# Electric Spindle lift columns



## Modular Expandable

Easy to integrate lifting and positioning systems for ergonomic height adjustable base frames and workstations.



ERGOSVISS table lift systems

# Always At the right height

#### Build new or retrofit!

Ergonomics is an essential factor in efficiency and injury prevention. Are your workstations suitable for all your employees and tasks?

Ergoswiss columns can help you change an existing static work structure into an adjustable dynamic one. You can raise and lower complete work platforms or partial workspaces to their perfect ergonomic height, avoiding strained injuries and improving process efficiency.

The Ergoswiss spindle lifting system is a simple plug & play system that consists of linear units or lifting columns, a control box, and a manual control switch. Each lifting column is driven by an internal motor. The spindle lifting system also allows for horizontal adjustment.

Ergoswiss has a variety of systems available to address the different challenges in specific markets. Whether you are building a 2-leg packaging workstation with light to medium duty lift capacity requirements, a multileg conveyor application, or a heavy-duty tool and die base frame; we have the right system for your needs.

The scalable modularity, by simply adding additional columns to a structure, and the anodized aluminum extrusion columns, with our standard T-slot design throughout the product lineup, are just some of the benefits.



# Market Segments

adaptable, compatible and can be easily integrated into many market segments:

<sup>°go</sup>Assembly Workbenches, fixtures, packing tables, conveyors, aluminum and steel substructures.



<sup>oo</sup>Catering Industrial kitchens Prepstations, pay stations, buffets.



ergo Care Laboratory workstations and equipment, unique furniture.

## Each industry has its unique requirements and challenges. Our aluminum modular lifting columns are



## SF 1200 series Lifting columns - Slim and fast ERGOSWISS

#### Market Segments





The electric spindle driven lifting column SF is an economical lifting column solution to support base frames and workstation lift columns, that require only a lighter lifting capacity.

The base column is consisting of a 5.9" x 2.4" (150X60 mm) anodized aluminum extrusion with two faces of our standard Ergoswiss T-Slot geometry (8 mm width) for easy integration.

Each lifting column includes an internal motor and spindle drive that is synchronized by the control box. Each column includes a 78" motor cable to connect to the control box.

Performance data lifting column SF	
Number of lifting columns	2
Load per lifting column	220 lbs / 100 kg (440 lbs / 200 kg for two-leg setup)
Max pushing force	220 lbs / 100 kg per column
Max. pulling force	Static - 110 lbs / 500 N / dynamic - 22 lbs / 50 N
Lifting speed	0.78″ / sec (20 mm / sec)
Stroke	11.81" (300 mm) SF1230 15.75" (400 mm) SF1240
Duty cycle E/D (On/Off)	2 / 40 min
Column specifications	
SF1230	Base / retracted height: 22.44" (570 mm) Extended height: 34.25" (870 mm)
SF1240	Base / retracted height: 26.38" (670 mm) Extended height: 42.13" (1070 mm)



Additional Accessories: SF columns can be integrated like the SM column system. Most of the accessories are compatible for both systems.

#### Accessories

#### Foot plate Part# 126.00132

Using the Foot plate, the SF system can easily be mounted onto a cross bar or integrated onto an aluminum profile. Dimensions: 8"x 2"x 3/8" (200 x 60 x 10 mm)

**Application:** Light weight worktables base frames up to 440 lbs lifting capacity.

Lifting system SF 1200 quick ship setsPart to orderDescription	
909.61204-PP	QS - Lifting system SF 2240 US 02 (15.75" stroke) including 2x Lifting column SF 1240 / 1x Control box Compact with Power cable US / 1x Cable remote control Memory

Frame SF – base frame – 440 lbs lifting capacity	
Part to order Description	
909.71203	QS-Frame SF-2 1230 960-1610 US 02 including: 909.61203-PP plus Telescopic cross bar (Adjustable every 2" from 35.43" 61.02"), 2 x Table foot SF with 2 leveling feet each Base height: 24.41" (620 mm), Extended height: 36.22" (920 mm)
909.71204	QS-Frame SF-2 1240 960-1610 US 02 including: 909.61204-PP plus Telescopic cross bar (Adjustable every 2" from 35.43" 61.02"), 2 x Table foot SF with 2 leveling feet each Base height: 28.35" (720 mm), Extended height: 44.09" (1120 mm)



# ERGOSWISSSM 1400 seriesIfting columns - Slim and compact

Market Segments



The electric spindle driven lifting column SM is an economical lifting column solution to support base frames and workstation lift columns, that require medium lifting capacities.

Its compact, yet strong base column, is consisting of a 5.9" x 2.76" (150x70 mm) anodized aluminum extrusion with three faces of our standard Ergoswiss T-Slot geometry (8 mm width) for easy integration.

Each lifting column includes an internal motor and spindle drive that is synchronized by a control box. Each column includes a 70" motor cable to connect to the control box.

Performance data lifting column SM	
Number of lifting columns	2
Load per lifting column	440 lbs / 100 kg (880 lbs / 400 kg for two-leg setup)
Max pushing force	440 lbs / 200 kg per column
Max. pulling force	Static - 110 lbs / 500N / dynamic - 22 lbs / 50 N
Lifting speed	0.47" / sec (12 mm / sec)
Stroke	11.81″ (300 mm) SM1430 15.75″ (400 mm) SM1440
Duty cycle E/D (On/Off)	2 / 18 min
	660 lbs (300kg) capacity columns on request
Column specifications	
SM1430	Base / retracted height: 20.9" (530 mm) Extended height: 32.7" (830 mm)
SM1440	Base / retracted height: 23.6" (630 mm) Extended height: 40.6" (1,030 mm)



**SM column integration:** With this foot plate the column SM / TM and SF can be mounted onto a crossbar or into the ground. Size: 8"x 2"x 0.5" (200 x 60 x 10 mm) with 2 slotted holes.

Accessories	Application
Foot plate Part# 126.00132	

**Application:** Worktables and base frames up to 880 lbs lifting capacity.

	Lifting system SM 1400 quick ship sets	
	Part to order	Description
	902.20233-PP	QS - Lifting system SM 2430 US 02 (11.81" stroke) including 2x Lifting column SM 1430 / 1x Control box Compact with Power cable US / 1x Cable remote control Memory
1	902.20234-PP	QS - Lifting system SM 2440 US 02 (15.75" stroke) including 2x Lifting column SM 1440 / 1x Control box Compact with Power cable US / 1x Cable remote control Memory



## SM 1400 series Lifting columns - Slim and compact ERGOSWISS

#### Market Segments

Mounting Angle SX: With the fastening angle the SF, SM and SL system can be easily integrated to a T-Slot profile or steel frame. The angle set comes with T-nut and screws.



**Adaptor SM 90°:** The adaptor is used to mount the inner column profile onto a T-slot profile, steel framing or a wall structure. The adapter is suitable for T-slot profiles with T-slot distance 1" up to 2" (30 up to 50 mm) in between slots.









# ERGOSWISSSL 1400 seriesLifting columns - Slim and powerful

MarketSegments



The electric spindle driven lifting column SL is the most common sold lifting column. For 2 or 3 leg setups, the SL is providing a solid structural base for an economical lifting solution that requires medium duty lifting capacities. The columns when extended can withstand strong bending, torsion and sheering forces.

Its compact base column is consisting of a 10.24" x 2.36" (260x60 mm) anodized aluminum extrusion with three faces (6 slots) of our standard Ergoswiss T-Slot geometry (8 mm width) for easy integration.

The additional T-Slots available allow the easy integration of crossbars, shelves, and other add-ons.

Each lifting column includes an internal motor and spindle drive that is synchronized by a control box. Each column includes a 70" motor cable to connect to the control box.

Performance data lifting column SL	
Number of lifting columns	2
Load per lifting column	440 lbs / 200 kg (880 lbs / 400 kg) for two-leg setup)
Max pushing force	440 lbs / 200 kg per column
Max. pulling force	Static – 110 lbs / 500N / dynamic - 22 lb s/ 50 N
Lifting speed	0.47" / sec (12 mm / sec)
Stroke	11.81" (300 mm) SL 1430 15.75" (400 mm) SL 1440
Duty cycle E/D (On/Off)	2/18 min
Column specifications	
SL1430	Base / retracted height: 20.9" (530 mm) Extended height: 32.7" (830 mm)
SL1440	Base / retracted height: 23.6" (630 mm) Extended height: 40.6" (1,030 mm)



**SL column integration:** With the foot plate the column SL can be easily integrated onto a crossbar or the ground. Size:  $11^{"x} 2^{"x} 3/8"$  (270 x 53 x 10 mm) with 2 slotted holes.

Accessories	Application
Foot plate SL 340x60 Part# 126.00108-PP	

**Application:** Worktables and base frames lifting capacity as up to 880 LBS.

Lifting system SL 1400 quick ship sets	
Part to order	Description
901.20233-PP	QS - Lifting system SL 2430 US 02 (11.81" stroke) including 2x Lifting column SL 1430 / 1x Control box Compact with Power cable US / 1x Cable remote control Memory
901.20234-PP	QS - Lifting system SL 2440 US 02 (15.75" stroke) including 2x Lifting column SL 1440 / 1x Control box Compact with Power cable US / 1x Cable remote control Memory



### SL 1400 series Lifting columns - Slim and sturdy ERGOSWISS



Frame SL 1400 – base frame – quick ship sets (880 lbs lifting capacity)



QS-Frame SL-2 1440 960-1610 US 02 including:

901.30458

901.20234-PP plus Telescopic cross bar (Adjustable every 2" from

35.43'' - 61.02''), 2 x Table foot SL centric with 2 leveling feet each Base height: 26.57" (675 mm) Extended height: 42.32" (1075 mm)

Table foot SL 680 eccentric: Eccentric base foot with 2 level feet for adjustment. Length: 27" (680 mm) / Width: 3" (80 mm) / Height 1.78" (45 mm).

Accessories	Application
Table foot SL 680 eccentric Part#115.00570	
Mounting angle SX 60x60 cpl. Part# 113.00150	
Ergoswiss T-Slot nuts Part# 142.00217 - thread M6 Part# 142.00218 - thread M8	





# SL 1300 seriesERGOSWISSLifting columns - Slim and powerful





The electric spindle driven lifting column SL 1300 series compliments the SL1400 series. The dimensions, accessories as well setups are identical to the 1400 series, however, a stronger motor / gear ratio and a different iSMPS controller enable the system to support applications to lift heavier loads.

Performance data lifting column SL	
Number of lifting columns	2
Load per lifting column	660 lbs / 300 kg (1,320 lbs / 600kg for two-leg setup)
Max pushing force	660 lbs / 300kg per column
Max. pulling force	Static - 110 lbs / 500N / dynamic - 22 lbs / 50 N
Lifting speed	0.35" / sec (9 mm / sec)
Stroke	11.81" (300 mm) SL1330 15.75" (400 mm) SL1340
Duty cycle E/D (On/Off)	2 / 18 min
Column specifications	
SL1330	Base / retracted height: 20.9" (530 mm) Extended height: 32.7" (830 mm)
SL1340	Base / retracted height: 23.6" (630 mm) Extended height: 40.6" (1,030 mm)



**Application:** Worktables and base frames up to 1,320 lbs lifting capacity

Lifting system SL 1300 quick ship sets	
Part to order	Description
901.41216-PP	QS - Lifting system SL 2330 US 02 (11.81" stroke) including 2x Lifting column SL 1330 / 1x Control box iSMPS with Power cable US / 1x Cable remote control Memory
901.41217-PP	QS - Lifting system SL 2340 US 02 (15.75" stroke) including 2x Lifting column SL 1340 / 1x Control box iSMPS with Power cable US / 1x Cable remote control Memory

## **Application:** Worktables and base frames up to 1,320 lbs lifting capacity

Frame SL 1300 – base frame – quick ship sets	
Part to order	Description
901.51216	QS-Frame SL 2330 960-1610 US 12 including: 901.41216-PP plus Telescopic cross bar (Adjustable every 2" from 35.43" – 61.02"), 2 x Table foot centric with 2 leveling feet each Base height: 22.64" (575 mm) Extended height: 34.45" (875 mm)
901.51217	QS-Frame SL 2340 960-1610 US 12 including: 901.41217-PP plus Telescopic cross bar (Adjustable every 2" from 35.43" – 61.02"), 2 x Table foot SL centric with 2 leveling feet each Base height: 26.57" (675 mm) Extended height: 42.32" (1075 mm)

# SQ 1300 seriesERGOSWISSMulti-column structures



The electric spindle driven lifting column SQ is an economical lifting column solution to support base frames and workstation lift columns, that require medium to heavy lifting capacities.

Its compact, yet strong base column, is consisting of a  $1.78'' \times 1.78'' (45x45 \text{ mm})$  anodized aluminum extrusion with two adjacent standard Ergoswiss T-Slots (8 mm width) for easy integration.

Each lifting column includes an internal motor and spindle drive that is synchronized by a control box. Each column includes a 78.75" motor cable to connect to the control box.

The electrically driven lifting column SQ is suitable for height adjustable tables and structures, laboratory workstations and generally in furniture and mechanical industry. Up to 4 lifting columns can be connected to one control box and are operated synchronously. In synchronous operation with 2 control boxes, up to 8 lifting columns can be operated.



Performance data lifting column SQ	
Number of lifting columns	4
Load per lifting column	330 lbs / 150 kg (1,320 lbs / 600 kg for four-leg setup)
Max pushing force	330 lbs / 150 kg per column
Max. pulling force	330 lbs / 150 kg per column
Lifting speed	0.35" / sec (9 mm / sec)
Stroke	11.81" (300 mm) SQ.3 1330 15.75" (400 mm) SQ.3 1340
Duty cycle E/D (On/Off)	2 / 18 min
Column specifications	
SQ.3 1330	Base / retracted height: 25.0" (640 mm) Extended height: 37.0" (940 mm)
SQ.3 1340	Base / retracted height: 29.0" (740 mm) Extended height: 45.0" (1140 mm)





**Application:** Worktables and base frames (4 leg system) 1,320 lbs lifting capacity

Lifting system SQ 1300 quick ship sets	
Part to order	Description
907.42236-PP	QS - Lifting system SQ.3 4330 US 12 (11.81" stroke) including 4x Lifting column SQ.3 1330 / 1x Control box iSMPS with Power cable US / 1x Cable remote control Memory, 4x level feet
907.42237-PP	QS - Lifting system SQ. 4340 US 12 (15.75" stroke) including 4x Lifting column SQ.3 1340 / 1x Control box iSMPS with Power cable US / 1x Cable remote control Memory, 4x level feet

# ERGOSWISSSM 1300 seriesMulti-column - Heavy duty

MarketSegments



The electric spindle driven lifting column SM 1300 is an economical lifting column solution to support base frames and workstation lift columns, that require heavy lifting capacities.

Its compact, yet strong base column, is consisting of a 5.9" x 2.76" (150x70 mm) anodized aluminum extrusion with three faces of our standard Ergoswiss T-Slot geometry (8 mm width) for easy integration.

Each lifting column includes an internal motor and spindle drive that is synchronized by a control box. Each column includes a 70" motor cable to connect to the control box.

Performance data lifting column SM 1300	
Number of lifting columns	4
Load per lifting column	660 lbs / 300 kg (2,200 lbs / 1,000 kg for four-leg setup)
Max pushing force	660 lbs / 300 kg per column
Lifting speed	0.35" / sec (9 mm / sec)
Stroke	11.81" (300 mm) SM1330 15.75" (400 mm) SM1340
Duty cycle E/D (On/Off)	2 / 18 min
Column specifications	
SM1330	Base / retracted height: 20.9" (530 mm) Extended height: 32.7" (830 mm)
SM1340	Base / retracted height: 23.6" (630 mm) Extended height: 40.6" (1,030 mm)
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#### Application: Worktables and base frames up to 2,200 lbs lifting capacity for 4 column setup

Lifting system SM 1300 quick ship sets	
Part to order	Description
902.41236	QS - Lifting system SM 4 SM 1330 / 1x Control box
902.41237	QS - Lifting system SM 4 SM 1340 / 1x Control box

Accessories	Application
Foot plate 60x200 Part# 126.00132	



### SM 1300 series ERGOSWISS Multi-column - Heavy duty

Market Segments 

Foot plate SM M10: This foot plate can be mounted to the lifting column SM. Three M10 threads allow the integration of adjustable feet or casters. Size: 4.9" x 2.36" x 3/8" (125 x 60 x 10 mm).



**Mounting angle SX 60x60:** With the fastening angle the SF, SM and SL system can be easily integrated to a T-Slot profile or steel frame. The angle set comes with T-nut and screws.

Accessories	Application
Mounting angle SX 60x60 cpl. Part# 113.00150 Frgoswiss T-Slot nuts Part# 142.00217 - thread M6 Part# 142.00218 - thread M8	
Telescopic Crossbars: The	Telescopic crossbars

s are available in two different configuration ranges: Te 21.65" – 37.40" (550-950 mm) or 35.43" – 61.02" (900-1550 mm). Each column can be adjusted in approx. 2" (50 mm) increments. The crossbars are made of powder-coated steel and have the required T-nut and screws connection hardware included. The bars are compatible with the following systems: SL/SM/SQ and mainly used in 4-column applications.

Accessories	Application
T- Cross Bar T8 21.65" – 37.40" (550-950 mm) 90° Part# 127.00631	
T-Cross Bar T8 35.43" – 61.02" (900-1550 mm) 90° Part# 127.00632	





# ERGOSWISSSM 1300 seriesLifting columns - Accessories

#### Market Segments

**Linear Extension cable:** (compatible with SQ, SM, SL, and SLA systems) are 47.25" (1.2 m) long and extend the column cables to the controller when longer cable runs are required. Up to 5 cable extensions can be daisy-chained for line runs up to the controller.



**The Sync-2 cable:** synchronizes two iSMPS controllers, allowing two independent systems to be operated together by a single remote. The Sync cable is also required when extending 4 column setup with additional legs. The cable is 157.5" (13.12 ft or 4 m) long.

Accessories	Application
SYNC-2 cable SCT Part# 124.00183	

Ergoswiss offers additional safety features on its lifting systems. These features are designed to ensure the reliability and durability of the lifting systems, as well as protect the users and the environment from potential hazards.

#### iSMPS controller

The iSMPS controller supplied in the standard systems has three integrated gravity sensors. Th will detect any deviation of 2.5 degrees in your setup in the x,y, and z directions.





#### Control Remote extension cord SCT 1m

This cord can extend the cable from the hand remote to the iSMPS controller. The cable is 39.4'' 39.37'' (1 m) and can be daisy-chained up to 3 times if required.

#### Part# 124.00290



	Safety strip SCT cpl.
nese	A pressure-sensitive safety strip can be added in areas of concern of the system setup. The system will stop immediately when the sensing strip is triggered. The cable that connects to the controller is 8 ft (2.5 m) long.
	Part# 124.00157

# Control cable SCT4"With the SCT control cable, the user can control the<br/>iSMPS controller-driven systems via PLC or own<br/>remote control. The line is 78.75" (2 m) long. Only<br/>the up/down function will be available. Using this<br/>cable with PLCs is a great way to synchronize<br/>multiple systems.Part# 124.00279

