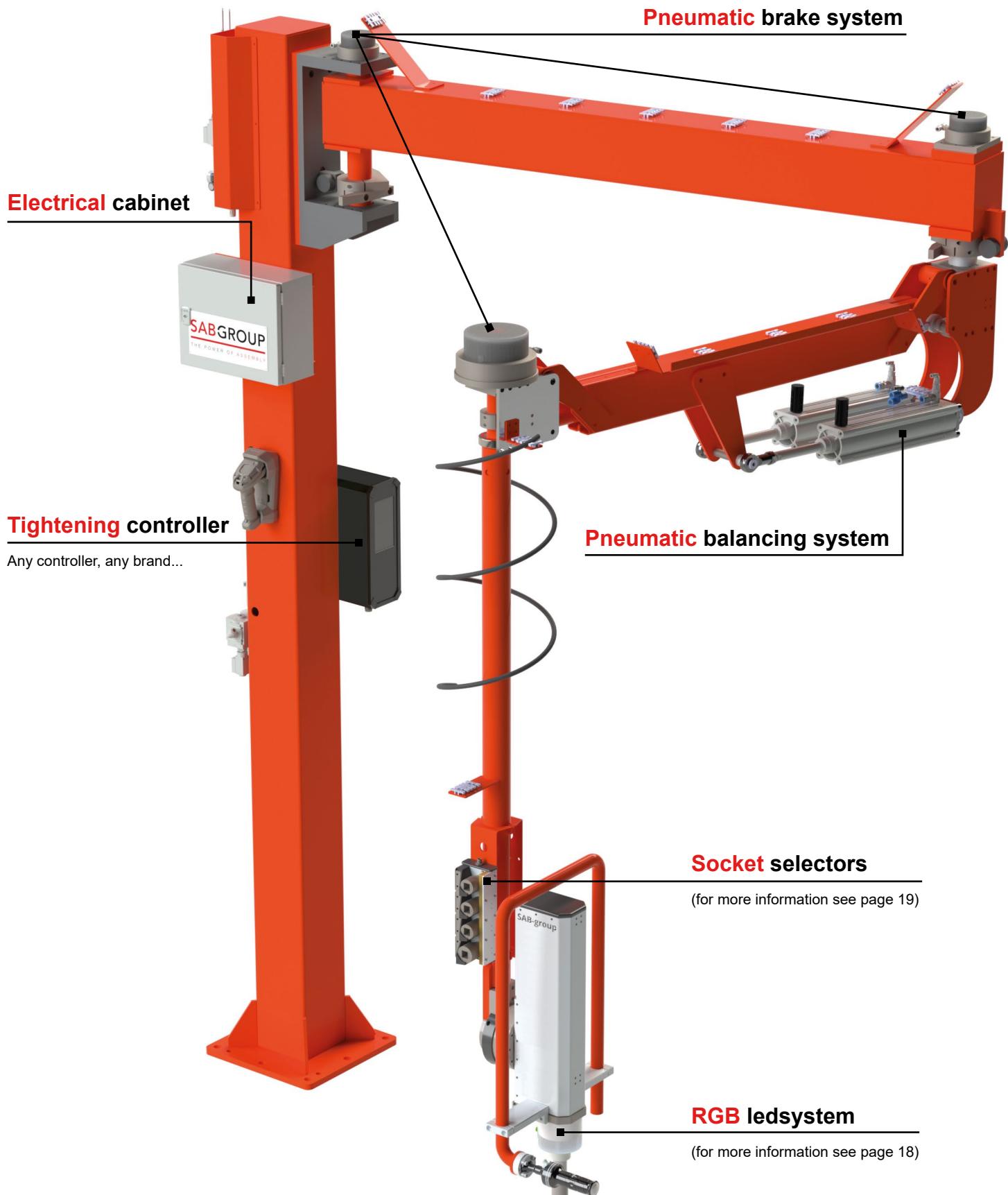
## Folding reaction arms

rail mounted - up to 2000Nm



## Folding reaction arms

floor mounted - up to 2000Nm



## Lineair reaction arms

rail mounted - up to 2000Nm



### Double rail system

(for more information see page 17)

## Balancing systems

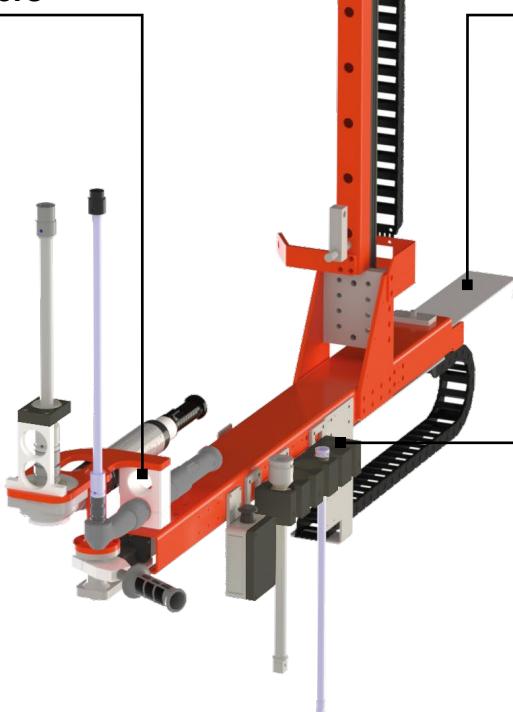
(for more information see page 17)



### Tightening controller

Any controller, any brand...

## Custom made toolholders



### Horizontal sliding system

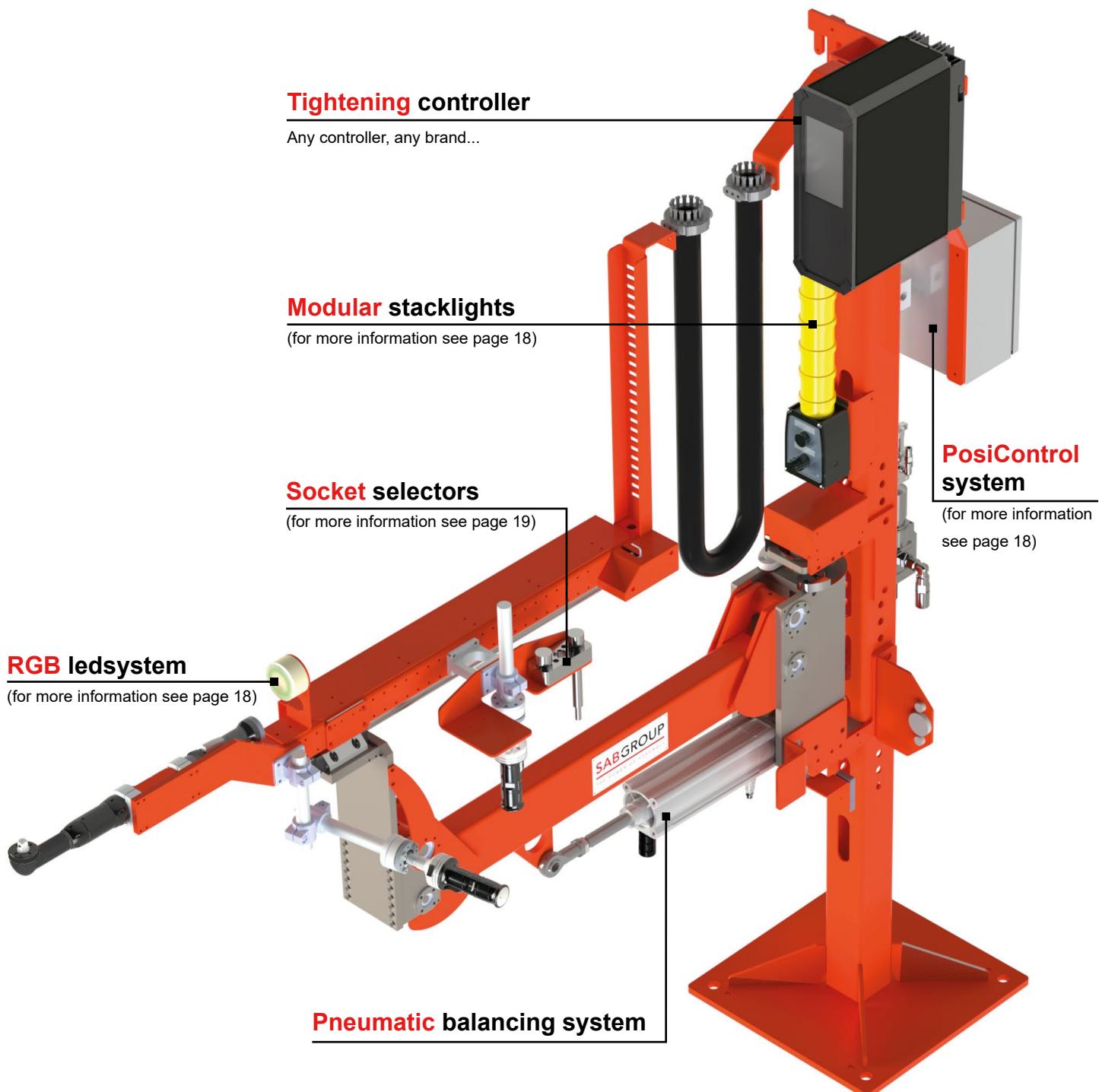
- A horizontal sliding reaction arm for vertical tightening below the car allows the tool to move smoothly side to side while absorbing the reaction torque.
- It provides stable support and precise alignment during tightening.

### Socket selectors

(for more information see page 19)

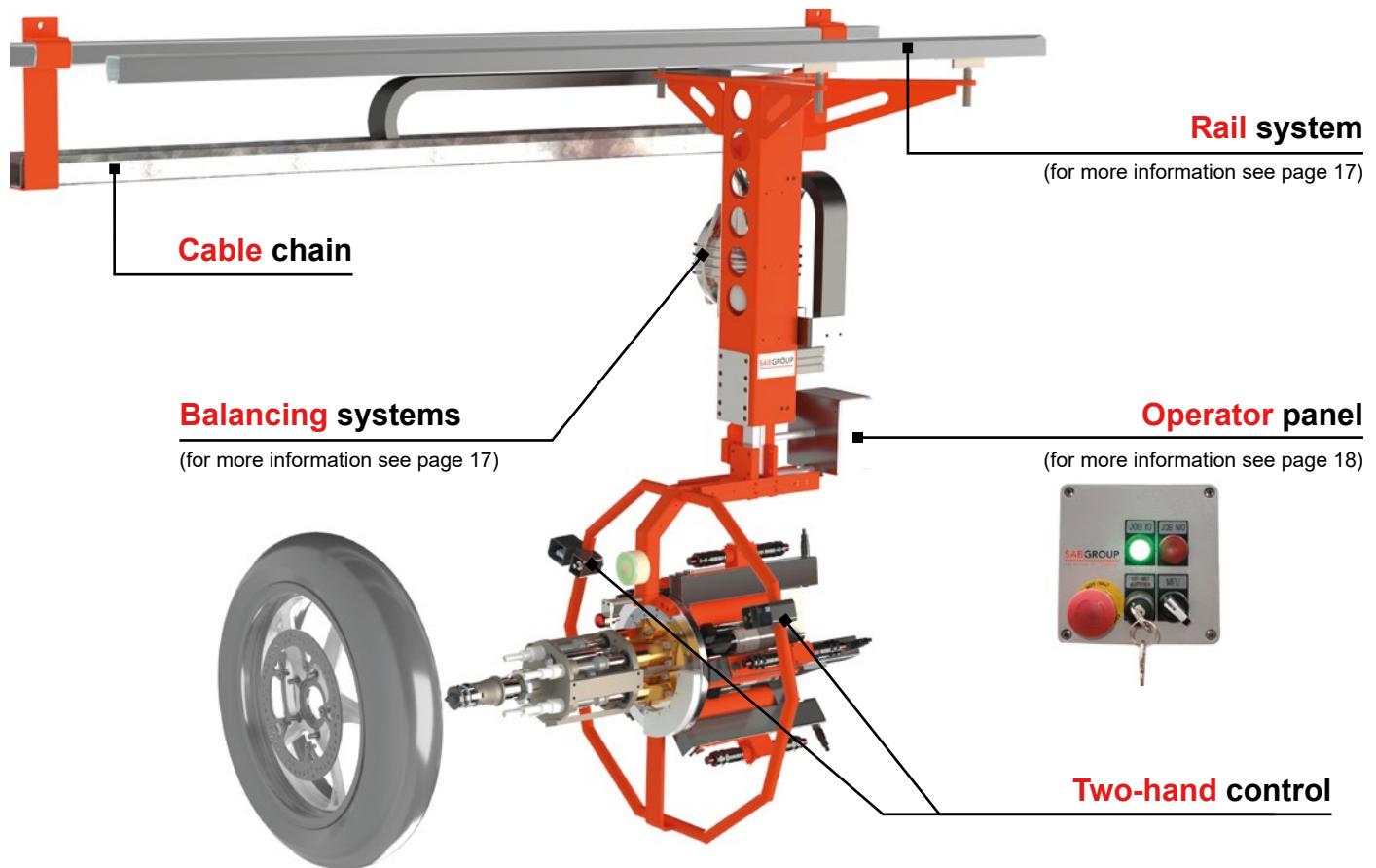
## Linear reaction arms

floor mounted - up to 2000Nm



## Wheel assembly

**rail mounted - up to 2000Nm**



## Wheel assembly

**floor mounted - up to 2000Nm**



### Fully automated tightening systems

- We are specialized in developing and building tightening systems for a wide range of applications.
- Our expertise covers everything from simple manual setups to fully automated production lines.
- Each system is designed to meet the specific technical and operational requirements of the customer.
- We ensure high precision, reliability and efficiency in every solution we deliver.
- Whether manual or automated our screwdriving systems are built for performance and long-term durability.

## Wheel assembly

manually - up to 2000Nm



### High torque assembly tools

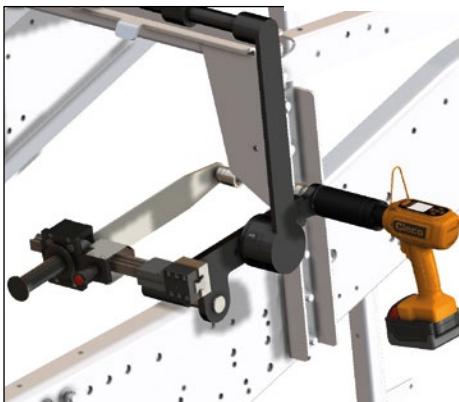
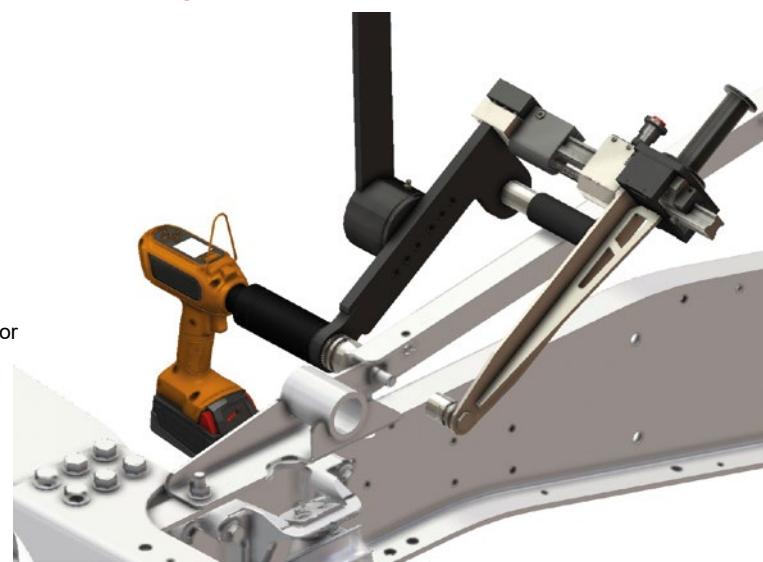
Our expertise includes developing manual fastening solutions using high-torque screwdrivers with custom made reaction arms and adjustable extension mechanisms.



## Counter held systems

manually - up to 2000Nm

- A counter-hold system is a mechanical solution that secures the nut or bolt head on the opposite side of a threaded joint, eliminating the need for the operator to manually hold it with a wrench.
- This ensures stable torque transfer, reduces operator strain and minimizes the risk of slippage or misalignment during assembly.
- Each system is engineered to precise specifications, taking into account torque requirements, spatial constraints and integration with existing tooling or automation setups.



## Mobile assembly solutions



### Fully equiped mobile assembly station

- Flexible and modular production system
- Error-proofed procedures to work along the production line
- Integrated controller with accesspoint for connection with the battery tools
- AC Power Supply with integrated battery pack
  - 8 hours on battery 2500Wh / Max. power 440W
  - Incl. battery indicator and fuses on bench
- 19" panel pc with touch screen
- Integrated hosereel 15m with 1-230V power supply for charging the battery pack

### Custom-made on demand

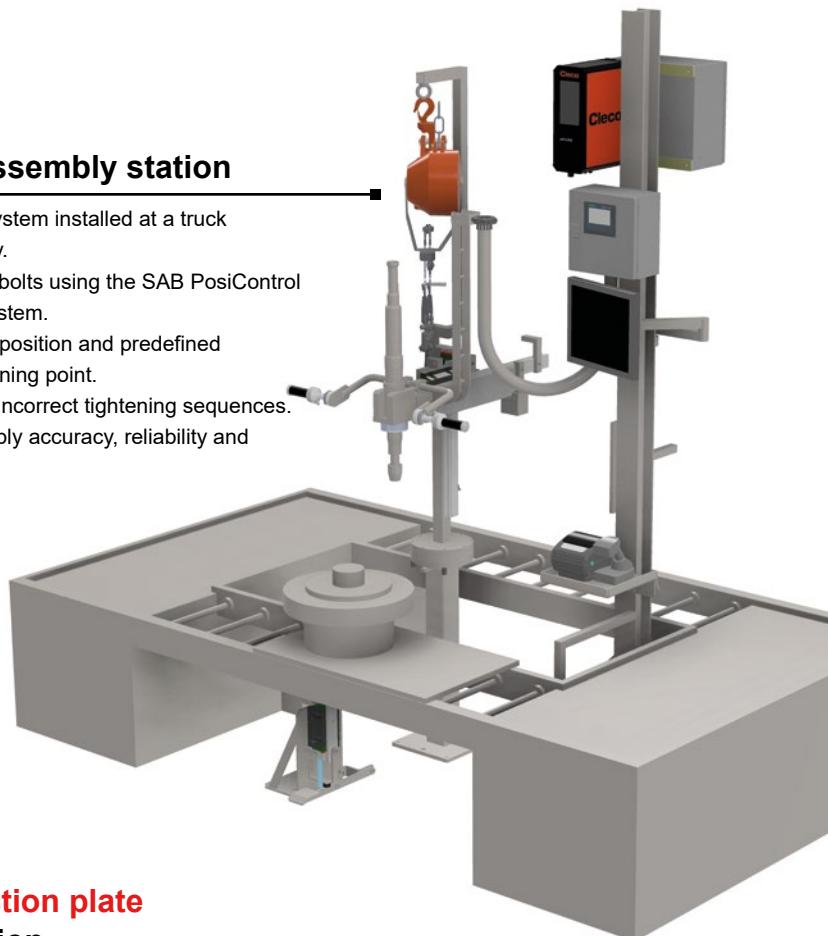


## Special projects



### Central bolt assembly station

- Automated tightening system installed at a tractor manufacturing facility.
- Designed for precise tightening of the central bolt on the rear axle trumpet housing.
- Supports multiple tractor models with model-specific torque values.
- Automatic torque selection ensures accuracy and repeatability.
- Improves assembly quality, process control and traceability.



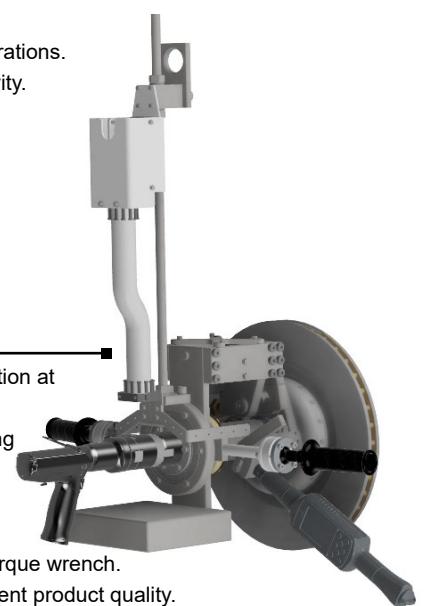
### Crown wheel assembly station

- Automated bolting system installed at a truck manufacturing facility.
- Tightening of twelve bolts using the SAB PosiControl position detection system.
- Ensures correct bolt position and predefined torque for each fastening point.
- Prevents missing or incorrect tightening sequences.
- Delivers high assembly accuracy, reliability and process traceability.



### Battery protection plate assembly station

- Ergonomic assembly system for mounting protective plates under a truck.
- Designed to improve operator comfort and reduce physical strain.
- Ensures safe and controlled positioning during installation.
- Supports efficient and repeatable underbody assembly operations.
- Enhances workplace safety, assembly quality and productivity.



### Zahn auf Zahn assembly station

- Ergonomic assembly system for controlled brake disc installation at an automotive manufacturer.
- Ensures safe handling and precise positioning during mounting operations.
- Fastening performed under controlled and repeatable assembly conditions.
- Final torque verification executed using a calibrated quality torque wrench.
- Delivers high assembly accuracy, operator safety and consistent product quality.

## Screwfeeding solutions

- Automatic and semi-automatic assembly systems to increase productivity and quality
- Operating times are reduced (-35%)
- Improve working conditions by reducing operator fatigue
- Lower production costs



### manually operated

- Forward bit stroke device
- Even with pistol grip for horizontal tightening



- Large bol feeder for high working autonomy



## Screwfeeding solutions

### Fully automatic on Cobot

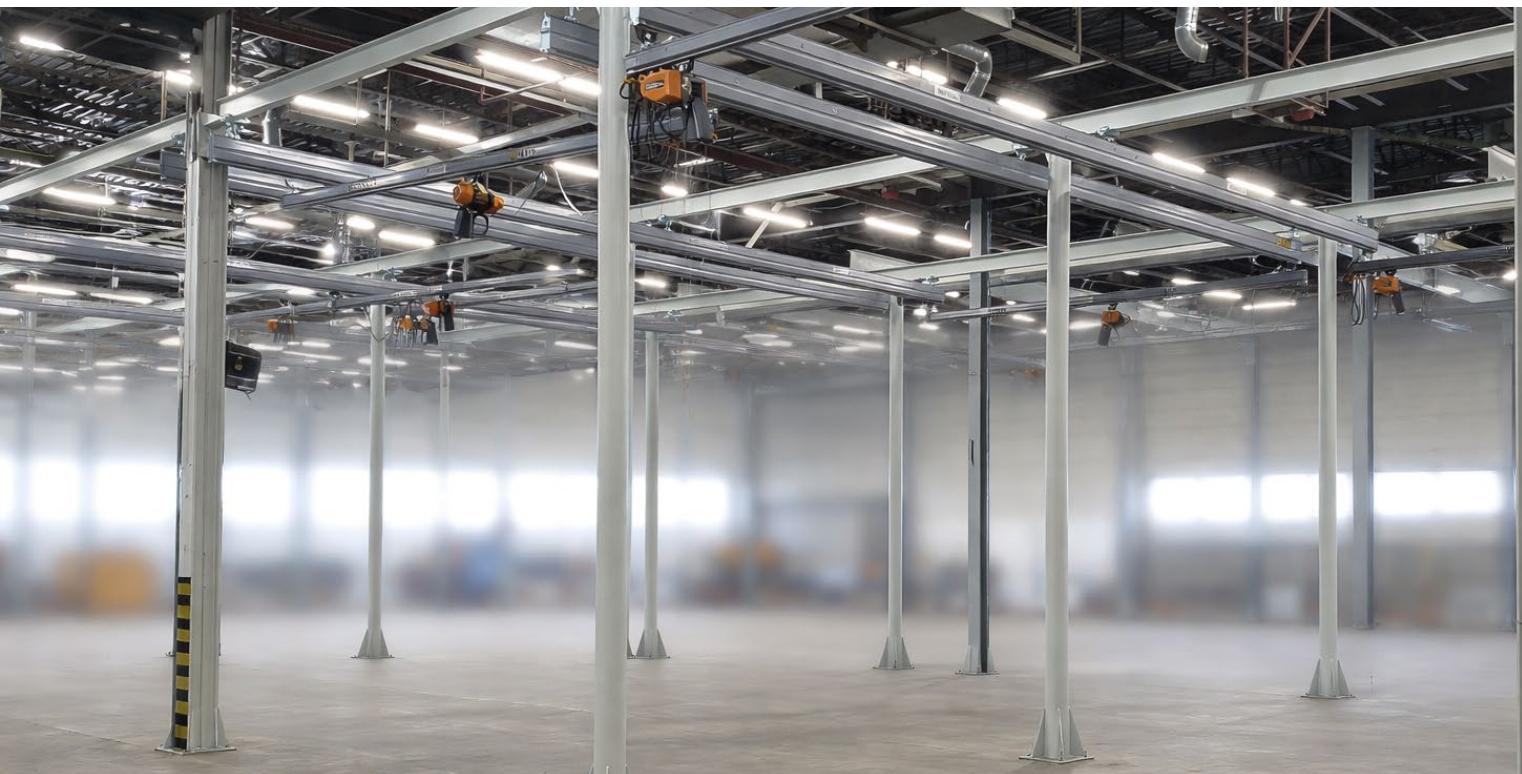
- There will be a growing use of "smart machines" or collaborative robots, in production systems.
- These solutions are not destined to replace humans but to collaborate with them and free them from the heavier and more dangerous tasks, allowing them to provide the real added value in their work.



## Rail systems

Efficiënt en ergonomisch

- Your partner for complete rail systems and steel structures



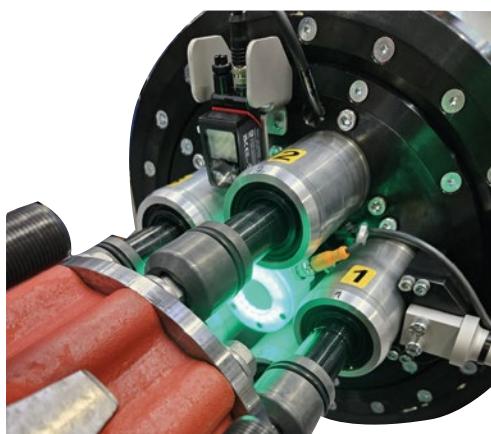
## Spring balancers

Capaciteit tot 300kg

- Our range of industrial balancers is designed to improve safety, ergonomics and overall workflow efficiency in any production environment.
- We work with multiple brands, including Tecna, Kromer and several other manufacturers, allowing us to offer the right solution for every specific application.
- In addition to these leading brands we also supply other balancer options tailored to the unique requirements of our customers.
- Whether you need compact balancers for light tools or heavy-duty solutions for intensive production lines, we always select the most suitable product for your application.



## RGB-led systems



### RGB ledsystem

- Configurable LED visualization for the operator
- For ex.: ■ OK-tightening (green light)
- NOK-tightening (red light)
- Tool running (blue light)

## POSI-control system



### POSI-control system

- Our in-house developed accurate positioning system is a game-changer for professionals

## Stacklight



### Stacklight ledsystem

- Modular system
- Designed for high-speed assembly lines, the stack light delivers immediate visual and audible feedback to the operators, ensuring quick response to errors.
- Key switch can be used to switch between manual and automatic mode

## I/O box



### I/O box

- Configurable
- Quick visual feedback
- Workstation error detection
- Quick operator reaction available
- Key switch can be used to switch between manual and automatic mode

product page



product page



## Socket selectors

### Socket selectors

- Wired socket selectors
- Wireless socket selectors
- Custom made socket selectors (ex. small bit selector or bigger heavy sockets)
- Custom made socket selectors (ex. for robotic stations)



## Special sockets

### Special sockets

- SAB's special sockets go beyond the ordinary.
- Crafted for specific tasks, they enhance efficiency and safety.
- From tight spaces to specialized fasteners, we've got you covered



## Screw presenters



### Screw presenters

- The pick-and-place systems for manual use consist of screw presenters to ensure fast and smooth work cycles, helping to reduce production costs.
- Thanks to our tailor-made suction systems, we can present screws made by any material and with any drive.

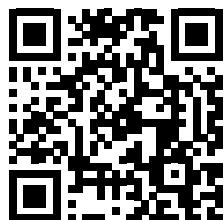


## A strong growing international group

SAB-group is a rapidly growing company on an international level.

With innovative solutions and a commitment to excellence,  
SAB-group is expanding its global presence and setting new  
standards in the industry.

We aim for dynamic growth and international success.



**SAB-GROUP**  
Vriesenrot 22  
9200 Dendermonde  
Belgium  
+32 52 40 95 74  
[info@sab-group.eu](mailto:info@sab-group.eu)  
[www.sab-group.eu](http://www.sab-group.eu)

**NOTES**