

ROLLYX  
Rail profiles



## ROLLYX SCHIENENSYSTEM

- Crane construction kit
- max. payload 3000 kg
- Factory length up to 8 m
- modular expandable
- light and solid
- easy to assemble
- proven technique
- Delivery ex stock
- Planning and construction
- Multifunction rail with additional runways



Positioning stoppers  
internal & external



Safety bolts for  
travel limitation



Energy supply  
electrical



Energy supply  
pneumatical



Trolleys



Locking plates



Suspensions



Brakes



Safety ropes



Crane trolleys



**ROLLYX**  
SCHIENENSYSTEM

# Smooth-Running Aluminium Rail System

■ ROLLYX Smooth-Running Rail System .....	1 - 11
• Profiles .....	2
• Functional elements of the profiles .....	2
• Rail connection elements .....	3
• Profile locking plates .....	3
• Stopping elements .....	3
• Trolleys .....	4
• Functional elements of the trolleys .....	4
• Crane bridge suspensions .....	4
• Ceiling suspensions .....	5
• Crane bridge stiffeners .....	5
• Crane trolleys .....	5
• Energy feeding components .....	6
• Switching elements .....	7
• Stop control trolleys .....	8
• Brakes .....	8
• Friction drives .....	9
• Snap-in lockings .....	9
• Railway variants .....	10
■ Lifting devices .....	12 - 14
• Chain hoist .....	12
• Rope balancer „PICO-MAT“ .....	12
• Jib-arm balancer „YXO-MAT“ .....	13
• Telescopic lifting axis „TELO-MAT“ .....	13
• Buckling-arm rope balancer „PICO-MAT“ .....	14
• Buckling-arm manipulator „VIGO-MAT“ .....	14
■ Safety ropes .....	15
■ Light-crane systems .....	15 - 17
• Jib crane .....	15
• Portal steelworks .....	16
• Storage and retrieval machine .....	17
■ All-in-one multifunction module „Multifunktionshimmel“ .....	18
■ Light-crane and handling technology .....	19
■ Notes .....	20
■ Catalogue- and brochure survey .....	21
■ Contact .....	22



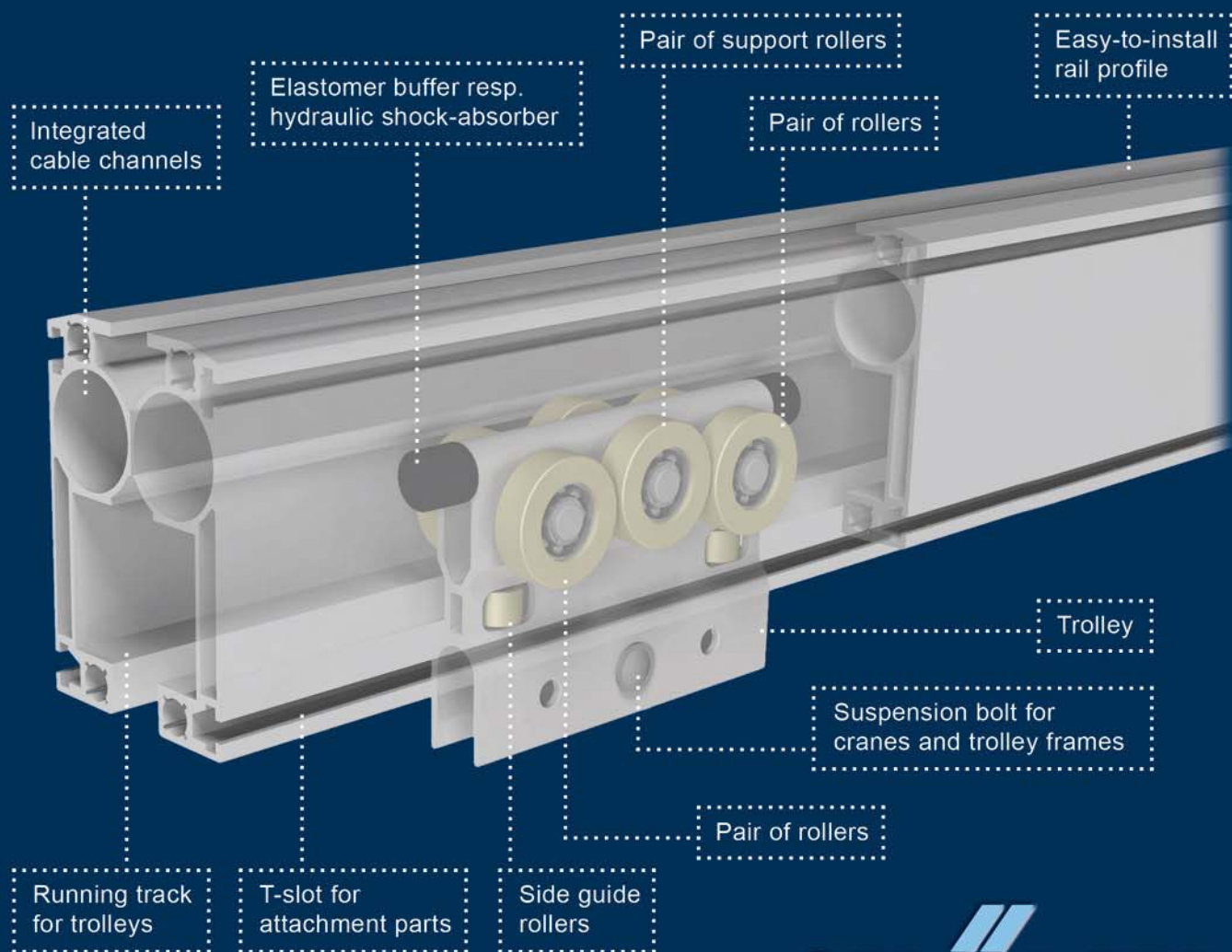
A strong partner for the assembly

## ROLLYX Smooth-Running Rail System

The ROLLYX aluminium rail system was developed as modular construction kit for the creation of track railways and X/Y light crane installations with optimal running properties and a payload range up to 3000 kg.

By means of this kit overhead cranes can be construed in a simple and fast way. Thus, the spectrum ranges from a straight line between two workplaces of just a few meters of conveyance, over an area-wide transport with an easy and convenient guidance by hand, up to installations for automated operation. The ROLLYX rail system can be easily adapted to individual conceptional requirements. It is based on hard-anodised multi-chamber precision aluminium profile of up to five-time stability gradation.

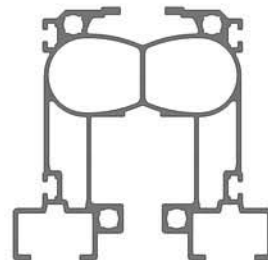
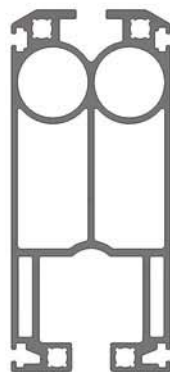
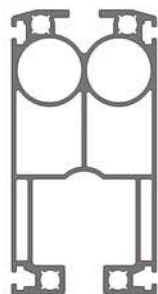
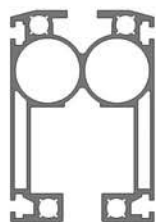
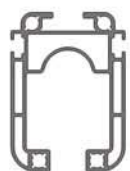
Special trolleys equipped with ball-bearing plastic rollers and side guide rollers stand for a tilt-free running performance with smallest rolling resistance and outstanding ease of motion. The system is complemented by a variety of accessories, such as universal suspensions, rail connection and end sets as well as different energy feedings.







## Profiles



### SR 100

Standard rail  
up to 500 kg  
4,6 kg/m

### SR 150

Standard rail  
up to 1000 kg  
7,8 kg/m

### SR 200

Standard rail  
up to 1000 kg  
10,0 kg/m

### SR 250

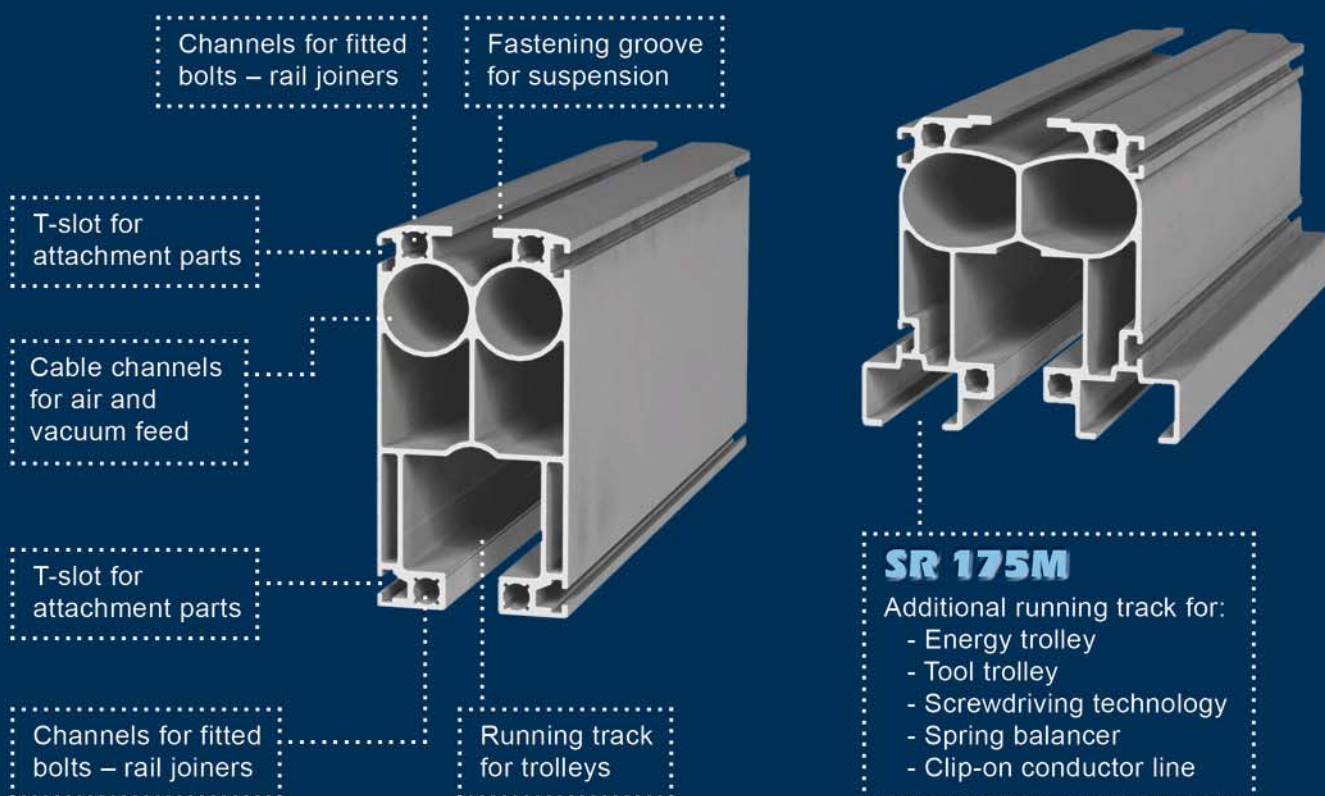
Heavy-duty rail  
up to 3000 kg  
16,8 kg/m

### SR 175M

Multifunction rail  
up to 1000 kg  
11,3 kg/m

ROLLYX rails are made of extruded multi-chamber precision aluminium of up to five-time stability gradation. Despite a low dead weight, highest bending strength and torsional stiffness is achieved due to the multi-chamber profile technique. The aluminium rails are natural-coloured hard-anodised and can be supplied up to 8 m length. Colour coatings and special lengths are available on request.

## Functional elements of the profiles





# Rail connection elements

The rail connection is a combined fitted bolt - screw joint, made of steel and aluminium.



Fitted bolts help that running surfaces of rail ends, which shall be joined together, are accurately positioned relative to one another. With regard to the axial connection the screw jointing cares for a firm hold of the faces.

## Profile locking plates

Each end of a rail track should be closed with a locking plate. Within the range of ROLLYX rail system this plate is made of aluminium and is secured with four screw dowel joints.

The locking plate may not be used for travel limitation. A safety bolt should always be installed in front of the locking plate.

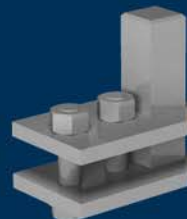


Profile locking plate for the track railway end

## Stopping elements

Positioning stoppers can be freely positioned over the entire rail length and thereby allow pre-positioning of a load.

The **internal positioning stopper** is installed into the rail from the bottom in order to position the trolleys.



Positioning stopper internal

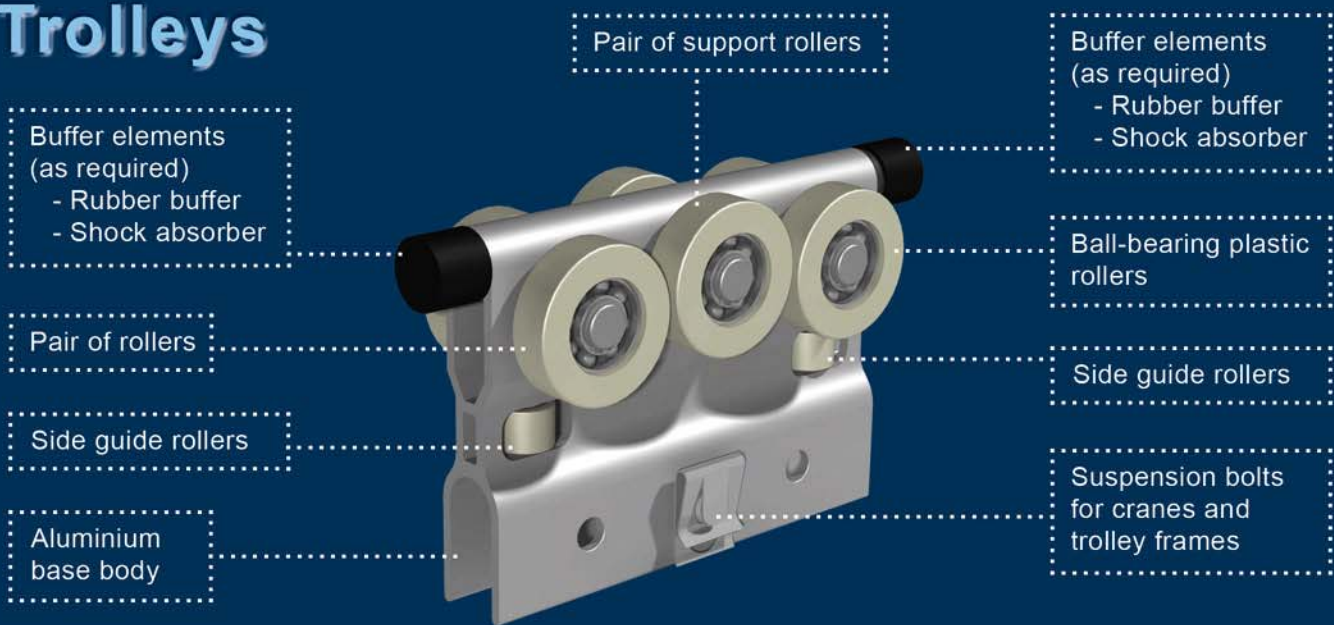
The **external positioning stopper** can be underrode with energy feeding trolleys and is therefore suitable for power feeding which is laid inside the rail.

Due to various combination possibilities e.g. twin stops and strongly absorbing stops can be set up.





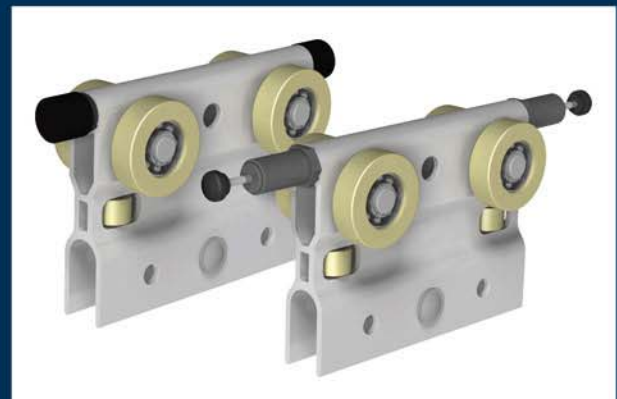
# Trolleys



ROLLYX trolleys are equipped with ball bearing plastic rollers. Side guide rollers prevent tilting of trolleys in the rail. An additional pair of support rollers is installed for applications which require additional support against raising up of rollers from the running surface.

## Functional elements of the trolleys

In the process of standard applications rubber buffers absorb the occasional bumping between trolley and stoppers for travel limitation. For applications involving a more frequent bumping against the stoppers, the use of hydraulic shock absorbers is recommended. Both kinds of absorbers are screwed into the threaded holes of the trolleys.



## Crane bridge suspensions

For the construction of single or double support crane bridge suspensions. They are screwed into the carrier groove of the rail and then hooked into the trolleys.



Application example  
ROLLYX X/Y-System



# Ceiling suspensions

With regard to suspension of ROLLYX rails from ceiling constructions different variants are available. Besides the varied rail length selection, height adjustment can always be realised as well.



# Crane bridge stiffeners

The connecting crossbar for double girder bridges causes a stiffening of the parallel running rail tracks, and is required from 3 m bridge span.



# Crane trolleys



Standard crane trolley



Cranked crane trolley

Different versions of crane trolleys are provided. Depending on installation height, kind of application and payload, profile and rail gauge must be selected to match.

## Crane trolleys for manipulators

consists of:

- Trolley frame
- either cranked or not
- 4 Trolleys
- 4 Suspensions



Crane trolley for chain hoist

## Crane trolley for chain hoists with double rail

- consists of:
- Trolley frame either cranked or not
  - 4 Trolleys
  - 4 Suspensions



Double trolley

## Crane trolley for chain hoists and rope balancer with single rail

- consists of:
- Cross-beam
  - 2 Trolleys
  - 3 Suspensions



# Energy feeding components



## Pneumatic energy feeding inside of the runway

- Energy trolley
- Air hose: DN10  
DN20
- Connectors: 1/2" or 3/4"



## Electric energy feeding inside of the runway

- Energy trolley
- Power cable: □ 4 x 1,5 mm<sup>2</sup>  
○ 5 x 1,5 mm<sup>2</sup>
- Connectors: 400V 50Hz 16A



### Alternative energy feeding in C-rail

- parallel to runway
- for pneumatics and electrics



Energy feeding in C-rail outside the runway

### Alternative energy feedings with energy chain

- parallel to runway
- for pneumatics and electrics



Energy chain outside the runway

## Switching elements

Various application possibilities also require different circuits. Our technicians and constructing engineers develop just the right solution for each performance requirement.

### Crane way position switch

The crane way selector switch (position switch) is available either in electrical or pneumatical version. They are used for pre-positioning, shutdown of traction drive or conveyor-belt switch-off.



*Our program an enrichment for you !*

## Stop control trolleys

Stop control trolleys cause an automatic stop of the trolleys in start-up position.

### Pneumatic stop control trolley Y-axis

A particular control is used for this trolley. Overrunning and rocking of the trolley during positioning process is advantageously prevented thereby, and thus it is functionally beneficial for the use of rope balancers and chain hoists.



Control module

### Pneumatic stop control trolley for X-axis

The stop control trolley is attached to the existing trolley.



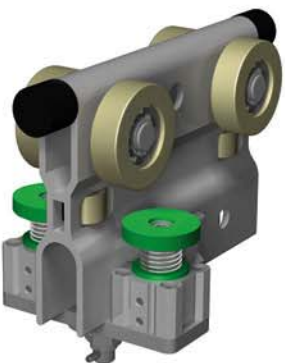
Pneumatic stop control Y-axis



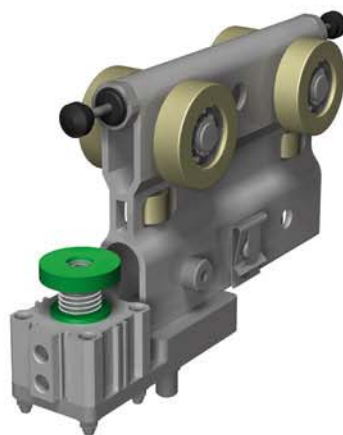
Pneumatic stop control X-axis

## Brakes

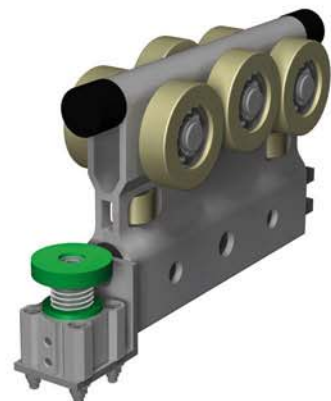
Brakes are used in order to stop the trolleys and to set them into a parking position. They can be used in X and Y-direction.



Standard brake



Brake for SR175M



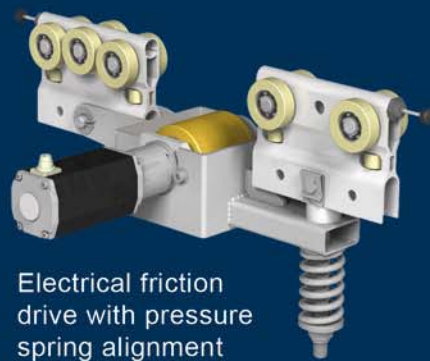
Brake for PICO-MAT



# Friction drives



Electrical friction drive with pneumatic cylinder alignment



Electrical friction drive with pressure spring alignment



Pneumactical friction drive with pneumatic cylinder alignment



Pneumactical friction drive with pressure spring alignment

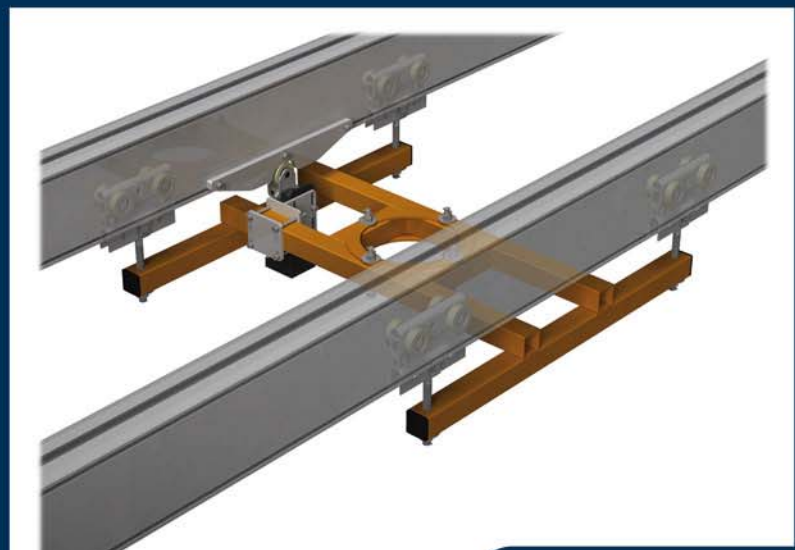
When ROLLYX rail systems with excellent smooth-running properties are concerned, friction drives only offer an additional advantage for loads from 500 kg upwards. These travel drives are available in electric and pneumatic version. In addition a drive alignment subassembly can be provided. It works continuously and engages the approach of the friction drive automatically, while on the other hand, it automatically opens the drive-way for positioning when disabled.

Special characteristics of these drives are:

- Stepless cross travel speeds
- Rather noiseless travelling
- Low energy consumption
- Use with 100% duty cycle

# Snap-in lockings

Pneumatic snap-in lockings allow positioning of trolleys. They are used for the pre-positioning at operator's work-place.



Pneumatic snap-in locking at crane trolley



Pneumatic snap-in locking at ROLLYX rail system

# Railway variants

The ROLLYX rail system offers countless combinations, which offer a solution for rather any kind of application. We distinguish between X- systems and X/Y-systems.

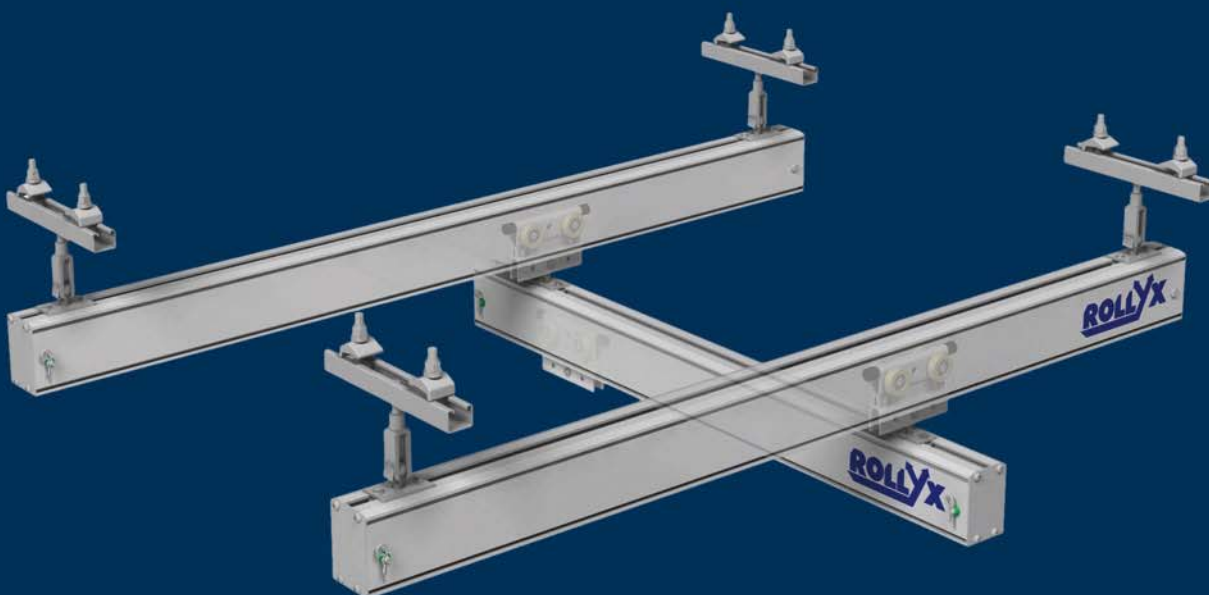


## Single rail runway with trolley

For applications, travelling in X-direction only, a single rail runway can be used. In this way practical work with tool-trolleys, chain hoist, screwdriving technology, manipulators (YXO-MAT and PICO-MAT) is enabled up to payloads of 3000 kg.

## Double rail runway with single support crane brige and trolley

This appliance already is an X/Y-system and suitable to travel both directions.



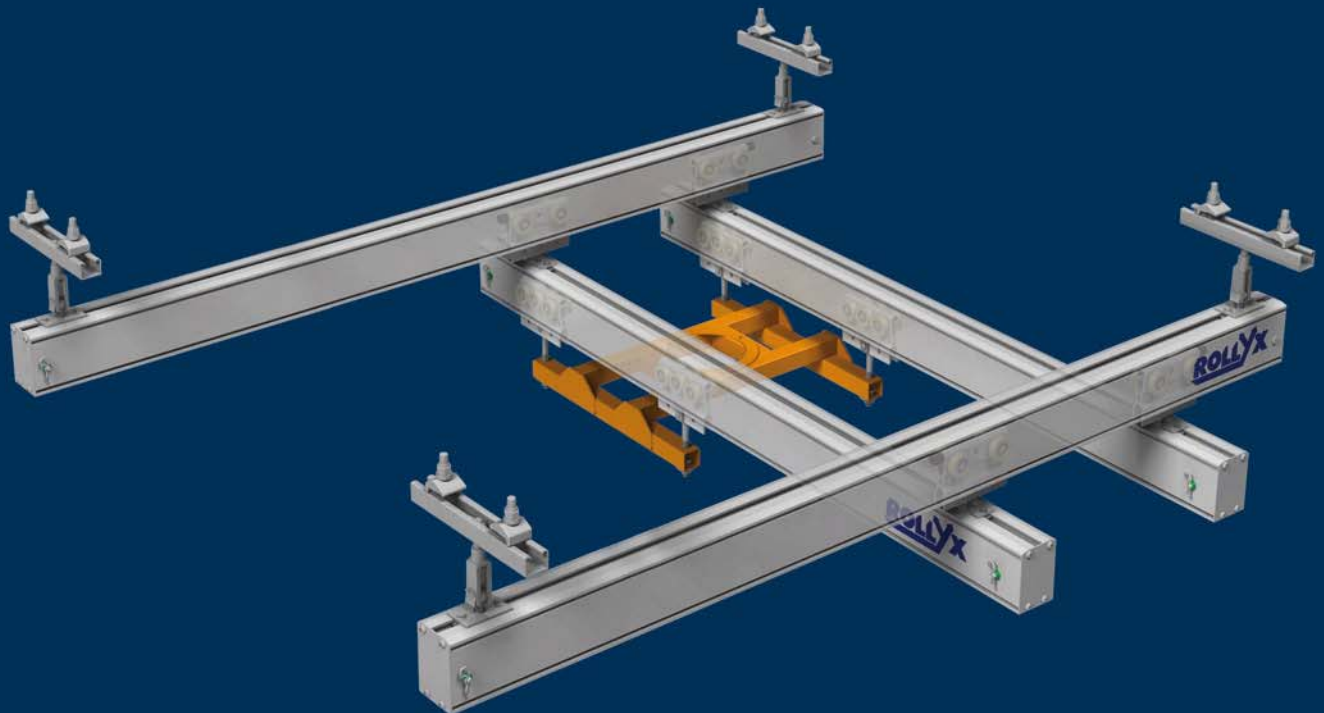


# The right solution for each application!

11

## Double rail runway with double support crane bridge and crane trolley

Applications which include a crane trolley allow a balanced weight distribution of the payload onto the double bridge and therefore they are suitable for movable loads up to 3000 kg. Consequently practical work with chain hoist, VIGO-MAT and TELO-MAT is possible.



## Triple rail runway with double support crane bridge and crane trolley

Triple rail runways come into question, when the length of run of the crane bridge exceeds 8 m, or when suspension distance would be too long to bear the load weight.



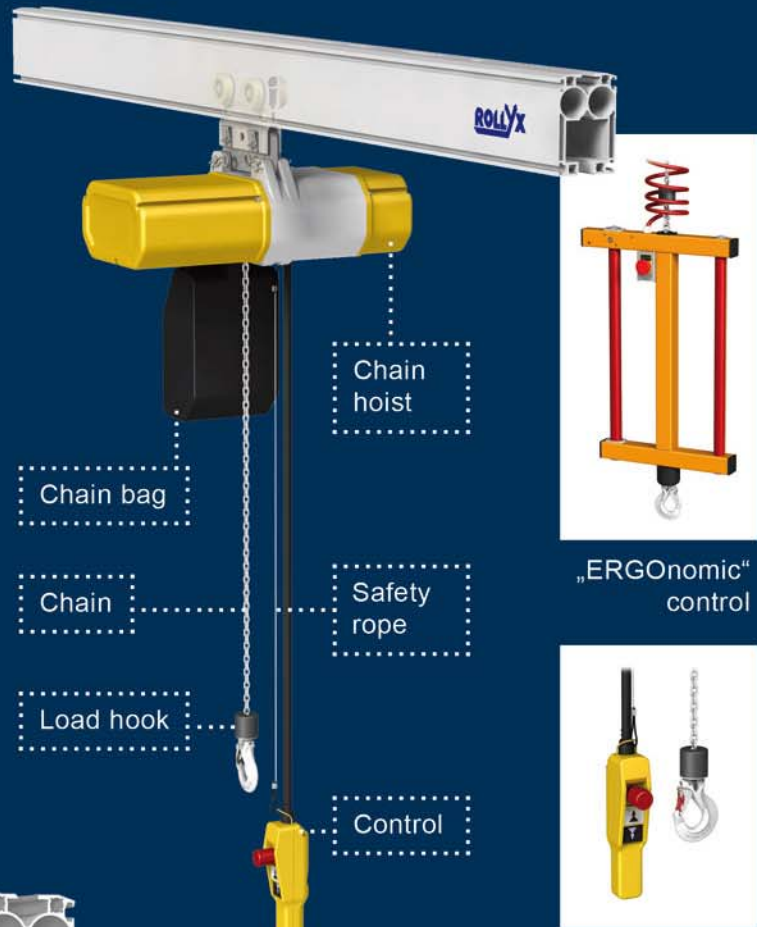


# Lifting devices

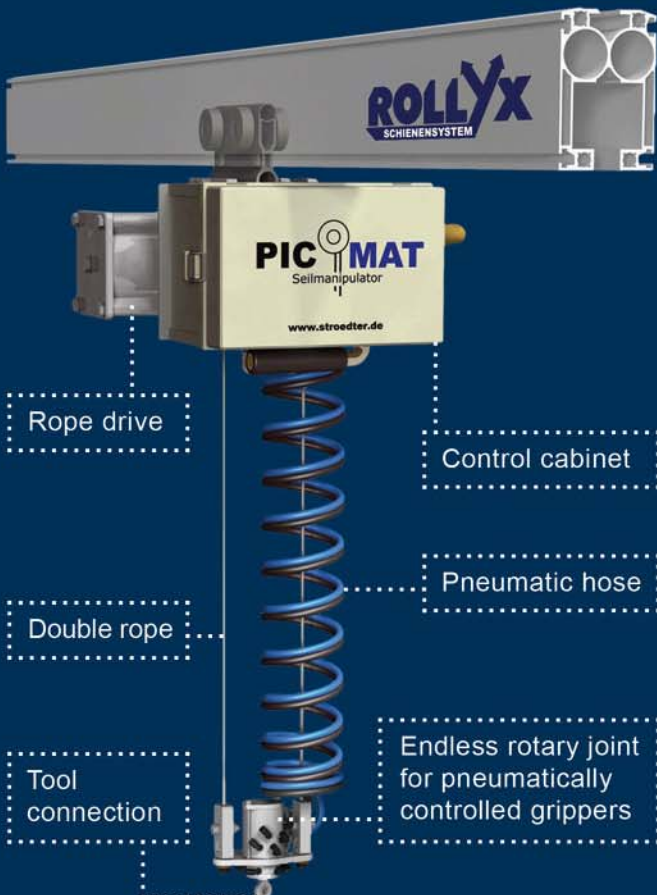
More than 30 years development work made our handling devices become reliable tools in different branches of the industry. Whether a single device or the equipment of a complete assembly line is concerned – Intelligent ergonomics directly from Strödter!

## Chain hoist

- Electric chain hoist  
400V 3ph 50Hz
- Industrial quality
- max. payload 3000 kg
- variable lifting height
- 1- or 2-strand load chain
- Handhold control  
resp. „ERGOmatic“-control



## Rope balancer



The rope balancer PICO-MAT TWIN is a hand-operated double rope manipulator with pneumatic balance control. With this device you can lift, turn, pivot or transport loads up to 100 kg.

For a simple and stepless handling the loads are pneumatically set in a weightless condition (in balance). The twin rope system offers stability against twisting, which is a major advantage over traditional single rope devices and single-strand chain hoists.

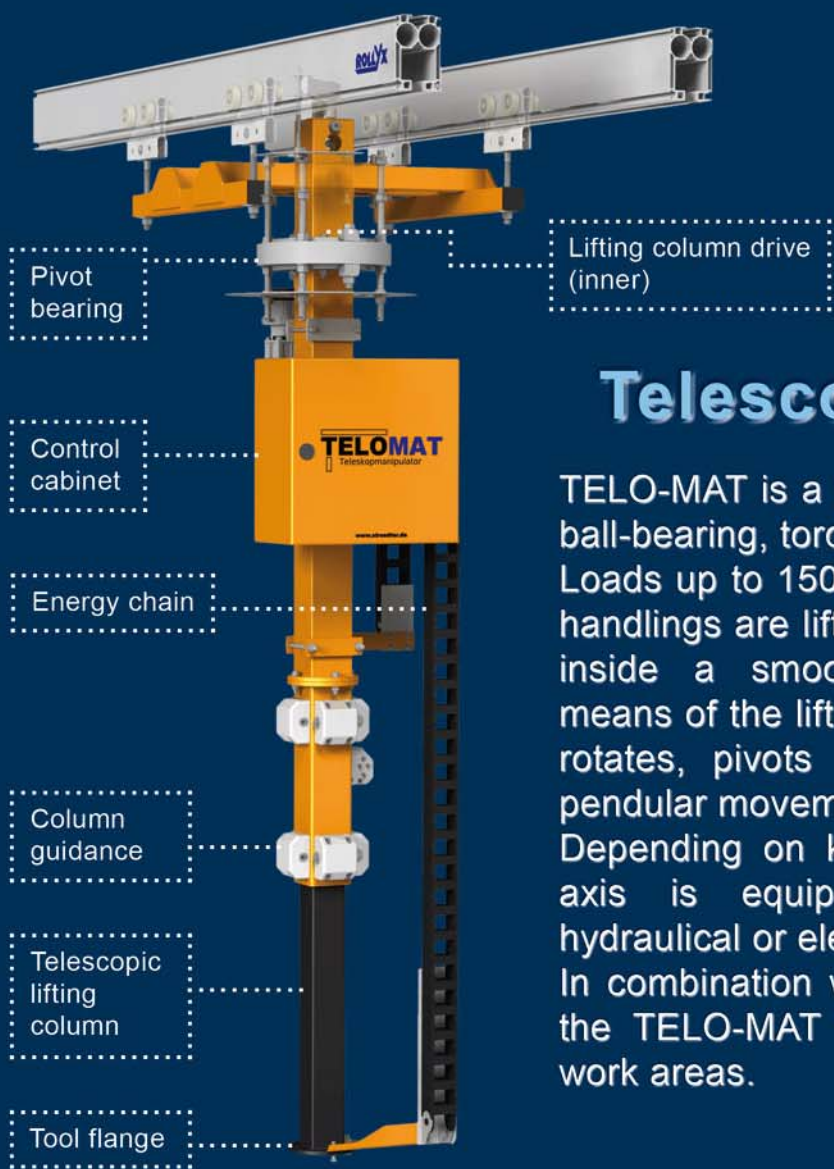
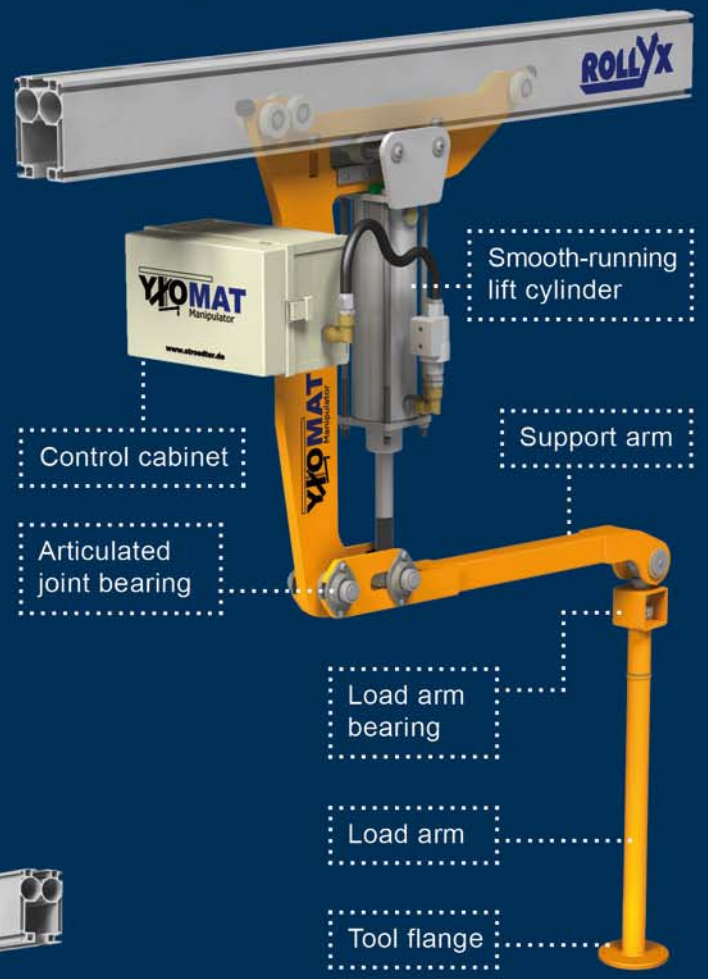


Please ask for our brochures !



# Jib-arm balancer

- max. payload 300 kg
- Lifting height 200 – 1300 mm
- fast work up to 1 m/s
- effortless and ergonomic
- allows work in standing posture
- no more bending and stretching
- energy-saving and low-noise
- 100% duty cycle
- cost-efficient



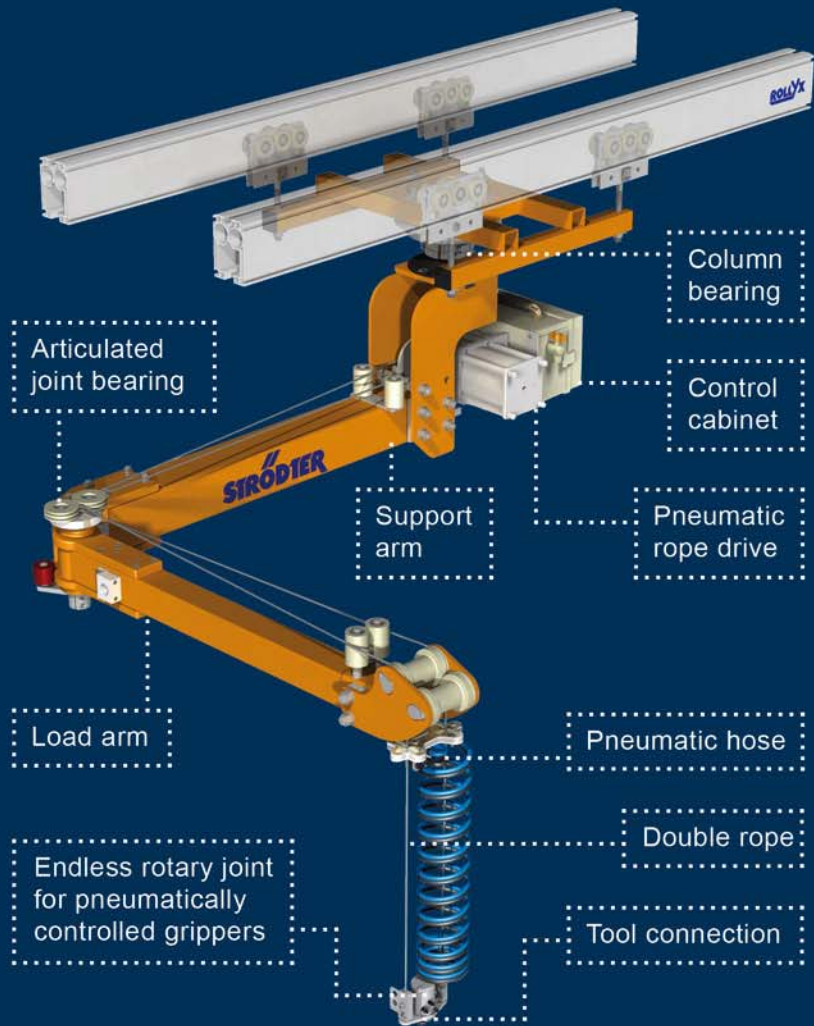
# Telescopic lifting axis

TELO-MAT is a telescopic manipulator with a ball-bearing, torque-stable guidance. Loads up to 1500 kg for flexible and sensitive handlings are lifted steplessly and are moved inside a smooth-running rail system by means of the lifting axis. The TELO-MAT lifts, rotates, pivots or transports loads without pendular movements. Depending on kind of application the lifting axis is equipped with a pneumatical, hydraulic or electrical drive. In combination with the ROLLYX rail system the TELO-MAT is employed for large-scale work areas.

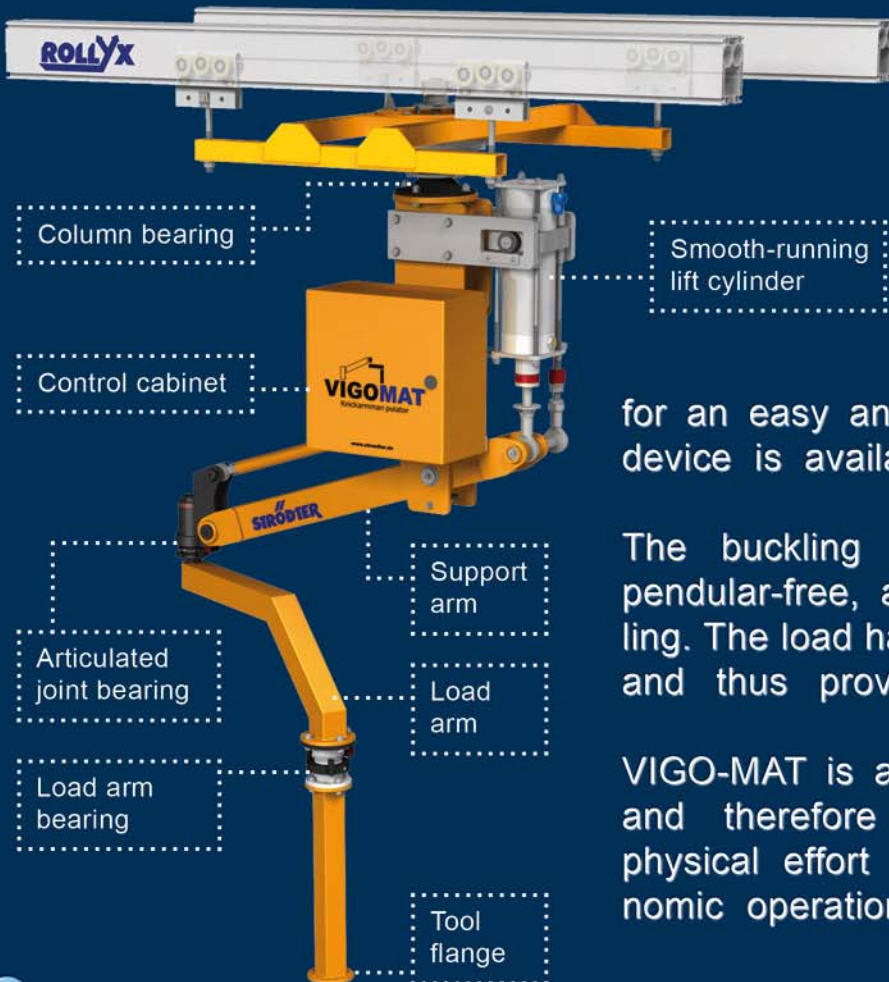


## Buckling-arm rope balancer

- max. payload 110 kg
- variable lifting height
- low risk of twisting due to double rope technique
- sensitive and stepless positioning
- endless rotary joint with 2 - 6 pneumatic connections
- energy-saving and low-noise
- Pneumatic-drive with 100% duty cycle



## Buckling-arm manipulator



VIGO-MAT is a hand-guided buckling arm manipulator with weight compensation. Loads up to 500 kg are put in a state of suspension for an easy and stepless handling. The device is available as floor-mounted or hanging version.

The buckling arm principle allows a pendular-free, accurate and easy handling. The load handling device may jut out and thus provide access to overbuilt areas.

VIGO-MAT is a weight-optimised device and therefore requires only minimal physical effort during operation. Ergonomic operation elements allow stress-free working.

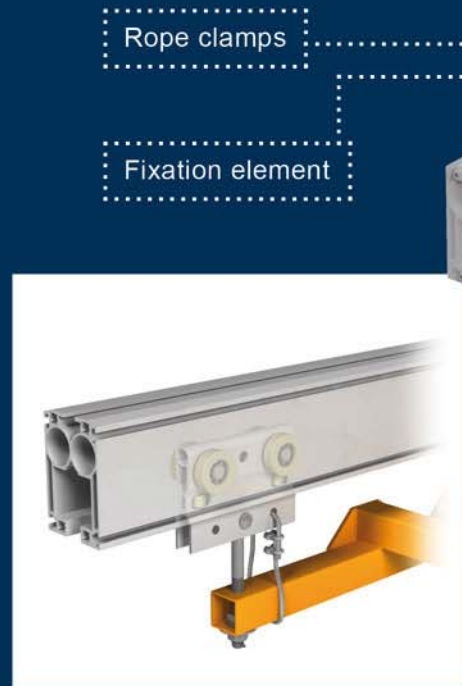


# Safety ropes

Strödter provides all suspensions with anti-fall safety ropes.



Safety rope to the I-beam



Safety rope to the trolley frame



Safety rope for X/Y range

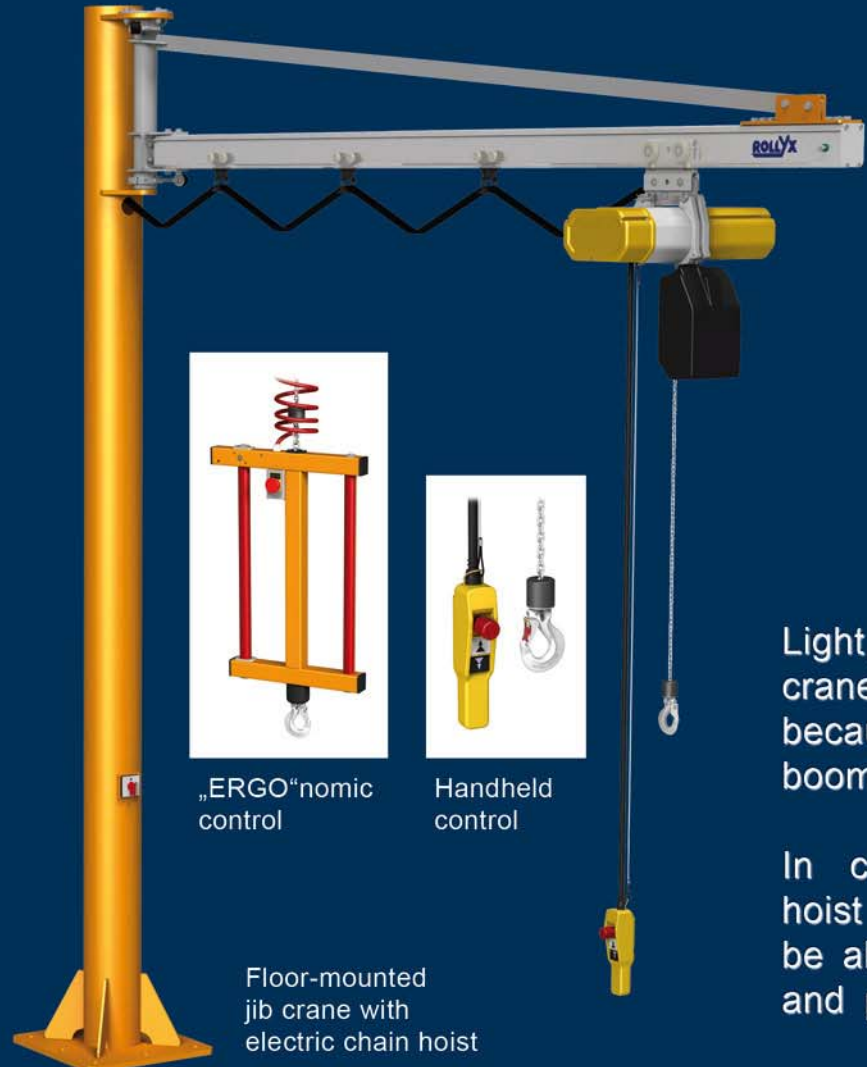


Safety rope to the device

Rope clamps

Fixation element

Arresting cable



„ERGO“ nomic control



Handheld control

Floor-mounted jib crane with electric chain hoist

# Light-crane systems

With the crane installation product line we have bundled interesting all-in-one systems and thus offer you high quality crane units.

## Jib crane

Light, lighter, lightest. The jib crane stands for low deadweight because of the aluminium jib boom, in practice this means low inertia material handling. In combination with a chain hoist or rope balancer you will be able to increase ergonomics and productivity. The max. payload comes up to 3000 kg.



# Portal steelworks

Easy-to-operate light crane systems belong to a meaningful equipment of a workstation.

Also in this area the vantages of the ROLLYX rail systems are of practical use and for this they allow a smooth-running travelling of load at all levels.



ROLLYX Rail System with Electric chain hoist for roof suspension

## Ceiling suspension

Due to the low deadweight of the ROLLYX aluminium rail systems large-size workplaces can be installed in an easy, fast and reasonably priced manner by suspension of rails from existing supporting beams of the hall. The max. payload comes up to 3000 kg.

## 2-Portals Steelwork

Our basic system (steelwork construction with smooth-running rails) consists of a 2-portals steelwork, an X/Y rail system and a chain hoist of industrial quality. The max. payload comes up to 3000 kg.



ROLLYX Rail System with Electric chain hoist and 2-Portals Steelwork

## 3-Portals Steelwork

As a light crane system the 3-portals steelwork is suitable for the realisation of large working areas. Construed as modular system it allows fast installation of taylor-made workplaces. The max. payload comes up to 3000 kg.



ROLLYX Rail System with Electric chain hoist and 3-Portals Steelwork

Easier work with

smooth-running crane systems

as all-in construction kit!



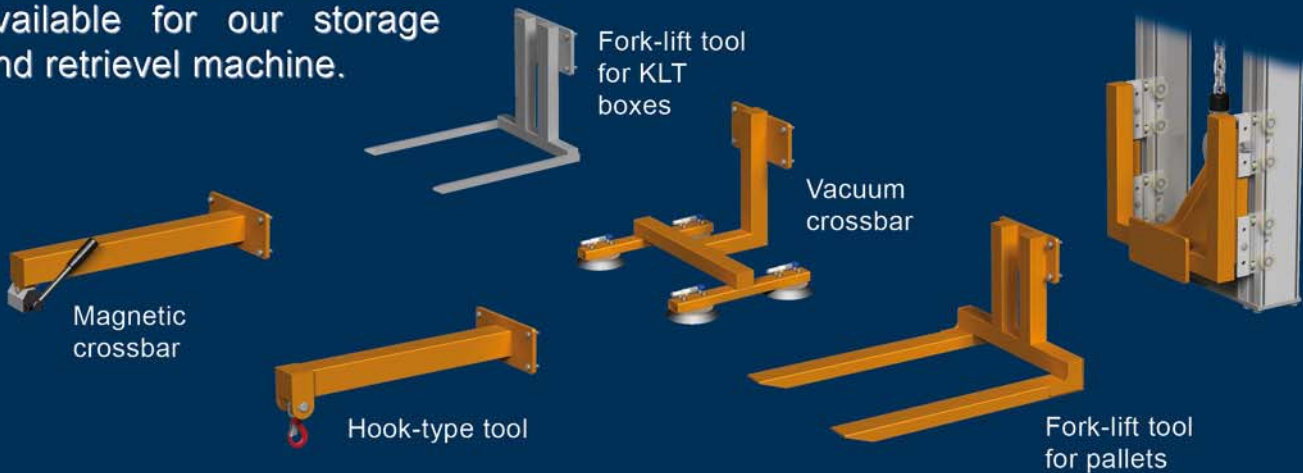
# Storage and retrieval machine

With this floor-independent fork-lift device you will stack almost up to the ceiling. It may be either used in combination with a steel portal or be mounted on hall construction. The max. payload comes up to 1000 kg.



ROLLYX Rail System with Storage and Retrieval Machine and Portals Steelwork

Various standard tools are available for our storage and retrieval machine.



A series of horizontal lines for taking notes, located in the bottom half of the page.

Notes



Prefabricated module up to 8 m length

## Element for economic installation of assembly lines

- Complete energy supply with rail runway for:
  - Manipulators
  - Tool trolleys
  - Screw technology
- Cable channels
- Air duct 4"
- Light strip
- Emergency stop
- Q-Stop



Rail profile  
SR 175M



Conductor line  
power rails



Energy supply  
electric / pneumatic

- low planning expense
- easy and quick installation
- low purchase costs
- perfect functionality

**ROLLYX**  
SCHIENENSYSTEM

All-in-one  
Multifunction Module





Chain hoist  
max. 3000 kg



ZYBA-MAT  
max. 400 kg



PICO-MAT  
max. 120 kg



YXO-MAT  
max. 300 kg



Buckling-arm rope  
balancer max. 110 kg



Buckling-arm rope  
balancer max. 110 kg



SUBA-MAT  
max. 580 kg



TELO-MAT  
max. 1500 kg



VIGO-MAT  
max. 500 kg



VIGO-MAT  
max. 500 kg

*We get loads floating on air!*



Articulating jib crane  
max. 500 kg



Jib crane  
max. 3000 kg



2-Portals Steelwork  
max. 3000 kg



3-Portals Steelwork  
max. 3000 kg



Ceiling suspension  
max. 3000 kg



Storage and retrieval  
machine max. 1000 kg

Lined writing area consisting of 24 horizontal lines.





# Sales Program



Gripper Technics  
Automotive Industry



Gripper Technics  
General Industry

Please ask for our information!

Brochure Survey

# Brochures



VIGO-MAT  
Brochure



TELO-MAT  
Brochure

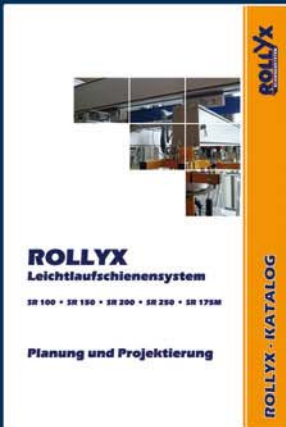


PICO-MAT  
Brochure

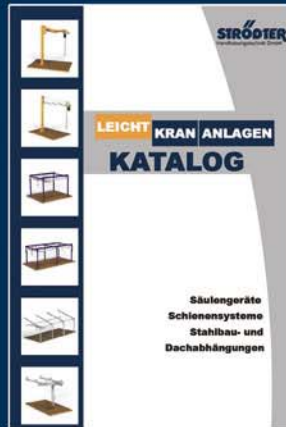


Buckling-arm rope  
balancer Brochure

# Catalogues



ROLLYX Planning and  
Project Engineering



Light-Crane Systems

All documents are available in different languages.



# Catalogue- & Brochure Survey



# Sales Program

[www.stroedter.de](http://www.stroedter.de)



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Conductor line  
power rails



Crane bridge  
suspensions



Buffer elements



Stiffening girders



Crane way switches



Rail joints



Double trolleys



Friction drives



Travel units



## Smooth-Running Aluminium Rail System