



Vacuum Handling Systems
Slewing cranes and crane systems

Slewing cranes and crane systems

At a glance

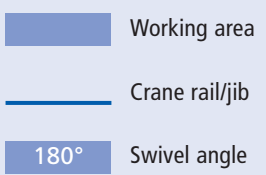
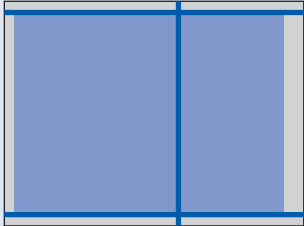
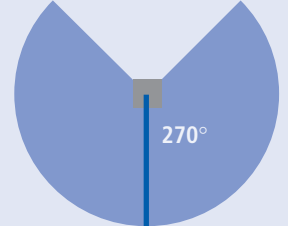
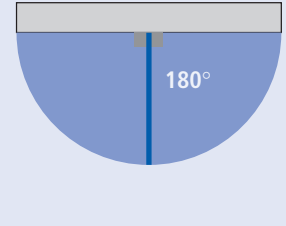
Thanks to their efficiency, Schmalz slewing cranes and crane systems are able to optimise the internal material flow and satisfy at the same time the ever-increasing demands within intralogistics. Different working areas, load classes and aluminium or steel crane rails facilitate their use in a variety of applications. The cranes as standard version have been designed especially for indoor applications. The following overview will enable you to quickly determine the best crane solution for your application.

Slewing cranes and crane systems with aluminium crane rail

- High degree of mobility
- Low moving mass
- Ergonomic handling
- Modern, attractive design
- Aluminium components are anodised (natural colour)

Slewing cranes and crane systems with steel crane rail

- Suitable for heavier loads
- Longer jib lengths possible
- Low design
- Steel components are coated (RAL 7035, light grey) or galvanised

Features	Crane system		Column-mounted slewing crane		Wall-mounted slewing crane	
						
Benefits	<ul style="list-style-type: none"> • Maximum working area • Multiple beams possible in one crane system 		<ul style="list-style-type: none"> • Large working area achieved by a swivel angle of 270° • Available with a mobile base plate (optional) 		<ul style="list-style-type: none"> • Low-cost crane solution as it is secured to an existing wall or column 	
	Aluminium	Steel	Aluminium	Steel	Aluminium	Steel
Solution for a chain hoist, cable system, cable balancer, chain hoist with lifting device Lifting capacity 0 – 650 kg Lifting capacity > 650 kg	Page 2 -	Page 7 -	Page 4 -	- Page 6	Page 4 -	- Page 6
Solution for tube lifter Jumbo Lifting capacity 0 – 300 kg	Page 2	Page 7	Page 8	-	Page 8	-

Special solutions

Page 9 provides information about special cranes with hinged, telescopic or extra flat jib as well as cranes designed especially for use in areas where there is a risk of explosion. We would be glad to provide individual crane solutions such as crane systems for outdoor applications or crane systems fitted with an electrical drive upon request.

Services

Our comprehensive services in the areas of consulting, project planning, inspection and maintenance, along with our reliable spare parts management, guarantee that you are always in safe hands. Of course, we also undertake annual expert approval.

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Slewing cranes and crane systems with steel crane rail

Column-mounted slewing crane,
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Slewing cranes for vacuum tube lifter Jumbo

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Special designs

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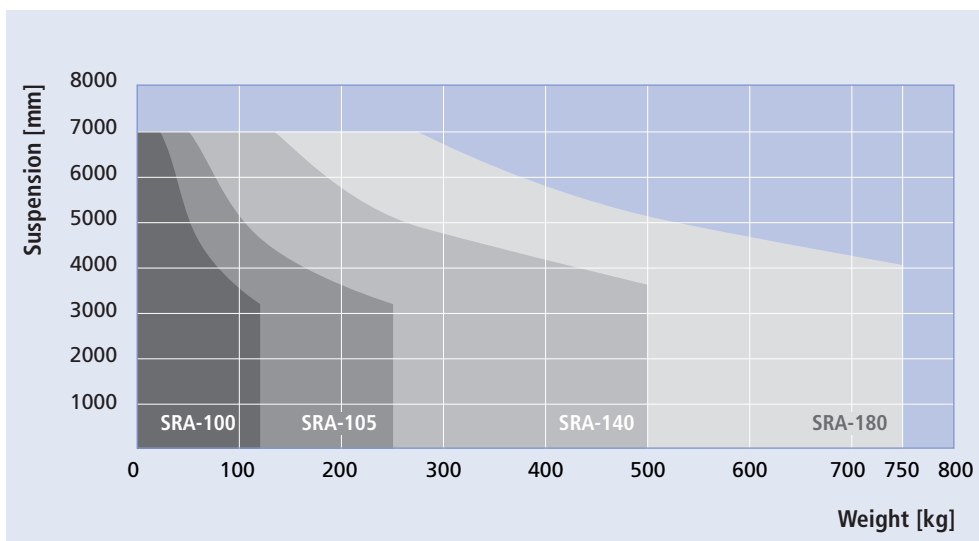
Aluminium crane systems SRA

Safe and easy handling in a large working area



Aluminium crane system with one beam, 85 kg or 150 kg load, 2x6 m or 4x6 m

Load diagram



Components



4 different SRA aluminium crane rails

- Low weight
- Low moving mass
- Maximum available length: 8 m, extendable using rail connectors



Ergonomic operation thanks to perfect ease of movement

A favourable weight-load ratio ensures that heavy loads are handled effortlessly and easily. Even load distribution across all load-bearing rollers prevents the trolley from tilting even when driven "diagonally". A large working area and numerous possible combinations ensure maximum flexibility. Its modular design allows a crane system to be secured to an existing steel structure or a customer specific outer structure.

Functional design

- Modular structure with a manageable number of parts
- High-quality components
- Innovative section geometry
- Anodised crane rails (in natural colours)

Intelligent configuration

With the Schmalz configuration program, cranes can be configured in a matter of seconds.

Technical specifications

- Maximum dimensions: Approx. 8 m x 30 m
- Maximum load: Approx. 700 kg (depending on the beam weight)
- Weight of smallest crane section: Only 2.9 kg/m
- The intelligent modular system also facilitates the following options:
 - Available as single-beam, double-beam and monorail crane systems
 - Several beams in one rail
 - Maximum beam length increased by using a third rail
 - Option to jack up the beam between two rails in order to reduce the height of the installation
 - Electrical traction drive



Unique carrying hooks TRO-R

- Excellent low-friction properties in conjunction with aluminium crane rails
- Maximum load of 750 kg
- Low weight
- Low-friction, long-lasting rollers



Sealing plates VRS-PL

- Section covering on both sides of rail and beam
- Prevents dirt from entering the rail or beam
- Can be removed without causing any damage



Line trolleys TRO-SRA

- For attaching different power supplies (electricity, compressed-air, vacuum)
- Suitable terminal clamps available in the product range



Fixed/variable end stops STO

- Prevents the carrying hook from falling out at the end of the section
- Protects the line trolleys from damage if the load moves
- Adjustable travel area as a result of variable end stops

Slewing cranes with aluminium crane rail

Easy to move, flexible and safe!

Schmalz slewing cranes are extremely versatile and can be combined with a chain hoist, a cable system, a cable balancer or a chain hoist with lifting device. They boast perfect ease of movement and maximum ergonomic operation. As a result of the high load-bearing capacity of up to 650 kg, heavy workpieces can also be handled safely and with little physical effort. Some of its key components are also used for aluminium crane systems and, therefore, have already been described in detail on pages 2 and 3.

Technical information

- CE approved
- Hoisting class: H2
- Stress group: B2



Column-mounted slewing crane with aluminium crane rail, 325 kg load, 4 m jib length

Column-mounted slewing crane SK with aluminium crane rail

- Extremely easy to move as a result of the special bush bearings at the pivot bearing and the use of aluminium crane rails
- Large working area achieved by a swivel angle of 270°
- Adjustable travel through use of variable end stops
- Very safe as the crane's main switch is integrated into the column
- Maximum flexibility through individually adjustable column and jib lengths
- Easy to install as all crane columns are fitted with anchors and do not require additional intermediate plates



Wall-mounted slewing crane with aluminium crane rail attached to a concrete column, 325 kg load, 5 m jib length

Wall-mounted slewing crane WK with aluminium crane rail

- Extremely easy to move as a result of the special bush bearings at the pivot bearing and the use of aluminium crane rails
- Easy to install because of the special new wall consoles for securing the wall-mounted slewing crane
- Good use of the existing work surface achieved by a swivel angle of minimum 180°
- Adjustable travel through use of variable end stops

Model	Load [kg]	Column [mm]	Base plate L x W [mm]	Lower edge of jib [mm]	Jib height [mm]	Jib length [mm]
SK-KZG-175	175	250 x 250	700 x 700	2600 – 4000	800	3000 – 6000
SK-KZG-325	325	300 x 300	700 x 700	2600 – 4000	800	3000 – 6000
SK-KZG-650	650	350 x 350	800 x 800	2600 – 4000	1200	3000 – 6000
WK-KZG-325	175/325	-	-	-	800	3000 – 6000
WK-KZG-650	650	-	-	-	1200	3000 – 6000



Column-mounted slewing crane with aluminium crane rail, 650 kg load, 6 m jib length

Accessories



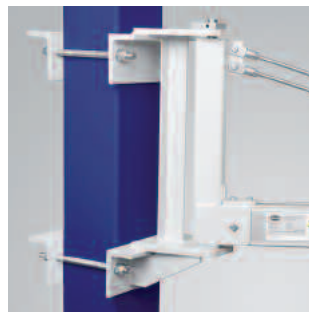
Shear connector anchor set DUE-SET

- For easily securing the crane column to a concrete floor (thickness: at least 200 mm, quality: C20/25)
- No additional foundation required



Base plate GP

- No need to secure the crane column to the floor
- Crane not anchored to the floor and therefore can be transported using a fork lift or lift truck



Clasp bracket UM-KLAM

- For securing a slewing wall crane to an existing column or wall



Swivel angle limit SWBG

- Stop limit for the individual swivel area setting
- Limit for each swivel side: 45°–135°

Slewing cranes and crane systems with steel crane rail

Reliable even when the load is extremely heavy!

Slewing cranes and crane systems with steel crane rail are required as soon as a load exceeds 650 kg. They can be combined with a chain hoist, a cable system, a cable balancer or a chain hoist with lifting device. Generally, these loads are transported manually. If required, crane movements can also be fitted with an electrical drive. A full range of accessories is available for these products.



Column-mounted slewing crane with steel crane rail, 100 kg load, 5 m jib length

Column-mounted slewing crane SK with steel crane rail

- Loads in excess of 650 kg
- Jib length up to 6000 mm
- Swivel angle of approx. 270°
- Lower edge of jib: 2600 mm, but the crane column can be extended if required



Wall-mounted slewing crane with steel crane rail, 1000 kg load, 5 m jib length

Wall-mounted slewing crane WK with steel crane rail

- Loads in excess of 650 kg
- Jib length up to 6000 mm
- Swivel angle of approx. 180°
- Innovative attachment

Model	Load [kg]	Diameter of the column [mm]	Diameter of the base plate [mm]	Lower edge of jib [mm]	Jib height [mm]	Jib length [mm]
SK-KZG-1000	1000	430 – 530	510 – 610	2600 – 3600	742 – 1205	3000 – 6000
WK-KZG-1000	1000	-	-	-	742 – 1205	3000 – 6000



Steel crane system with one beam, 250 kg, 6x12 m

Steel crane systems SRS

- Crane systems with steel rails can be configured for individual use. A wide range of single-beam, double-beam and monorail crane systems is available
- Used especially if room height is low
- Suitable for use in zones with a risk of explosion (1/21 and 2/22)
- Use of galvanised crane rails

Technical specifications

- Maximum dimensions: approx. 6 m x 40 m
- Maximum load: approx. 400 kg

Chain hoists



Chain hoist

Chain hoist KZG

- Extremely safe operation due to low-voltage operating controls
- Long service life thanks to limit switches
- Precise and careful positioning of workpieces with a 2-stage speed control
- Fast and safe operation achieved through high lifting speeds
- Available with frequency regulation for even more precise positioning, particularly when handling fragile objects or performing assembly work (optional)
- Available for different voltage and frequency ranges
- 2-year warranty

Model	Load [kg]	Lifting range [mm]	High speed [m/min]	Precision lifting [m/min]	Weight [kg]
KZG-125-3000-8/2	125	3000	8,0	2,0	14
KZG-250-3000-8/2	250	3000	8,0	2,0	27
KZG-250-3000-8/0.8-FU	250	3000	8,0	0,8	27
KZG-500-3000-8/2	500	3000	8,0	2,0	27
KZG-500-3000-8/0.8-FU	500	3000	8,0	0,8	27
KZG-1000-3000-4/1	1000	3000	4,0	1,0	30
KZG-1600-3000-4/1	1600	3000	4,0	1,0	60
KZG-2500-3000-4/1	2500	3000	4,0	1,0	110

FU: Frequency control

Slewing cranes for vacuum tube lifter Jumbo

Easy to move, flexible and safe!



Column-mounted slewing crane with aluminium crane rail, 65 kg load, 5 m jib length including base plate



Wall-mounted slewing crane with aluminium crane rail attached to a round concrete column, 140 kg load, 4.5 m jib length

Column-mounted slewing crane SK and wall mounted slewing crane WK with aluminium crane rail for vacuum tube lifter Jumbo

- Designed especially for the vacuum tube lifter Jumbo
- Perfectly supplements your needs because of its optimised jib height and load
- Very easy and careful handling as a result of excellent mobility and ergonomics, even with heavy workpieces
- Optimised height facilitates use even if room height is low
- Simple connection options as a result of a perfected power supply (electricity, compressed-air, vacuum) with cables integrated into the crane column
- Easy to install thanks to innovative accessories (additional information provided on page 5)
- Low-cost solution as a result of its modular structure
- Variable stoppers safely restrict the travel
- Short delivery times
- Tested safe
- Some of its key components have already been described in detail on pages 2 and 3

Model	Suitable for Jumbo load class	Maximum load [kg]	Column [mm]	Base plate L x W [mm]	Lower edge of jib [mm]	Jib height [mm]	Jib length [mm]
SK-JU-65	20, 30, 35, 45, 65	65	140 x 140	400 x 400	3000 – 4000	500	2000 – 5000
SK-JU-110	85, 110	110	180 x 180	400 x 400	3000 – 4000	500	3000 – 6000
SK-JU-140	140	140	180 x 180	400 x 400	3200 – 4000	500	3000 – 5000
SK-JU-300	200, 300	300	250 x 250	700 x 700	3200 – 4000	800	3000 – 6000
WK-JU-65	20, 30, 35, 45, 65	65	-	-	-	500	2000 – 5000
WK-JU-110	85, 110	110	-	-	-	500	3000 – 6000
WK-JU-140	140	140	-	-	-	500	3000 – 5000
WK-JU-300	200, 300	300	-	-	-	800	3000 – 6000



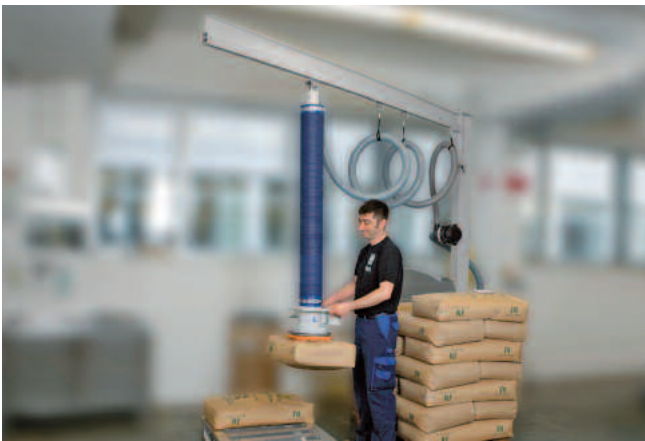
Column-mounted slewing crane with steel crane rail for zones with a risk of explosion, 110 kg load, 4 m jib length

Slewing crane with steel crane rail for zones with a risk of explosion

- Suitable for explosion-protection zones 1/21 and 2/22
- Different jib options available:
 - Standard
 - Hinged
 - Flat
- Stainless steel (optional)

Model	Suitable for Jumbo load class	Column [mm]	Base plate L x W [mm]	Lower edge of jib [mm]	Jib height- [mm]	Jib length- [mm]
SK-JU-110-SRS63-VSL-EX	20, 30, 35, 45, 65, 85, 110	180 x 180	400 x 400	3000 – 4000	500	2000 – 4000
SK-JU-140-SRS80-VSL-EX	20, 30, 35, 45, 65, 85, 110, 140	180 x 180	400 x 400	3200 – 4000	500	4500 – 5000
WK-JU-110-SRS63-VSL-EX	20, 30, 35, 45, 65, 85, 110	-	-	-	500	2000 – 4000
WK-JU-140-SRS80-VSL-EX	20, 30, 35, 45, 65, 85, 110, 140	-	-	-	500	4500 – 5000
SK-JU-85-SRS63-VSL-EX-F	20, 30, 35, 45, 65, 85	180 x 180	400 x 400	3000 – 4000	500	3000 – 4000
WK-JU-85-SRS63-VSL-EX-F	20, 30, 35, 45, 65, 85	-	-	-	500	3000 – 4000

F: Flat jib



Column-mounted slewing crane with steel rail and flat jib, 85 kg load, 3.5 m jib length

Special designs

- Hinged jib
 - Designed especially for low room height
 - Additional joint for swinging past obstructions
 - Integrated vacuum line, no "hose" on the jib
- Flat jib
 - Available in two jib lengths: 3 m and 4 m
 - Designed especially for low room height
- Telescopic jib
 - Available in two jib length ranges: 2.2 m to 3 m and 3 m to 4 m

Model	Suitable for Jumbo load class	Column [mm]	Base plate L x W [mm]	Lower edge of jib [mm]	Jib height [mm]	Jib length [mm]	Jib length extended [mm]
SK-JU-85-SRS-VSL-K	20, 30, 35, 45, 65, 85	180 x 180	400 x 400	2985 – 4150	500	3000	-
WK-JU-85-SRS-VSL-K	20, 30, 35, 45, 65, 85	-	-	-	500	3000	-
SK-JU-85-SRS63-VSL-TA	20, 30, 35, 45, 65, 85	180 x 180	400 x 400	3430 – 4510	500	2200 – 3000	3000 – 4000
WK-JU-85-SRS63-VSL-TA	20, 30, 35, 45, 65, 85	-	-	-	500	2200 – 3000	3000 – 4000
SK-JU85-SRS63-VSL-F	20, 30, 35, 45, 65, 85	180 x 180	400 x 400	3225 – 4225	500	3000 – 4000	-
WK-JU85-SRS63-VSL-F	20, 30, 35, 45, 65, 85	-	-	-	500	3000 – 4000	-

K: Hinged jib; TA: Telescopic jib; F: Flat jib



Vacuum Components

Innovative vacuum components from Schmalz offer many users in various sectors of industry reliable support in the solution of automation and handling tasks. The wide range of components extends from suction pads and vacuum generators to mounting elements and system monitoring devices.

Tel. +49 (0)7443 2403 201

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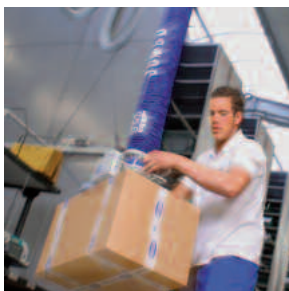


Vacuum Gripping Systems

Complex vacuum gripping systems from Schmalz permit decisive productivity improvements to be achieved. The range extends from layer and large-area gripping systems to complete vacuum spiders, delivered ready for connection, for use in all areas of automation.

Tel. +49 (0)7443 2403 103

Fax +49 (0)7443 2403 197



Vacuum Handling Systems

Ergonomical vacuum lifting devices Jumbo and VacuMaster for effortless, damage-free handling of workpieces. Crane systems to supplement these to form complete system solutions which are precisely matched to the planned application. Workshop equipment as practical aids in trade and industry.

Tel. +49 (0)7443 2403 301

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Vacuum Clamping Systems

Future-oriented vacuum clamping technology from Schmalz is the intelligent response to the continually increasing demands for more productivity and economic operation of CNC machine tools.

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