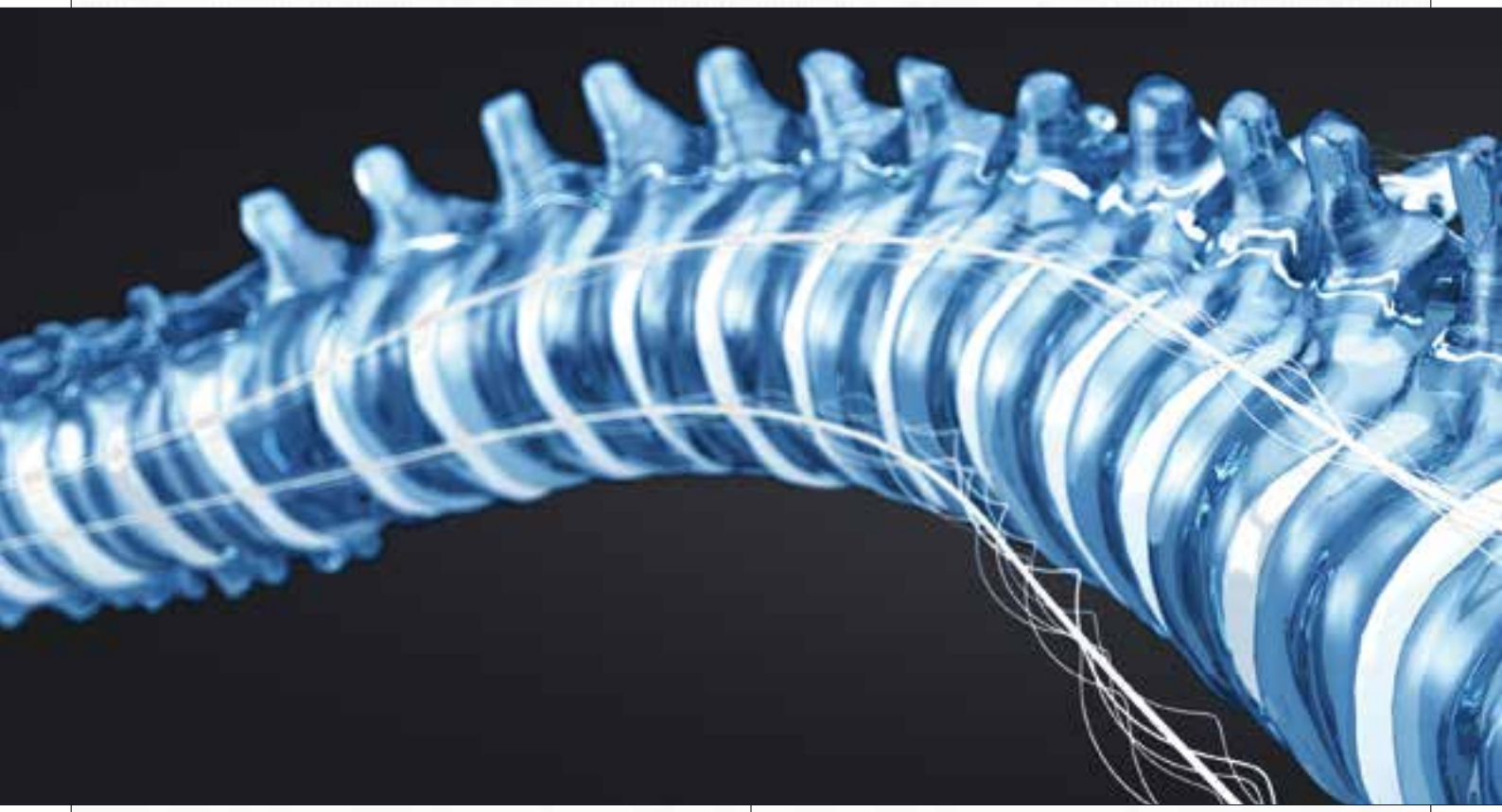
Spindle **Lifting Systems**

ERGOSWISS
hydraulic and spindle lift systems

English

The **Challenge**



Ergonomics

Physical discomfort such as backache and leg pains have a major impact on a person's quality of life and consequently on a company's performance. These ailments can lead to a decline in productivity, work of lower quality and extended sick leave.

The aim of ergonomics is to adapt the working environment to meet people's needs. In concrete terms, this means adapting the height at which people work to their different body heights and activities as well as optimising working conditions, work processes and equipment.
Perfectly equipped work stations reduce the distance employees have to walk and improve work processes.

Ergonomic work stations promote employee motivation, thereby increasing productivity. Taking these factors into consideration, you can see how the Ergoswiss system can pay for itself in just a few months.

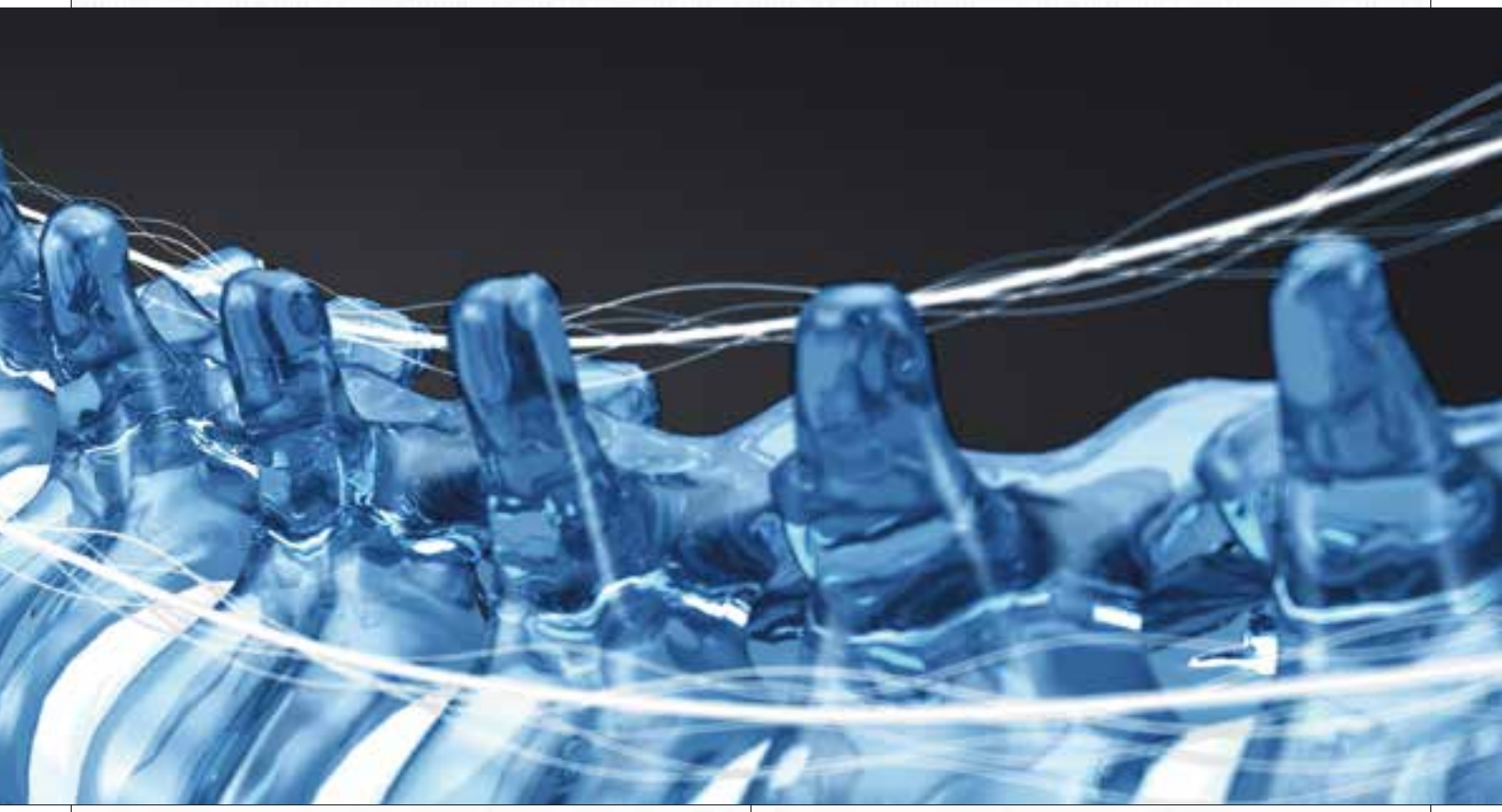
About us

We have been developing and manufacturing hydraulic and spindle lifting systems since 1999. The lifting systems are available as lifting columns and in the form of table legs and table bases. They are used for height-adjustable work stations or for a wide range of applications. Our mission is to strive for quality, progress and reliability.

Our products aim to improve the working environment and enhance working comfort.

We supply:
- manufacturers of operating, assembly and laboratory work stations
- manufacturers of machines and conveyer systems
- manufacturers of industrial kitchens and healthcare institutions
- manufacturers from the furniture and office furniture industries

The **Solution**



Service

In the field of mechanical engineering, our products offer a cost-efficient and simple alternative to conventional drive systems.

We offer you:
- expert advice
- online configuration with automatic creation of a quotation
- rapid response to requests for quotations
- short lead times
- faultless after-sales service
- world-wide presence and delivery

We would be happy to help meet your individual needs.
Visit our website or simply give us a call.

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System configurator

Assemble your very own lifting system at **www.ergoswissconfig.com.**
Whether you need individual lifting elements or a complete base frame, all we need is a few clicks from you to configure a suitable product. We will then send you a personal quotation by e-mail.

Online Shop

You can easily order hydraulic and spindle lifting systems, screen lifts, table bases and accessories from our Online Shop at **shop.ergoswiss.com.**

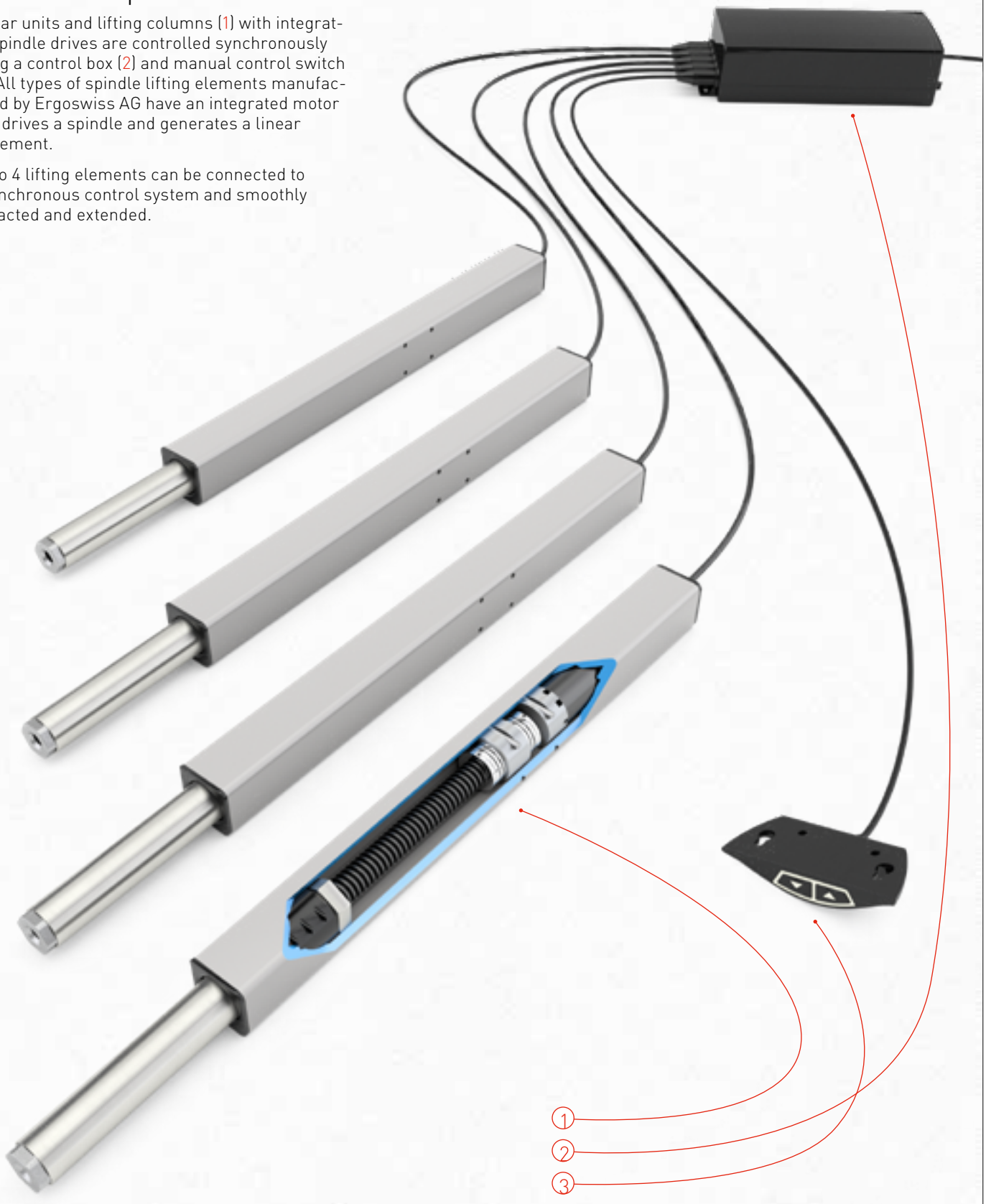
ERGOSWISS

System **Function**

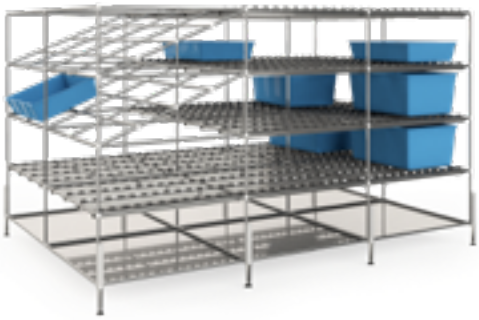
Proven and powerful

Linear units and lifting columns (1) with integrated spindle drives are controlled synchronously using a control box (2) and manual control switch (3). All types of spindle lifting elements manufactured by Ergoswiss AG have an integrated motor that drives a spindle and generates a linear movement.

Up to 4 lifting elements can be connected to a synchronous control system and smoothly retracted and extended.

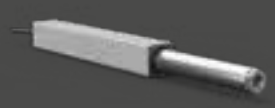
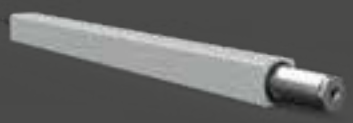
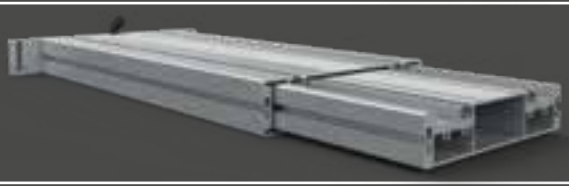
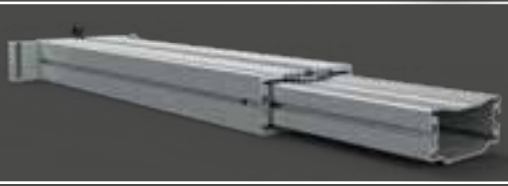
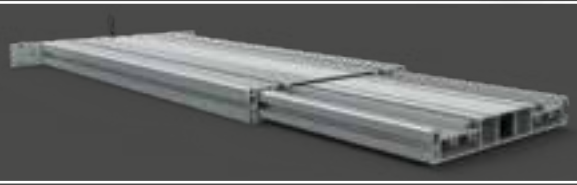


ergo Applications



Product **Overview**

Some of the features of our spindle lifting systems:
- Simple plug & play assembly and start-up.
- Generous legroom and more design scope as the drive is installed directly in the lifting element.
- No restoring force is required.

Lifting element	Stability	Cross section	Installation
	●●●○○	35 x 35 mm	600 mm 700 mm
		35 x 35 mm	
	●●●◐○	45 x 45 mm	600 mm 700 mm
		80 x 50 mm	
	●●●●●	260 x 60 mm	530 mm 630 mm
	●●●●◐	150 x 70 mm	530 mm 630 mm
	●●●◐○	45 x 45 mm	640 mm 740 mm
		260 x 40 mm	
		50 x 50 mm	

*Please also note the maximum load of the entire system

- The spindle lifting system also allows for horizontal adjustment.
- The lifting system is only available with an electric motor. (For a hand-crank solution, see hydraulic catalogue).
- As our control units are connected in parallel, they can drive up to 12 lifting elements synchronously.

Stroke length	Spindle lifting system	Max. system load per lifting element*	Hydraulic lifting system	Max. system load per lifting element*
300 mm 400 mm	**SLA**	1500 N	**LA**	1500 N 2500 N
			LD	1500 N 2500 N
300 mm 400 mm	**SLG**	1500 N	**LG**	1500 N 2500 N
			TA	1500 N 2500 N
300 mm 400 mm	**SL**	2000 N 3000 N	**TL**	1500 N 2500 N
300 mm 400 mm	**SM**	2000 N 3000 N	**TM**	1500 N 2500 N
300 mm 400 mm	**SQ**	1500 N	**TQ**	1500 N 2500 N
			TT	1500 N 2500 N
			TU	1500 N 2500 N

System Combinations SLA|SLG|SQ

This table will help you to put together your own system on the basis of the required system load, the number of lifting element (linear units and lifting columns) to be activated and the desired lifting distance.

150 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
1 lifting element	300 mm	* 1330	VD SCT2	9	2/18
1 lifting element	400 mm	* 1340	VD SCT2	9	2/18
300 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
2 lifting elements	300 mm	* 1330	VD SCT2	9	2/18
2 lifting elements	400 mm	* 1340	VD SCT2	9	2/18
450 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
3 lifting elements	300 mm	* 1330	VD SCT4	9	2/18
3 lifting elements	400 mm	* 1340	VD SCT4	9	2/18
600 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
4 lifting elements	300 mm	* 1330	VD SCT4	9	2/18
4 lifting elements	400 mm	* 1340	VD SCT4	9	2/18
700 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
6 lifting elements	300 mm	* 1330	2x VD SCT4	9	2/18
6 lifting elements	400 mm	* 1340	2x VD SCT4	9	2/18
800 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
8 lifting elements	300 mm	* 1330	2x VD SCT4	9	2/18
8 lifting elements	400 mm	* 1340	2x VD SCT4	9	2/18

Control unit type VD	Hand switch up/down	Hand switch memory
		

* Linear unit **SLA, SLG** and lifting column **SQ**

** Duty cycle

Control voltage (230, 210 VAC)

System Combinations SL|SM

This table will help you to put together your own system on the basis of the required system load, the number of lifting element (lifting columns) to be activated and the desired lifting distance.

200 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
1 lifting element	300	* 1430	*** compact-3	12	2/18
1 lifting element	400	* 1440	*** compact-3	12	2/18
400 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
2 lifting elements	300	* 1430	*** compact-3	12	2/18
2 lifting elements	400	* 1440	*** compact-3	12	2/18
2 lifting elements	300	* 1430	*** compact-3	12	2/18
2 lifting elements	400	* 1440	*** compact-3	12	2/18
600 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
2 lifting elements	300	* 1330	*** VD SCT2	9	2/40
2 lifting elements	400	* 1340	*** VD SCT2	9	2/40
750 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
3 lifting elements	300	* 1330	*** VD SCT4	9	2/40
3 lifting elements	400	* 1340	*** VD SCT4	9	2/40
1000 kg	Stroke length	Lifting element type	Control unit type	Lifting speed mm/s	Duty cycle** (on/off)
4 lifting elements	300	* 1330	*** VD SCT4	9	2/40
4 lifting elements	400	* 1340	*** VD SCT4	9	2/40

Control unit type compact	Hand switch up/down	Hand switch memory
		
Control unit type VD	**Hand switch up/down**	**Hand switch memory**
		

* Lifting column **SM** or **SL**
** Duty cycle
*** Control voltage (230, 110 VAC)

ERGOSWISS

The Linear units SLA|SLG

Universal and compact

The housing of the linear unit consists of a colourless anodised aluminium profile.
The stand pipe is made of stainless steel and positioned in a plastic bushing. It is operated by means of an internal spindle drive. The cable length is 2 metres.

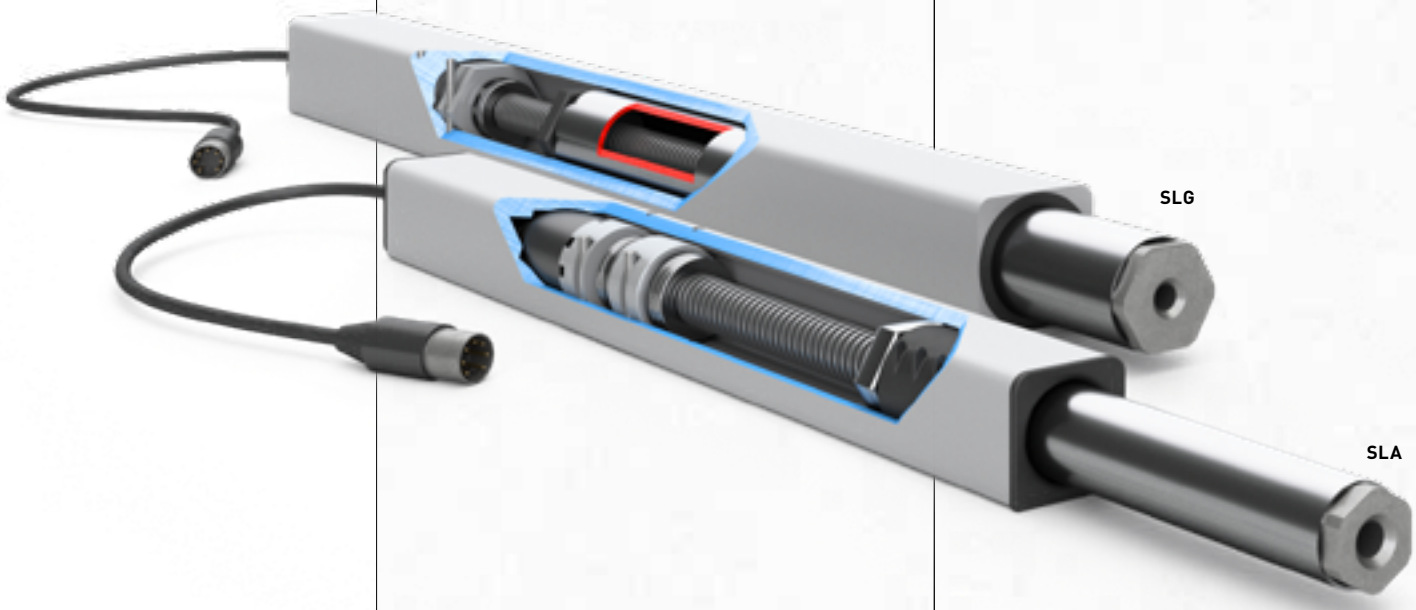
Up to 4 linear units can be connected to one control unit and operated synchronously.

Application

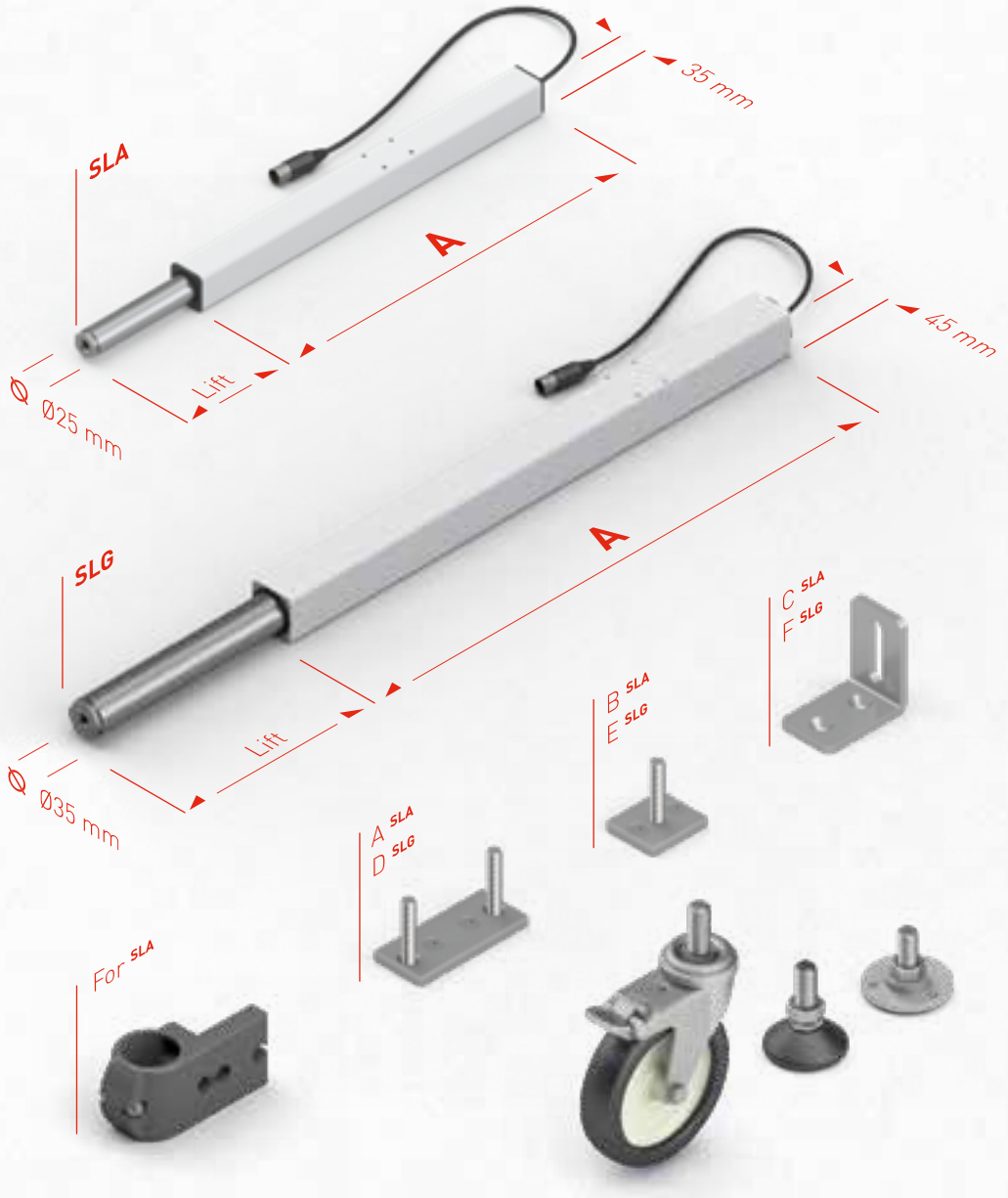
The linear units **SLA** and **SLG** are used in places where a work surface needs to be adjusted to the right ergonomic height. Existing work stations can simply be retrofitted. The systems fit perfectly into the 40x40 mm and 50x50 mm steel profiles which are often used as support elements and legs for work stations.

Compared to the linear unit **SLA** (cross section 35x35 mm), the linear unit **SLG** (cross section 45x45 mm) can absorb higher bending moments and is more stable at the same lifting distance.

- Tooling shop
- Machine industry
- Furniture industry



Dimensions **SLA|SLG**



Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Technical data

- Versatile linear guide rail with **internal** drive unit
- Compressive force per lifting element 1500 N (**SLA/SLG**)
- Tensile force per lifting element 1500 N (**SLA/SLG**)
- Please also note the maximum load of the entire system
- Synchronous control of 1 to 8 linear units
- Lifting speed 9 mm/s
- Stroke length 300 or 400 mm
- **SLA** Mb stat. = 150 Nm*
  SLG Mb stat. = 200 Nm*
- **SLA** Mb dyn. = 50 Nm**
  SLG Mb dyn. = 80 Nm**
- No additional guide rail is required
- Colour: colourless anodised aluminium

* Mb stat. = max. permissible bending moment at a standstill

** Mb dyn. = max. permissible bending moment during lifting movement

Typ **SLA|SLG**	Lift	A
SLA|SLG 1330	300	600 mm
SLA|SLG 1340	400	700 mm

ERGOSWISS

Lifting column **SL**

Elegant and powerful

The lifting column **SL** consists of two colourless anodised aluminium profiles, guided by plastic gliders. Each lifting column has an **internal** motor that drives a threaded spindle.
The cable length is 1.8 metres.

The T-slots on 3 sides (width 8 mm) of the lifting column allow the addition of crossbars, shelves, attachments and mountings.

Up to 3 (4) lifting columns can be connected to one control unit. When a maximum of 4 control units are synchronised, up to 12 lifting columns can be operated synchronously.

The choice of system load defines the type of control unit (see system combination).

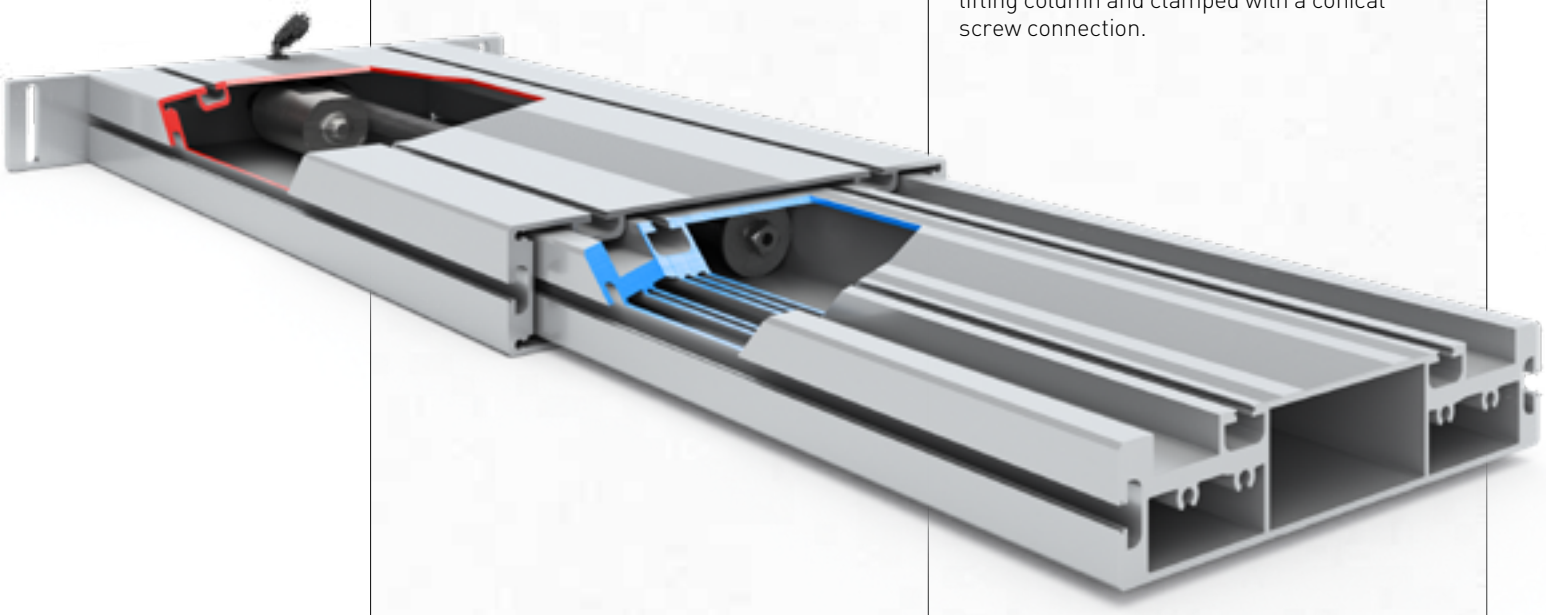
Application

The **SL** is available as a lifting system (lifting column and control unit) or as a complete base frame.

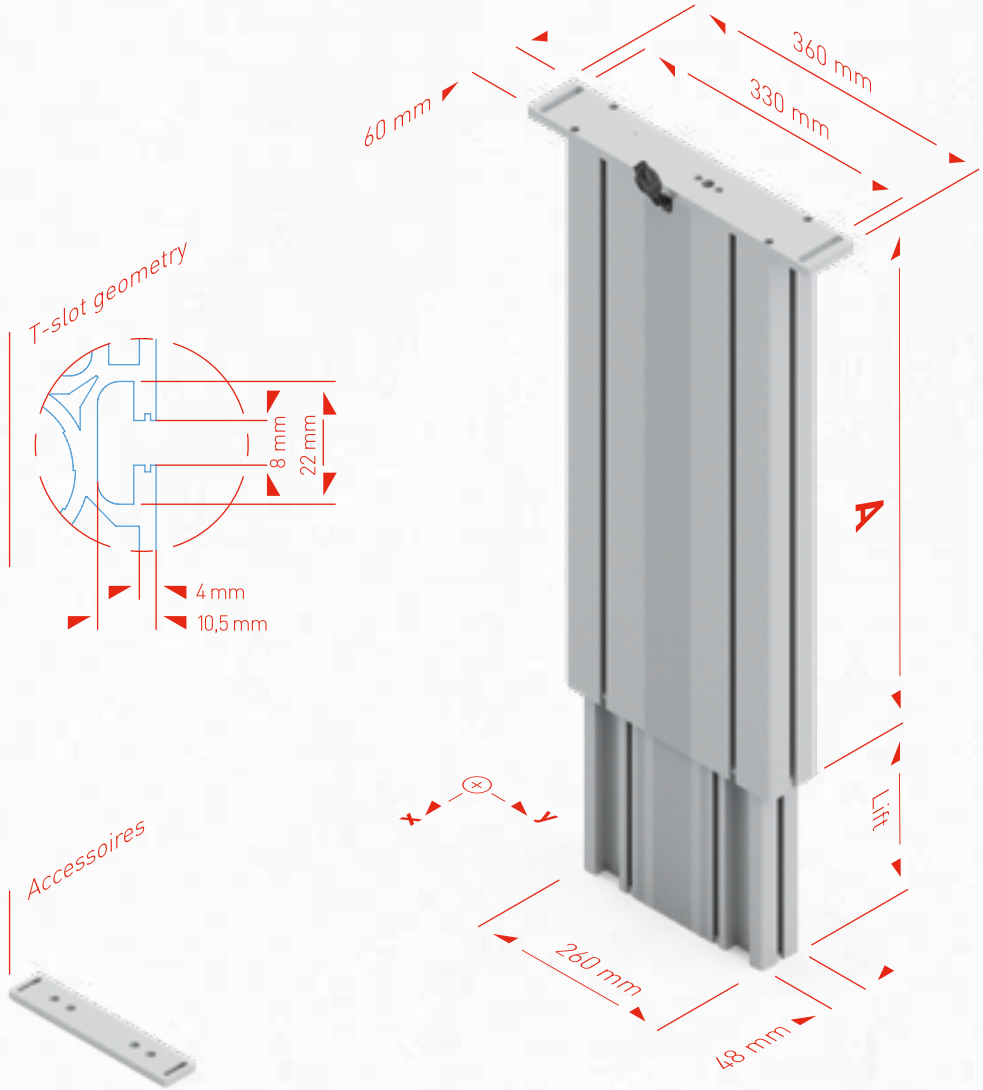
The system **SL** can be used for assembly tables, in assembly units, for office desks, height-adjustable beds and bathtubs and for general use in furniture construction and mechanical engineering.

The following accessories are available:
- crossbars in various lengths
- telescopic crossbar
- table feet with adjustable rubber feet
- base plates
- option: ESD (electrostatic discharge) version

The crossbars are supplied with pre-fitted universal connectors. These can be pushed into the lifting column and clamped with a conical screw connection.



Dimensions **SL**



Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Technical data

- Versatile lifting column with **internal** drive unit
- System loads:
  - 1 **SL:** 2000 N
  - 2 **SL:** 4000 N (6000 N)
  - 3 **SL:** 4000 N (6000 N)
  - 4 **SL:** (10000 N)
- Synchronous control of 1 to 4 lifting columns
- Lifting speed 12 mm/s (9 mm/s)
- Stroke length 300 or 400 mm
- Mb**x** stat. = 450 Nm*
  Mb**y** stat. = 1200 Nm*
- Mb**x** dyn. = 200 Nm**
  Mb**y** dyn. = 550 Nm**
- Colour: colourless anodised aluminium

* Mb stat. = max. permissible bending moment at a standstill

** Mb dyn. = max. permissible bending moment during lifting movement

Lifting column **SL**		
	A	**Lift**
SL 1430 (1330)	530 mm	300 mm
SL 1440 (1340)	630 mm	400 mm

ERGOSWISS

Base frame **SL**

Flexible assembly

The base frame **SL** has been designed for fast and flexible assembly of tables.

The maximum system load is 4000 N.
The adjustment range is 400 mm and the lifting speed 12 mm/s.

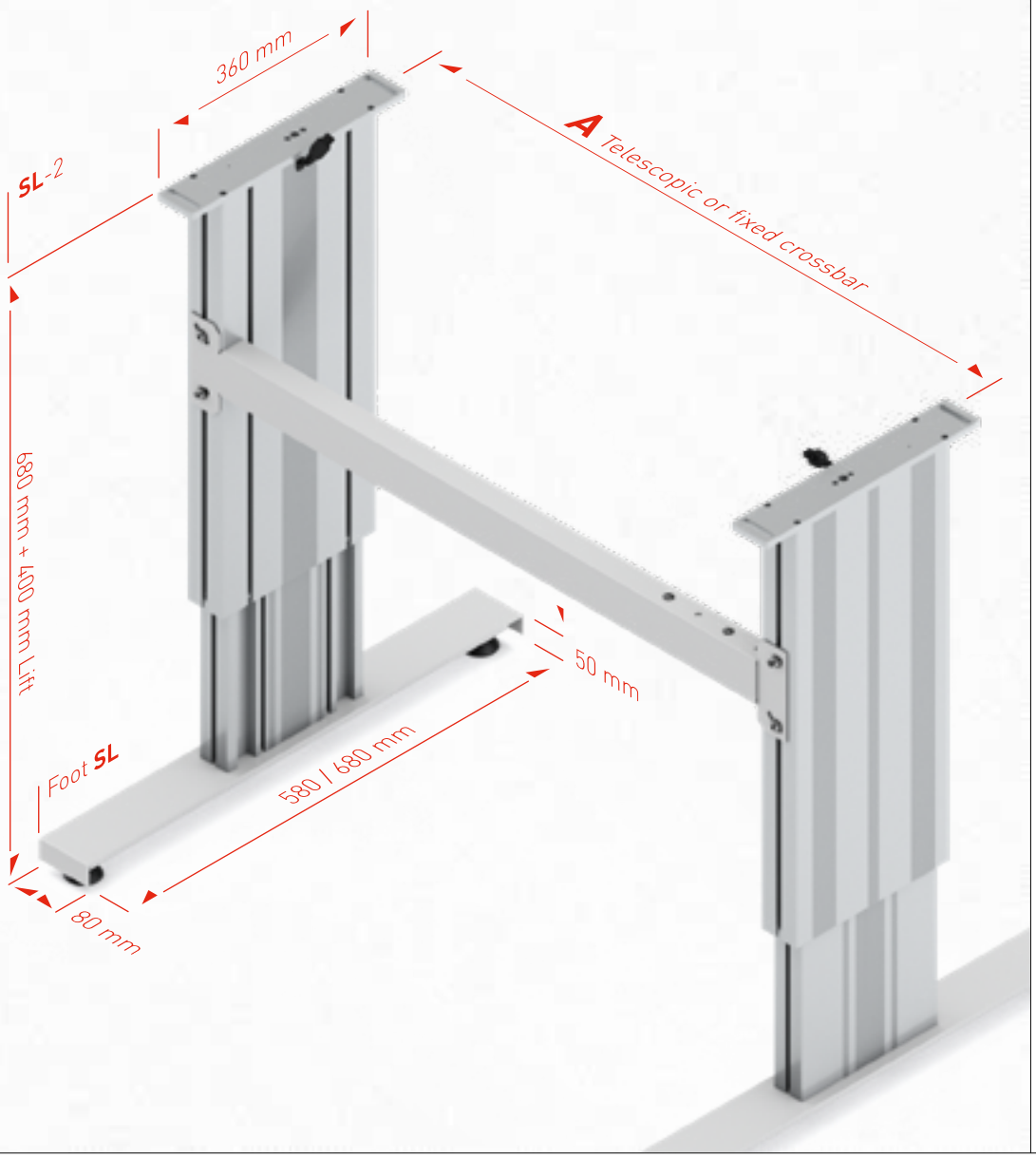
The base frame **SL** consists of 2 lifting columns, a crossbar and 2 table feet. The crossbars slide easily into the grooves of the lifting column and are clamped with an Allen key.

Both lifting columns are connected to the synchronous control system by means of a plug-in connector and are immediately ready for operative use.

Various screws to mount the table top are included in delivery. The base frame is delivered unassembled.

Assembly and operating instructions are included with every delivery. They can also be downloaded from **www.ergoswiss.com.**

Dimensions of base frame **SL**



Base frame **SL-2**	
	A
SL-2	960 - 1610 mm

Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

On request available:
- System load 6000 N (9 mm/s)
- Installation 580 mm (Stroke length 300 mm)

You can also buy the **SL** base frame directly from our Online Shop!

shop.ergoswiss.com

ERGOSWISS

Lifting column **SM**

Slim and robust

The lifting column **SM** consists of two colourless anodised aluminium profiles, guided by plastic gliders. Each lifting column has an **internal** motor that drives a threaded spindle.
The cable length is 1.8 metres.

The T-slots on 3 sides (width 8 mm) of the lifting column allow the addition of crossbars, shelves, attachments and mountings.
Up to 3 (4) lifting columns can be connected to one control unit. When a maximum of 4 control units are synchronised, up to 12 lifting columns can be operated synchronously.

The choice of system load defines the type of control unit (see system combination).

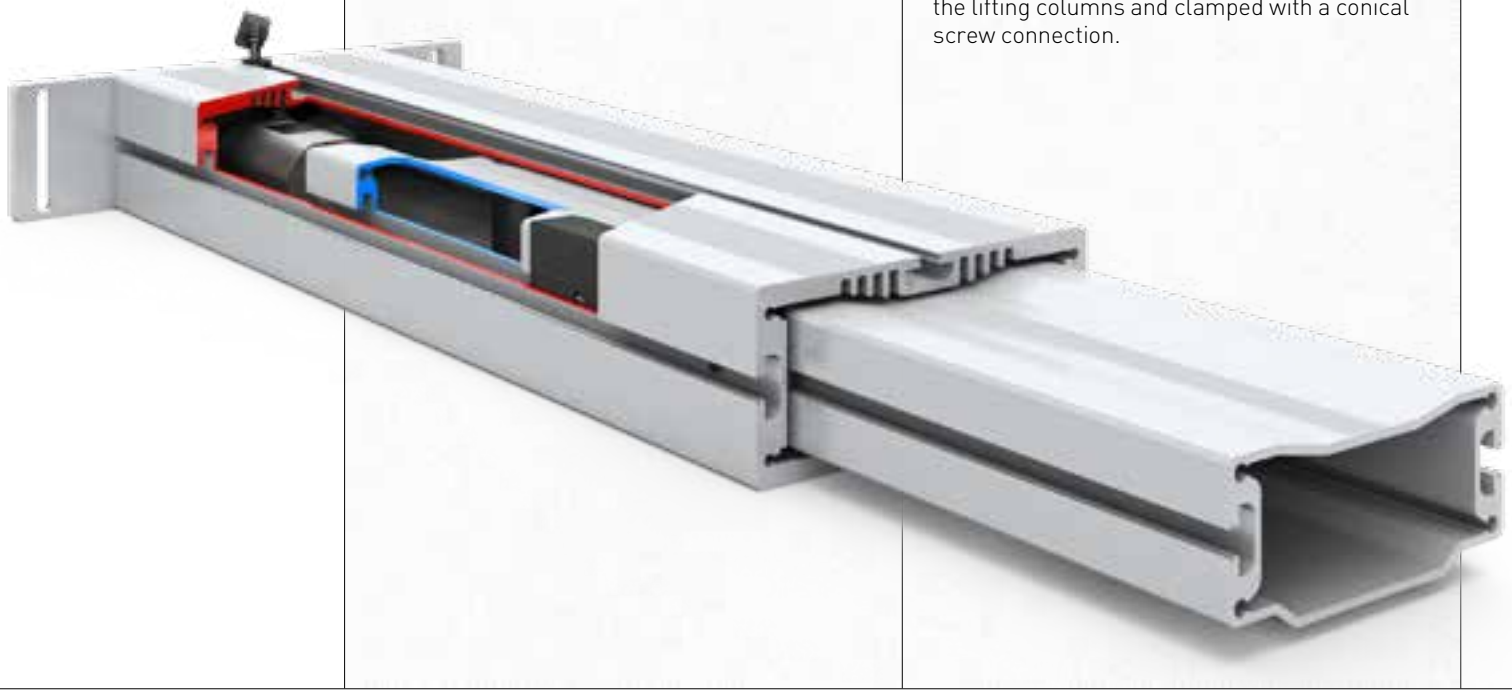
Application

The **SM** is available as a lifting system (lifting column and control unit) or as a complete base frame.

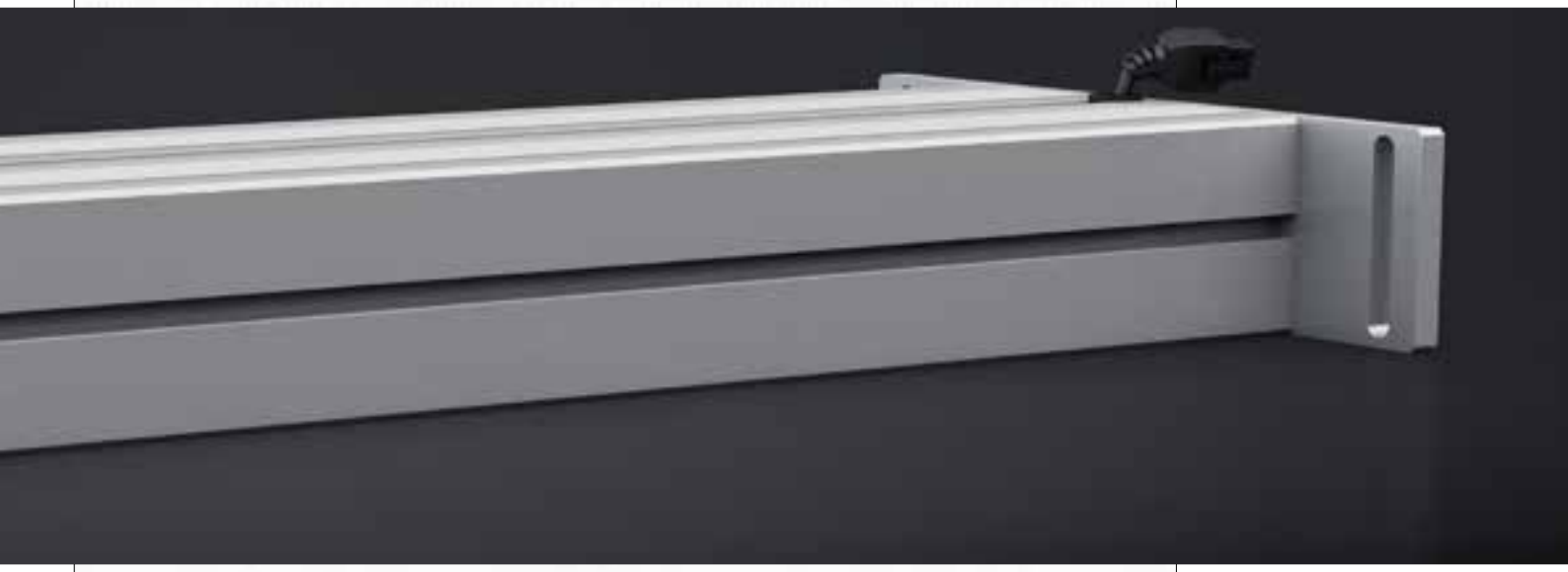
The system **SM** can be used for assembly tables, in assembly units, for office desks, height-adjustable beds and bathtubs and for general use in furniture construction and mechanical engineering.

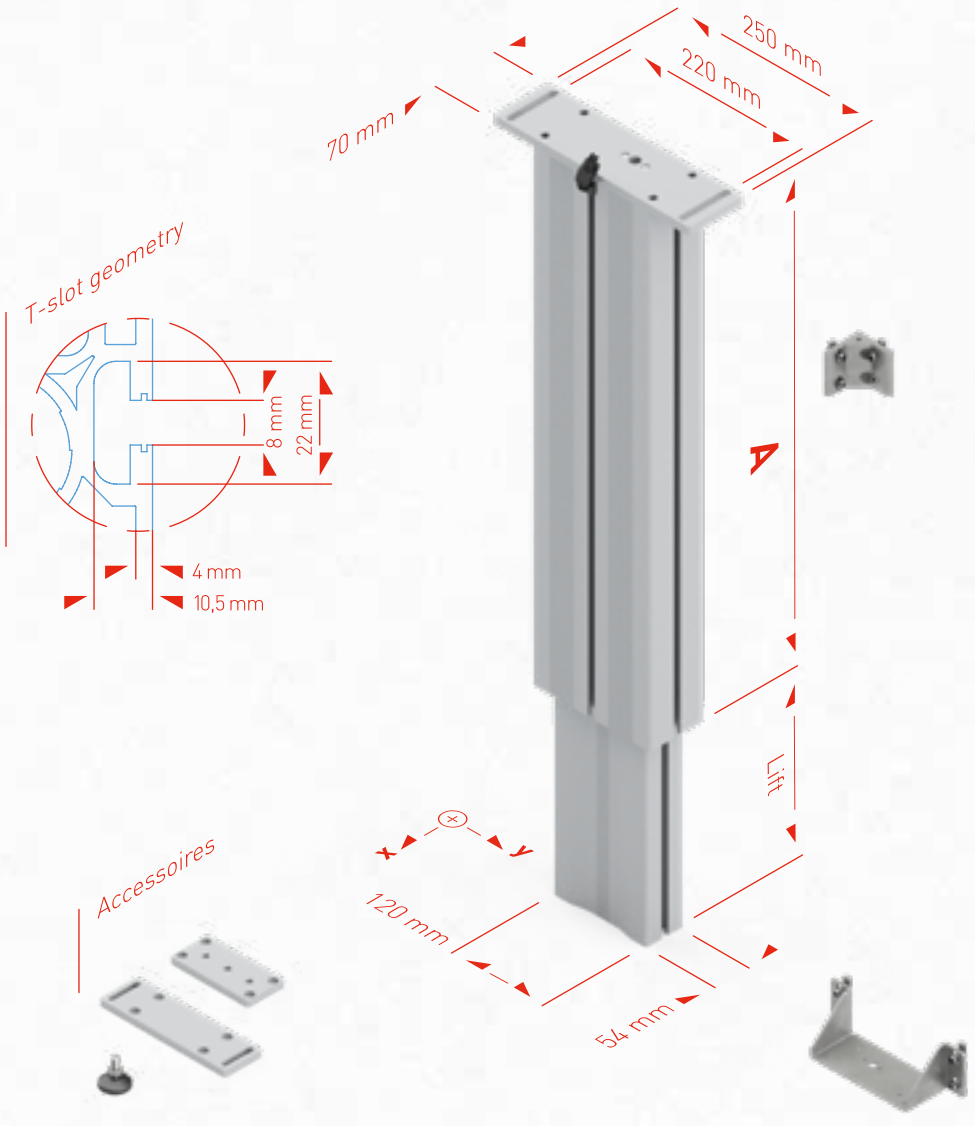
The following accessories are available:
- crossbars in various lengths
- telescopic crossbar
- table feet with adjustable rubber feet
- base plates
- option: ESD (electrostatic discharge) version

The crossbars are supplied with pre-fitted universal connectors. These can be pushed into the lifting columns and clamped with a conical screw connection.



Dimensions **SM**





Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Technical data

- Versatile lifting column with **internal** drive unit
- System loads:
  - 1 **SM:** 2000 N
  - 2 **SM:** 4000 N (6000 N)
  - 3 **SM:** 4000 N (6000 N)
  - 4 **SM:** (10000 N)
- Synchronous control of 1 to 4 lifting columns
- Lifting speed
  12 mm/s (9 mm/s)
- Stroke length
  300 or 400 mm
- Mb**x** stat. = 350 Nm*
  Mb**y** stat. = 900 Nm*
- Mb**x** dyn. = 150 Nm**
  Mb**y** dyn. = 450 Nm**

Colour: colourless anodised aluminium

* Mb stat. = max. permissible bending moment at a standstill

** Mb dyn. = max. permissible bending moment during lifting movement

Lifting column **SM**	**A**	**Lift**
SM 1430 (1330)	530 mm	300 mm
SM 1440 (1340)	630 mm	400 mm

ERGOSWISS

Base frame **SM**

Combinable in a variety of ways

The base frame **SM-1** consists of a lifting column mounted on a table foot with adjustable feet. The lifting column **SM** is equipped with a table plate support which is used to attach a table top.

- including 1 control box and 1 manual control switch
- ideal as a lectern
- System load 2000 N (12 mm/s)

The base frame **SM-2** consists of two lifting columns each of which is mounted on a table foot with adjustable feet. The columns are connected by a crossbar. Each lifting column **SM** is equipped with a table plate support which is used to attach the table top.

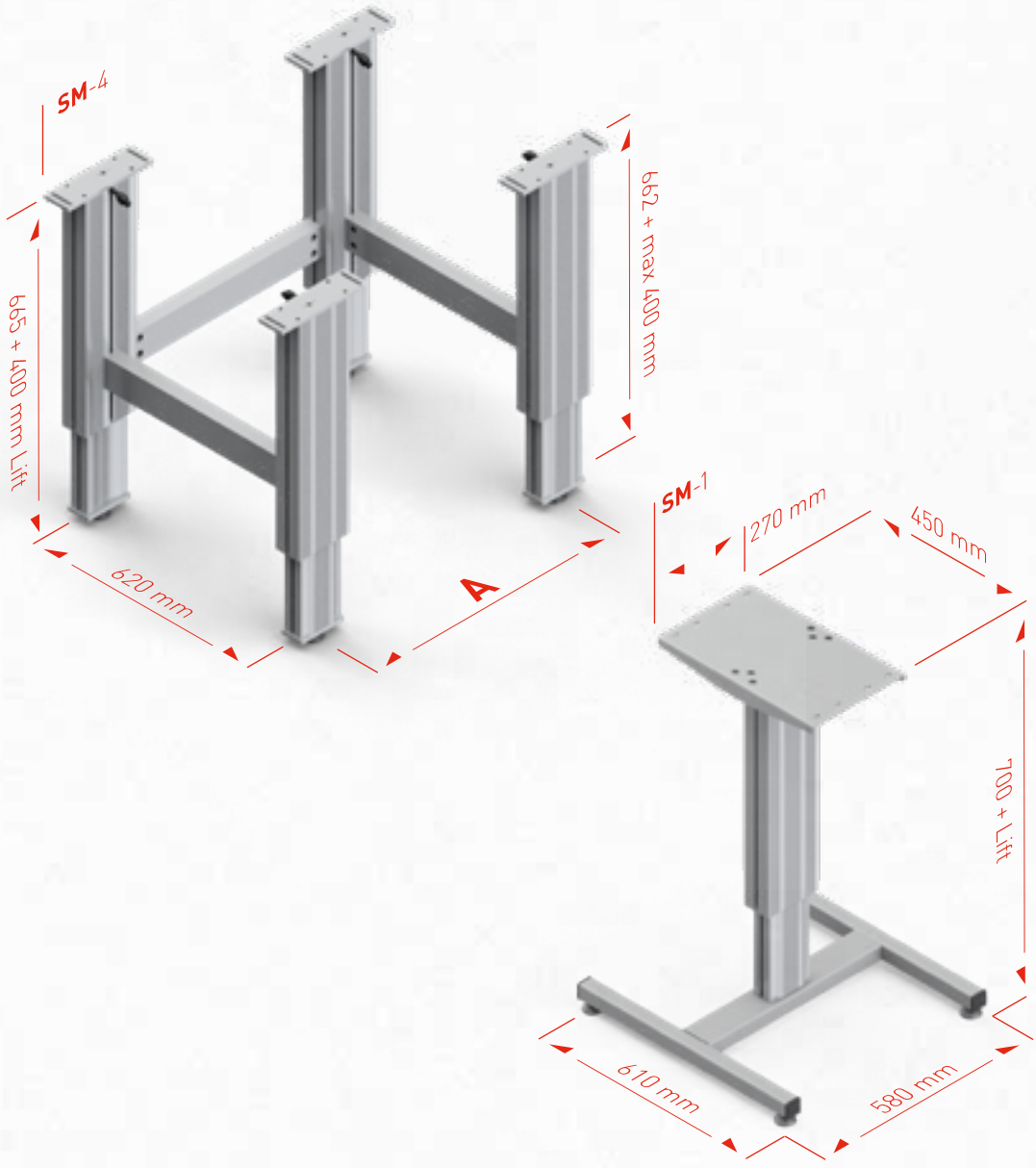
- including 1 control box and 1 manual control switch
- ideal as an office desk or light assembly table
- System load 4000 N (12 mm/s)

The base frame **SM-4** consists of four lifting columns arranged in a rectangle and connected by crossbars. The lifting columns are equipped with a foot plate including adjustable rubber feet. The table top is attached directly to the adapter plates of the lifting column **SM.**

- including 1 control box and 1 manual control switch
- ideal for stable workbenches
- system loads up to 10 000 N (9 mm/s) on request

Assembly and operating instructions are included with every delivery. They can also be downloaded from **www.ergoswiss.com.**

Dimensions of base frame **SM**



Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Base frame **SM-4**

	A
SM-4	700 mm
SM-4	1100 mm
SM-4	1300 mm
SM-4	1700 mm

Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

As option available:
- Installation 565 mm (Stroke length 300 mm)

You can also buy the **SM** base frame directly from our Online Shop!

shop.ergoswiss.com

ERGOSWISS

Lifting column **SQ**

Slim and powerful

The spindle lifting column **SQ** belongs to the same product family as the table leg TQ. Its plain anodised aluminium housings comes with a simple surface design to ensure an elegant and stylish finish.

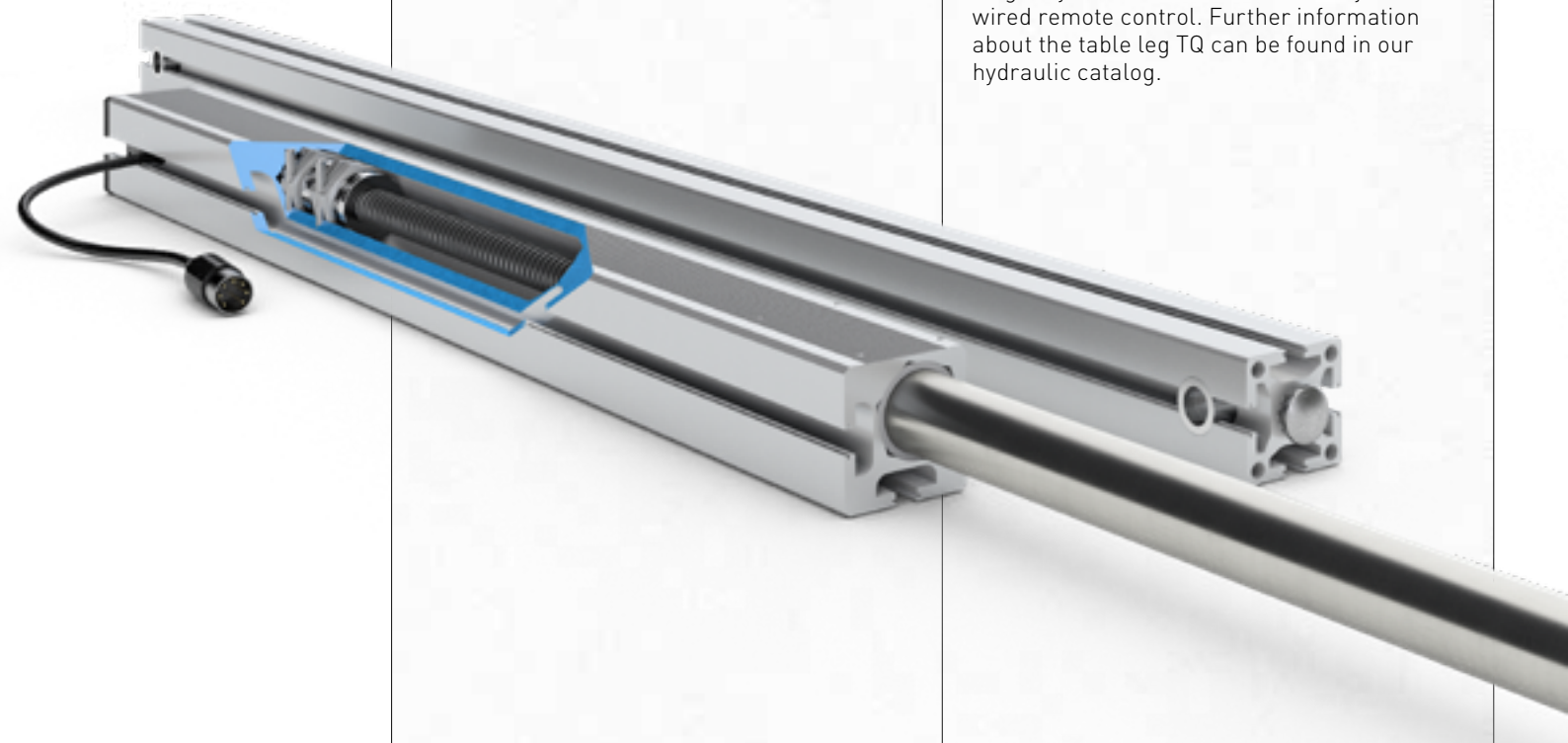
The T-slots on 2 sides (width 8 mm) allow the mounting of crossbars, shelves and other attachments along the entire length of the leg.

This product family also has a corresponding range of accessories to use in combination.

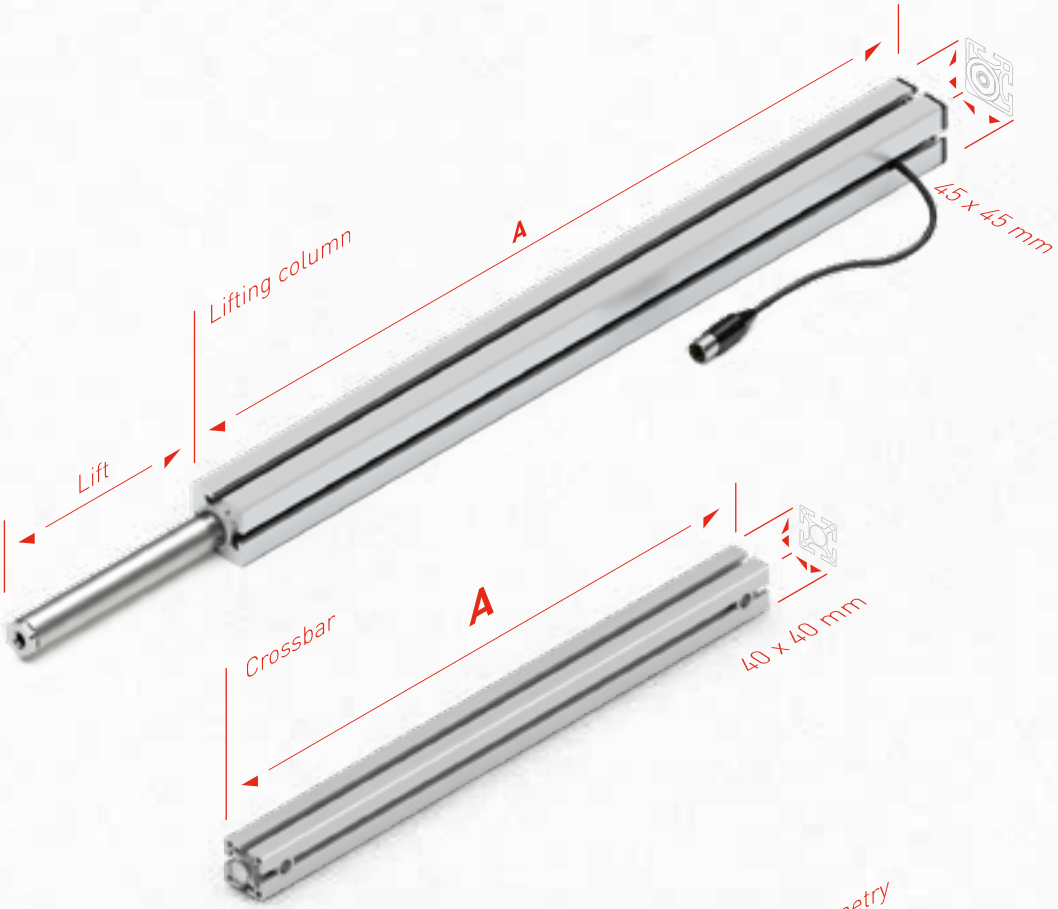
Application

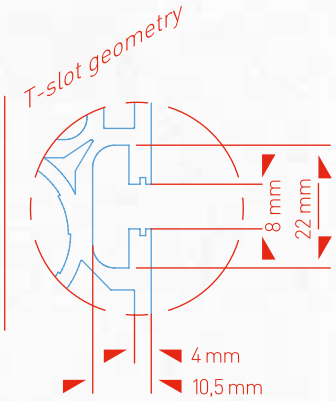
The electrically driven lifting column **SQ** is suitable for height adjustable mounting tables, laboratory workstations and generally in furniture and mechanical industry. Up to 4 lifting columns can be connected to one control box and are operated synchronous. In synchronous operation with 2 control boxes, up to 8 lifting columns can be operated. Each lifting column has an internal motor that drives the threaded spindle.

As a variant to the lifting column **SQ** the table leg TQ offers the possibility of adjusting the height by a hand crank or electrically with a wired remote control. Further information about the table leg TQ can be found in our hydraulic catalog.



Dimensions **SQ**





Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Technical data

- Versatile linear guide rail with **internal** drive unit
- Compressive force per lifting element 1500 N
- Tensile force per lifting element 1500 N
- Synchronous control of 1 to 8 linear units
- Lifting speed 9 mm/s
- Stroke length 300 or 400 mm
- Mb stat. = 200 Nm
- Mb dyn. = 80 Nm
- Colour: colourless anodised aluminium

Crossbar **SQ**	A
SQ 550	550 mm
SQ 750	750 mm
SQ 950	950 mm
SQ 1150	1150 mm
SQ 1550	1550 mm

ERGOSWISS

Base frame **SQ**

Quickly mounted

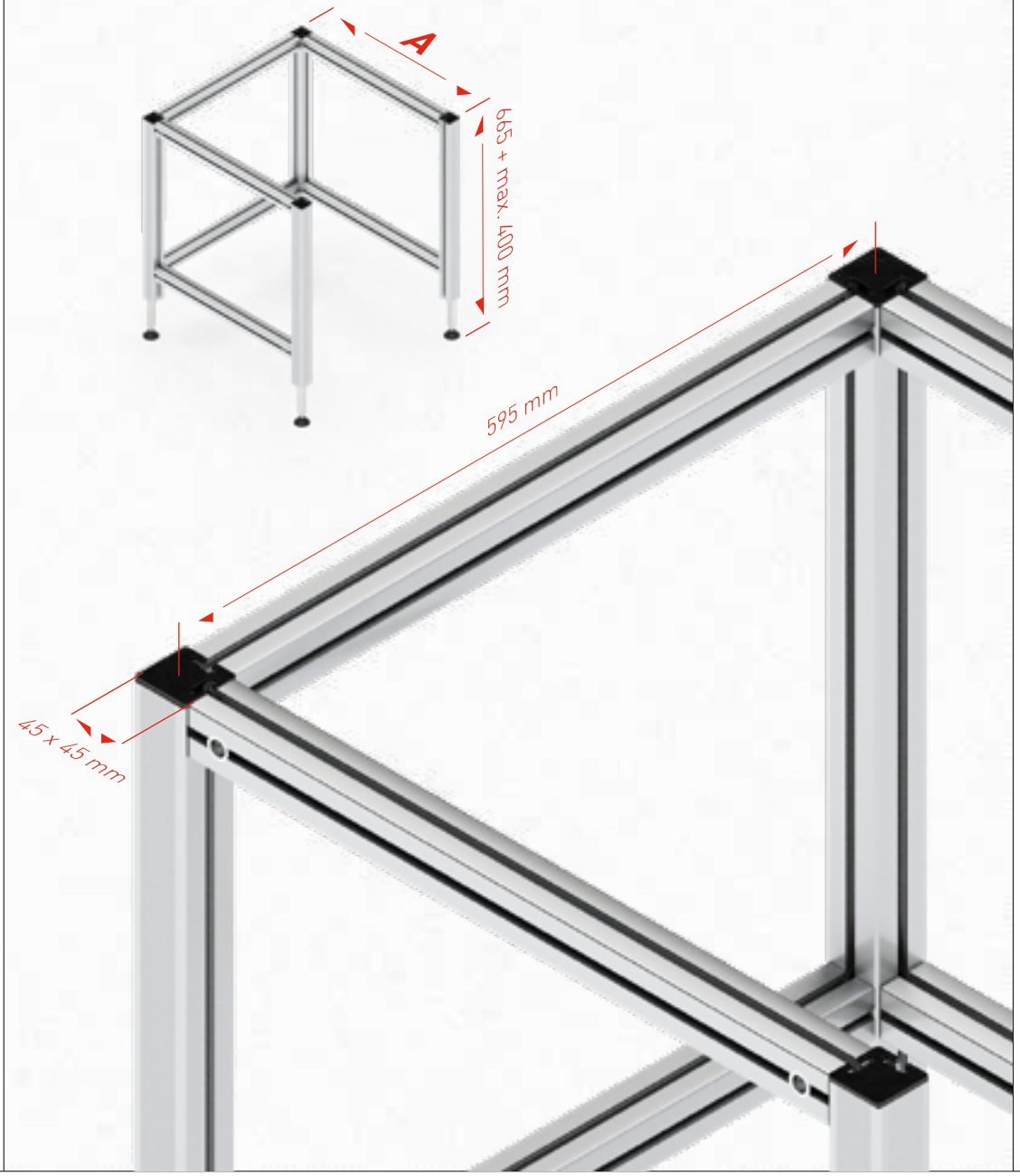
Tables can be put together quickly and flexibly with the **SQ** table base frame.

The maximum load is 6000 N. The max. height adjustment range is 400 mm.

The base frame **SQ-4** consists of four lifting columns **SQ,** arranged in a rectangle and connected by crossbars. The lifting columns are equipped with adjustable rubber feet. The table top is attached directly to the crossbars of the lifting columns **SQ.**
- Ideal for light and slim workstations

Assembly and operating instructions are included with every delivery. They can also be downloaded from **www.ergoswiss.com.**

Dimensions of base frame **SQ**



Base frame **SQ-4**	
	A
SQ-4	595 mm
SQ-4	795 mm
SQ-4	995 mm
SQ-4	1195 mm
SQ-4	1595 mm

Detailed CAD drawings in various formats can be found at **www.ergoswiss.com**

Our **Distribution partners**

Australia | Austria | Belgium | Canada | Czech Republic | Finland | France | Germany | Italy | Japan | Luxembourg | Netherlands | Poland | Slovakia | South Korea | Spain | Sweden | Switzerland | USA

ergoService

Our aim is to provide you with the best possible support for your projects. To help you achieve your goals, we can offer you the following services:

- **Technical advice | Competent and sound**
  Trained and experienced specialists are available around the world to advise you, either on site, over the phone or by e-mail.

- **Configurator and online creation of quotations | 24 hours a day + 365 days a year**
  You can assemble the right lifting system or base frame for your needs in the online configurator at any time. The corresponding quotation will be sent to your e-mail address within minutes.

- **Online Shop | Simply buy online**
  We offer a small selection of complete lifting systems in our Online Shop. These items are packed ready for despatch and available from stock. Spare parts can also be ordered in this way quickly and economically.

- **Always ready to deliver | Whenever and wherever you want**
  All the products in our standard range are available within 3 weeks, even in large quantities. Depending on the size of the delivery, we can deliver straight from our main factory in Switzerland or from our central European warehouse in the Netherlands.

- **CAD data, instructions | Freely available at any time**
  3D data and operating instructions are available on our website in several languages, without the need for registration. Our YouTube channel also offers many useful explanatory videos.

- **Standards, «CE» European conformity, certificates | Comprehensively tested**
  You can find the most common test certificates, conformity and installation declarations on our website under Downloads. Our engineers place a high priority on designing products that conform to common standards. Our systems are regularly tested for the risks they might pose and are also subject to long-term testing and tested by certified institutes (TÜV - German Technical Inspection Association, Electrosuisse - Swiss Association for Electrical Engineering, Power and Information Technologies).

- **After-sales service | Support 4ever**
  If you are not happy with a delivery or a lifting element does not function as it should, simply contact our experienced service team who can offer support in such matters.

- **Innovation | Takes us both further**
  Talk to us about your ideas and requirements! Your opinions and suggestions are very important for our product development. This is the only way we can remain innovative and satisfy you as a customer.

Personal **Notes**

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ergo Market Segments

ergo Care

Couches, laboratory benches, flow cabinets, bathtubs etc.

ergo Assembly

Assembly benches, piping systems, packaging tables, work benches, aluminium profile systems etc.

ergo Catering

Industrial kitchens, dining tables, pay stations, buffets etc.

ergo Furniture

Kitchens, cooking islands, dining tables, display cabinets, televisions, beds etc.

ergo Industrie

Working platforms, conveyor systems, machine hoods etc.