

Small Crane Systems _ the ideal system for every application



STAHL CraneSystems | Lifting technology | Drive technology | Control technology

Small Crane Systems from STAHL CraneSystems

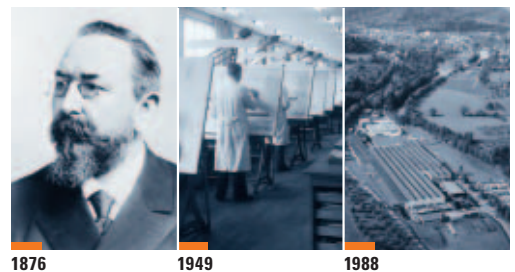
Experienced

Over 130 years of tradition, over 130 years of practical approach, competence and experience. STAHL CraneSystems can look back on a history characterised by the constant drive for innovation and important developments. Revolutionary and programmatic in many fields, always receptive to new aspects, we have amassed a wealth of experience that gives us distinct advantages today. You as our customer profit from these advantages, from the know-how of one of the world's leading manufacturers of components and systems for overhead transportation. Technically and economically, our products belong to the top flight internationally. Our service is individual, customer-oriented and practical.

Flexible

The majority of goods transported in overhead material flow is in the lower to medium load range. STAHL CraneSystems developed the innovative small crane technology KT2000 as early as 1984. This high-quality modular system is specially designed for the S.W.L. range up to 2,000 kg. With a single rail size, overhead monorails, suspension and overhead travelling cranes can be assembled individually and economically. Straight and curved sections and crossovers, switch points and turntables are assembled with plug and bolt elements and can thus be modified if necessary to suit new, individual production requirements. No welding is required. From simple applications up to complex automated material flow solutions, KT2000 is the forward-looking and economical system. The LCS small crane system from STAHL CraneSystems has been on the market since 2004. Constructed as a simple modular system for plug and bolt assembly, it is designed for the S.W.L. range up to 1,500 kg or 2,000 kg. Fast, flexible and economical, these are the characteristics of this system for simple workplace solutions and simple non-automated material flow tasks. STAHL CraneSystems offers you the complete programme for overhead transportation in the lower and medium S.W.L. range. When selecting the system best for you, STAHL CraneSystems is your competent partner with know-how and experience on two small crane systems, KT2000 and LCS.

- 1876** | Company founded by Raphael Stahl
- 1903** | First electric lifting block
- 1949** | View of the design office
- 1950** | The Electus: first portable electric chain hoist in the world
- 1954** | STAHL Service in Stuttgart
- 1984** | KT2000 small crane system
- 1988** | Hofratsmühle plant near Künzelsau
- 2004** | LCS completes small crane technology programme from STAHL CraneSystems



Page 04_LCS



2004



1984

Page 08_KT2000



Page 12_Chain hoists



1903



1950



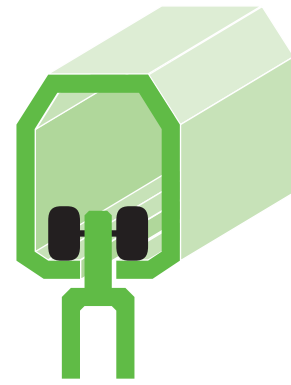
Page 14_Service



1954



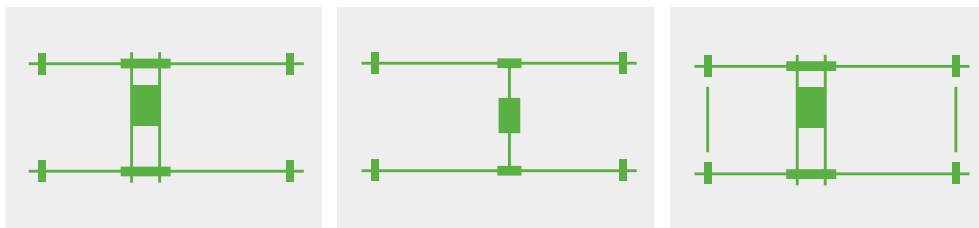
LCS _ simple, standardised, economical

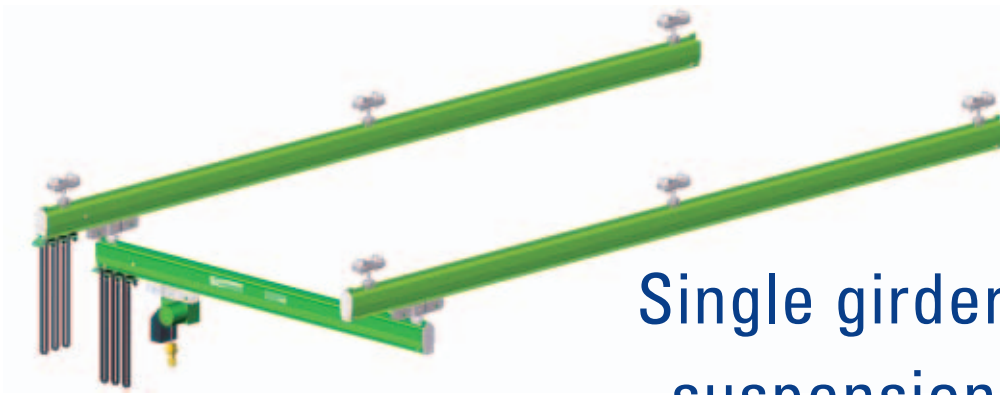


STAHL CraneSystems' LCS small crane system helps you to optimise your material transport economically and simply even in small workshops and production areas. This modular system can easily be adapted to individual production requirements time after time. Robust bolt connections facilitate speedy assembly. LCS's basic element is an enclosed runway profile, insensitive to dust, available in three different sizes. Possessing an excellent ratio of deadweight to lifting capacity, it is designed for the S.W.L. range from 125 kg to 2,000 kg. Wide suspension spacings and compact headrooms permit the available ceiling height to be utilised to the full. The inside-running patented trolley functions extremely quietly and smoothly; travel is by pushing or pulling on the load. The small cranes are suspended by standardised elements from the building or the free-standing steel frame bolted to the floor. Flexible flat cable provides the power supply to the hoist. The powerful original chain hoists from STAHL CraneSystems make your LCS a perfect, safe and high-quality small crane system.

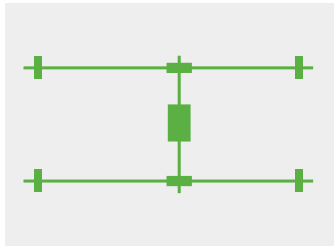
- › **Standardised** _ modular system with three different steel profiles for the S.W.L. range from 125 kg to 2,000 kg
- › **Economical** _ available fast, low maintenance, long service life
- › **Compatible** _ suitable for extending existing and compatible installations
- › **Simple** _ no time-consuming planning, simple specification, simple ordering, speedy delivery, simple bolt assembly

Schematic drawings of LCS applications

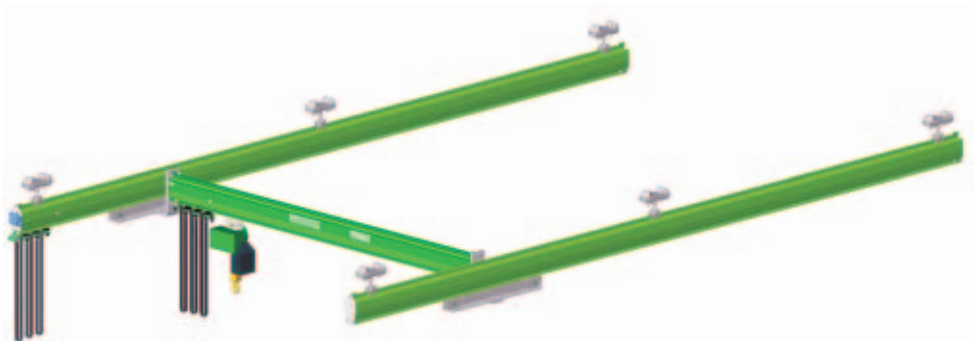




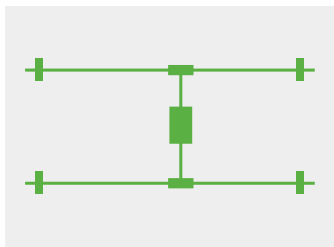
Single girder suspension crane



- › **High capacity** _ designed for loads of up to 1,500 kg
- › **Ergonomic** _ easy to move by hand
- › **Safe** _ negligible load swing as the trolley's centre of gravity automatically finds the correct hoisting position
- › **Practical** _ suspension spacings of up to 8 m with a max. load of 500 kg permit it to be mounted on existing building trusses and save on auxiliary structures



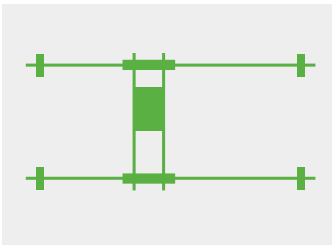
Raised suspension cranes



- › **Ideal** _ for low-ceilinged buildings
- › **Maximised** _ the raised crane bridge utilises the full height of lift, the whole bridge structure is raised between the runways
- › **High capacity** _ designed for loads of up to 1,500 kg with single-girder and up to 2,000 kg with double-girder cranes
- › **Safe** _ negligible load swing as the trolley's centre of gravity automatically finds the correct hoisting position



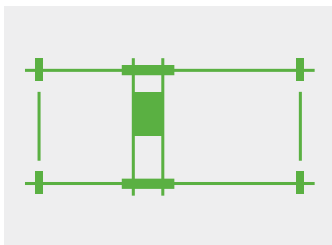
Double-girder suspension crane



- › **High capacity** _ designed for loads up to 2,000 kg and spans up to 8 m
- › **Ideal** _ utilisation of the full height of lift as the hoist is suspended between the bridge girders
- › **Safe** _ negligible load swing as the trolley's centre of gravity automatically finds the correct hoisting position



Workplace crane



- › **Freestanding** _ mounted directly on the floor
- › **Ideal** _ for rooms where the ceilings are not designed for high crane loads
- › **Perfect** _ for workplace-specific hoisting tasks
- › **High capacity** _ designed for loads of up to 1,500 kg with single-girder and up to 2,000 kg with double-girder cranes
- › **Flexible** _ can quickly be modified to suit altered production processes
- › **Optional** _ Single or double girder overhead travelling crane
- › **Adaptable** _ standard height up to 5 m, variable runway lengths





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1 Maximum hook path – This crane bridge with 500 kg S.W.L. is designed as a double-girder suspension crane. The chain hoist is suspended between the girders to make full use of the building height.

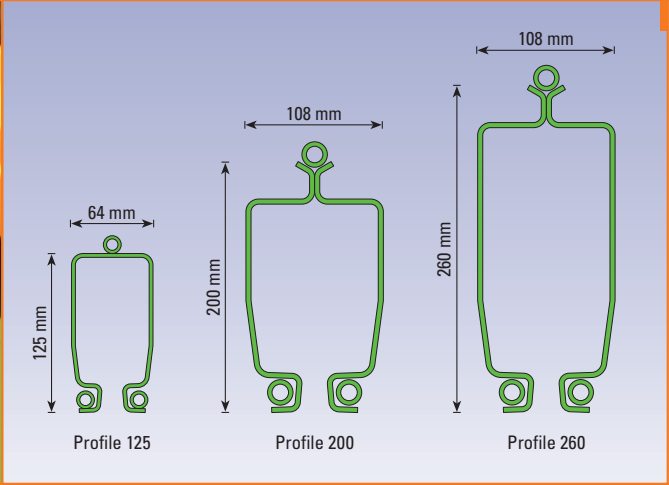
2 Compact workplace crane – The portal frames of the crane were set into the concrete floor. Suspending it from the ceiling was not possible as this would have interfered with the crane travelling above it.

3 5 m span – A light single-girder suspension crane with 500 kg S.W.L. is used for transporting materials in a workshop. The LCS small crane system is suspended from existing trusses.

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4 Retro-installed – In order to detour around the existing ventilation pipes, threaded rods were used to extend the suspensions of a crane with 500 kg S.W.L. The whole area of travel is thus beneath the obstacles.

5 Pendulum design – The standard galvanised suspension requires no welding on site. Vibrations from the crane installation are equalised by the pendulum design.

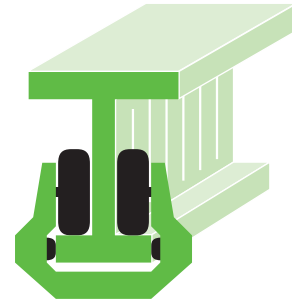
6 Flexible modular system – The 260 profile is used for wide spans and high loads. Two smaller rails are available for lower loads to make full use of the available ceiling height.

7 Perfectly adapted – A double-girder suspension crane with 1,000 kg S.W.L. is integrated into freestanding portals instead of being suspended from the ceiling.



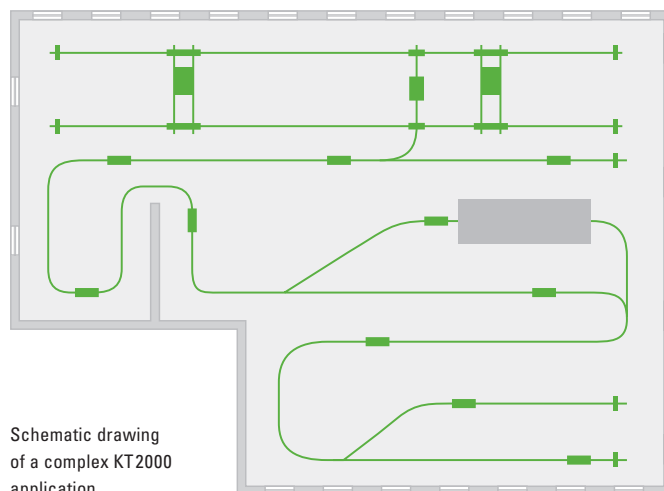
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KT2000 _ versatile, automation-friendly, cost-effective



KT2000 from STAHL CraneSystems is a small crane system that will hold its own indefinitely whatever your requirements and your growth. This system lifts and transports loads up to 2,000 kg particularly easily and economically. Whether overhead monorails for linear transport or suspension cranes for wide-ranging overhead transportation are needed, this modular system makes anything possible, right up to complex automated material flow solutions. The basic element of the KT system is the maintenance-friendly, open runway rail for both top and bottom running trolleys. Plug and bolt elements ensure simple, fast assembly. This enables the system to be individually adapted to your production and to extensions of the installation. The low-maintenance trolley with outside wheels functions easily and smoothly. Travel is optionally by pushing and pulling on the load or by means of the smooth electric friction-wheel drive. On the KT2000, the power supply is usually provided by a conductor line integrated into the system and protected against accidental contact. This permits for example the parallel operation of several suspension cranes on one crane bridge. Powerful original chain hoists from STAHL CraneSystems complete your KT2000 small crane system perfectly, safely and cost-effectively.

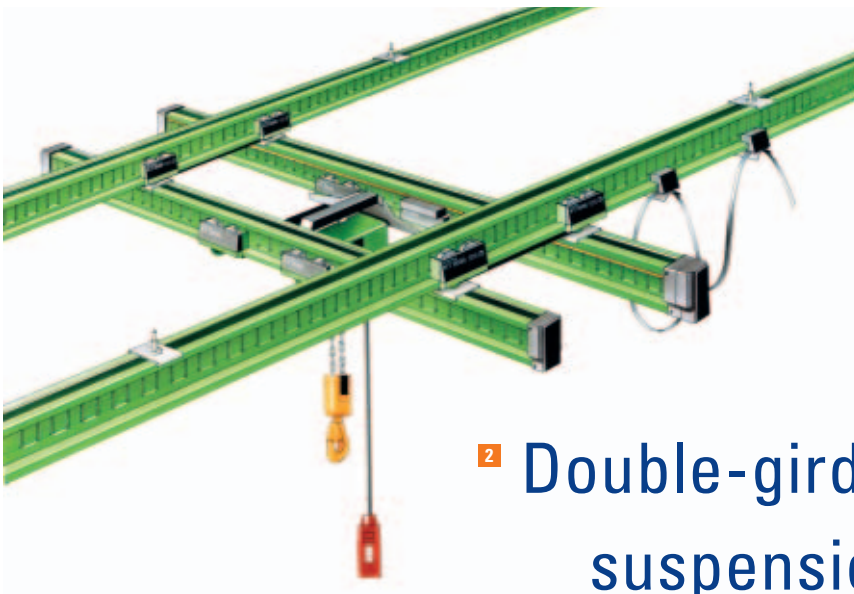
- **Easy maintenance** _ wheels easily accessible
- **Individual configuration** _ bends, switch points, interlocks
- **Unique conductor line** _ easily accessible and thus superior to internal conductor lines
- **Can be automated** _ up to eight conductor lines make automation simple
- **Flexible** _ no welding is necessary when adapting the system as the joints are bolted



Schematic drawing
of a complex KT2000
application

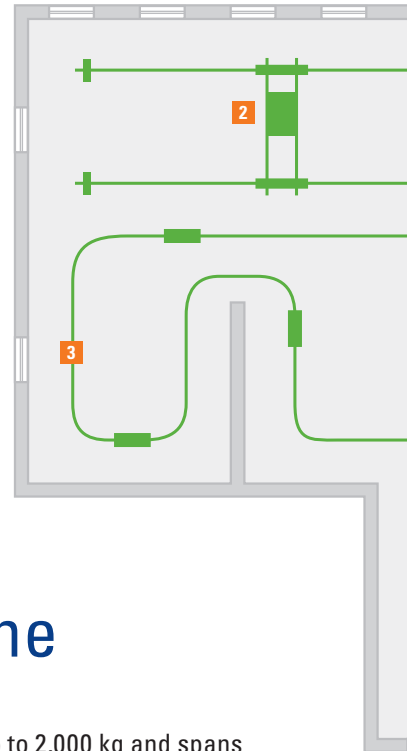
1 Single-girder suspension crane

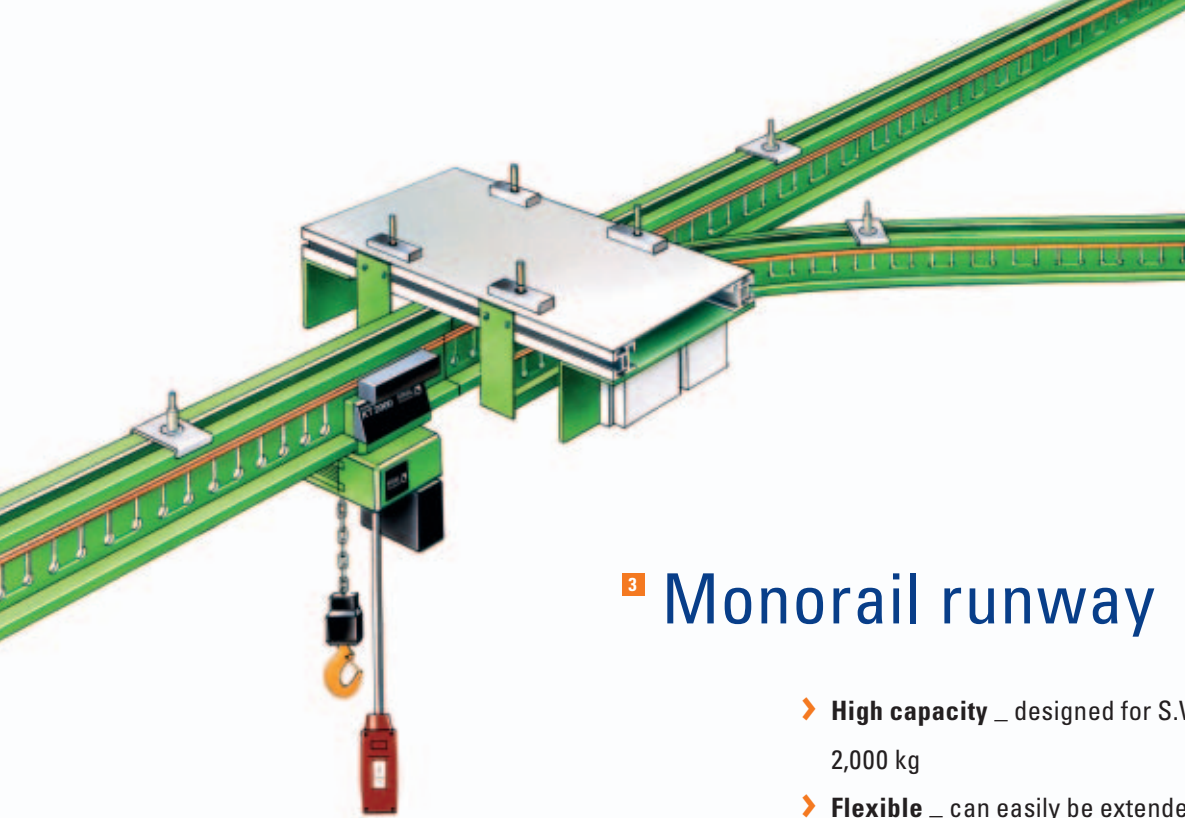
- › **High capacity** _ designed for S.W.L.s up to 1,000 kg
- › **Flexible** _ can easily be extended as no welding is necessary
- › **Wide-ranging** _ manual or electric crane interlocks for overhead material transport, hoist can cross over from suspension crane to spur runway without setting down load
- › **Safe** _ crane runway and crane bridge rails with pendulum suspension
- › **Ideal** _ system-integrated conductor line for parallel operation of more than one crane on the same crane bridge



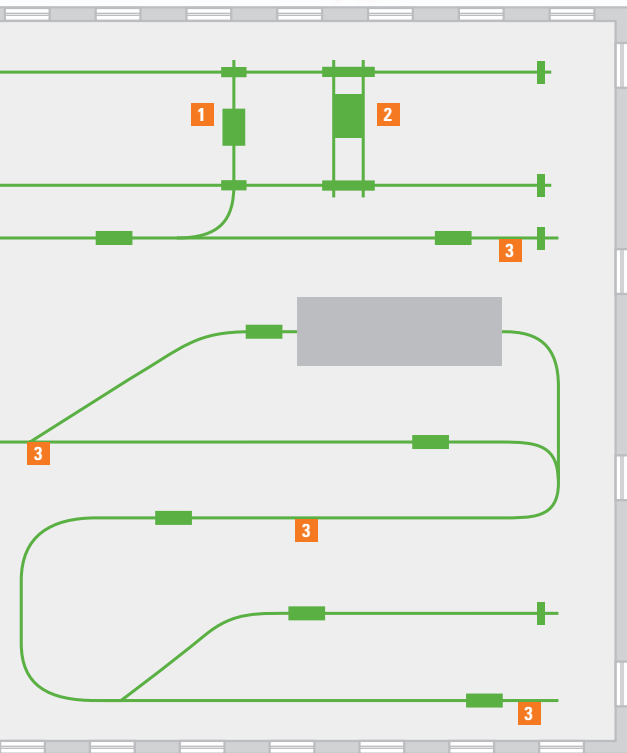
2 Double-girder suspension crane

- › **High capacity** _ uniform girder profile, designed for S.W.L.s up to 2,000 kg and spans up to 7 m
- › **Ideal** _ greater height of lift as the hoist is suspended between the bridge girders
- › **Flexible** _ can easily be extended and automated with up to 8-pole conductor line
- › **Wide-ranging** _ manual or electric crane interlocks for overhead material transport, hoist can cross over from suspension crane to spur runway without setting down load
- › **Safe** _ crane runway and crane bridge rails with pendulum suspension
- › **Maintenance-friendly** _ the trolleys are visible from outside making inspection simple





3 Monorail runway



- › **High capacity** _ designed for S.W.L.s up to 2,000 kg
- › **Flexible** _ can easily be extended as no welding is necessary
- › **Complex** _ continuous, individually adaptable transportation system with straight, curved and crossover sections and switch points
- › **Amazing** _ small radius of bend of 955 mm
- › **Convenient** _ system-integrated 8-pole conductor line for automating the system
- › **Ideal** _ utilisation of full runway length as no festoon cables restrict the approach dimension
- › **Mobile** _ travel motion either manual by pushing and pulling on the load or powered by a smooth friction wheel drive
- › **Wide-ranging** _ crane interlocks enabling the hoist to cross over from monorail to suspension crane without setting down the load



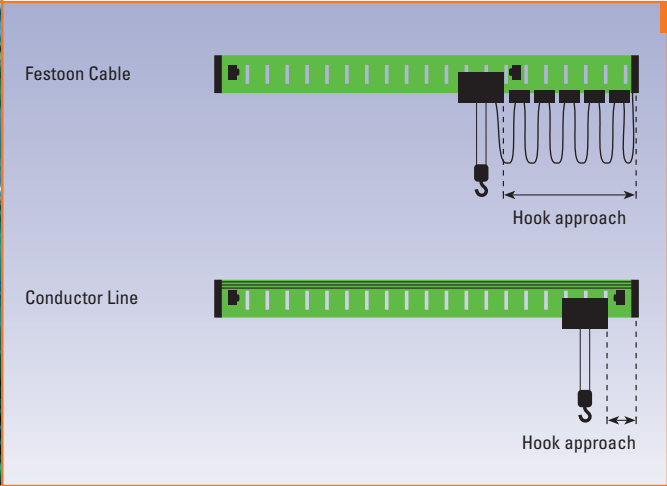


1

- 1 Flexible runway path _ A car manufacturer uses this KT2000 small crane system with 1,000 kg S.W.L. The compact switch points and the bends with only 955 mm radius permit a complex material flow.
- 2 John Deere _ In series manufacture of tractors, only low-maintenance systems with maximum availability are used to supply materials to the assembly line.
→ Ask for our reference brochure "Tractor assembly".
- 3 Minimum approach dimensions _ When conductor lines are used, there is no cable ambush area. The whole width and length of the room can be utilised, this is of particular advantage in the case of long runways.



2



3

- 4 Accurately positioned _ The optional electric friction-wheel drive for hoist and bridge facilitates working with loads above 1,000 kg or with wide spans.
- 5 Complete small crane technology _ A production area was equipped with four KT2000 small cranes on two runways. The power supply for these extremely long runways is provided by the integrated conductor line.
- 6 Greater effective height _ The two bridge girders of the KT2000 double-girder suspension crane are raised up into the crane runway.



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ST Chain hoists _

ideal, safe, reliable

The ST chain hoist programme from STAHL CraneSystems is one of the most striking and wide-ranging on offer in the world. In use in thousands of applications for decades, modernised and optimised over and over again, the STAHL chain hoist is a classic. Powerful, reliable and undemanding as regards maintenance and power consumption. Three chain hoists, the ST05, ST10 and ST20, from the ST range are available for use in small crane systems for loads up to 2,000 kg. They are used as push or electric trolleys and round off your small crane installation perfectly. The innovative and pioneering chain hoist design brings considerable economical advantages. The extremely short headroom optimises the effective hook height and reduces wear on the chain.

- › **Safe** _ patented suspension directly on the chain guide
- › **Ideal** _ short and compact headroom dimensions permit maximum utilisation of space
- › **Long-lived** _ high standard FEM classification
- › **Tough** _ surface-hardened, galvanised and generously dimensioned load chain
- › **Economical** _ long-life brake and low-wear slipping clutch
- › **Maintenance-friendly** _ innovative chain drive
- › **Available fast** _ to modern Kanban production

Type	S.W.L. [kg]	2 hoisting speeds [m/min]	Chain falls
ST 0502-8/2	500	4/1	2
ST 1005-8/2	1,000	4/1	2
ST 2010-8/2	2,000	4/1	2



- 1 The ST05 chain hoist from STAHL CraneSystems for loads up to 630 kg.
- 2 The ST10 chain hoist from STAHL CraneSystems for loads up to 1,000 kg.
- 3 The ST20 chain hoist from STAHL CraneSystems for loads up to 2,000 kg.

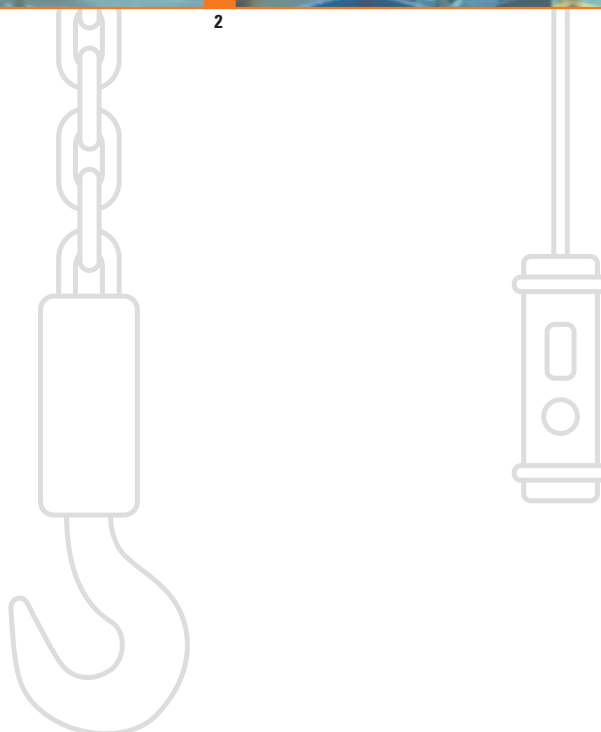


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Service _

world-wide, round the clock

Responsible

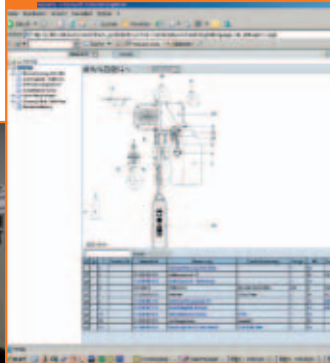
STAHL CraneSystems is a by-word for safety, confidence and cost-effectiveness. Our responsibility is to you, our customer. Specialists trained by us advise you on which hoists are right for your application. Planning, calculation and order processing are fast. The lasting safety and cost-effectiveness of your hoists and small crane systems are important to us at STAHL CraneSystems. In this too, qualified and competent service specialists, trained by us, look after your system throughout its service life, all around the world and right around the clock. Our services extend from world-wide prompt spare parts supply to individual, system-orientated maintenance using modern diagnostic apparatus, to annual inspections to ensure national accident prevention regulations are met. Training courses and seminars in our own training centre also form part of the extensive services offered by STAHL CraneSystems. We help your staff to keep up to speed.

- › **On the spot** _ 13 subsidiaries and over 100 partner companies around the world
- › **Perfect** _ everything from one qualified supplier, STAHL CraneSystems
- › **Competent** _ regular training courses for service engineers held by STAHL CraneSystems in our own training centre
→ training@stahlcranes.com
- › **Progressive** _ condition monitoring devices ensure safe operation, modern diagnostic apparatus permits customised service to be offered
- › **Round the clock** _ Online service
→ www.web.stahlcranes.com
- › **Guaranteed** _ Spare parts supply even decades after the series has been discontinued
- › **Fast** _ Online catalogue for spare parts
→ parts@stahlcranes.com

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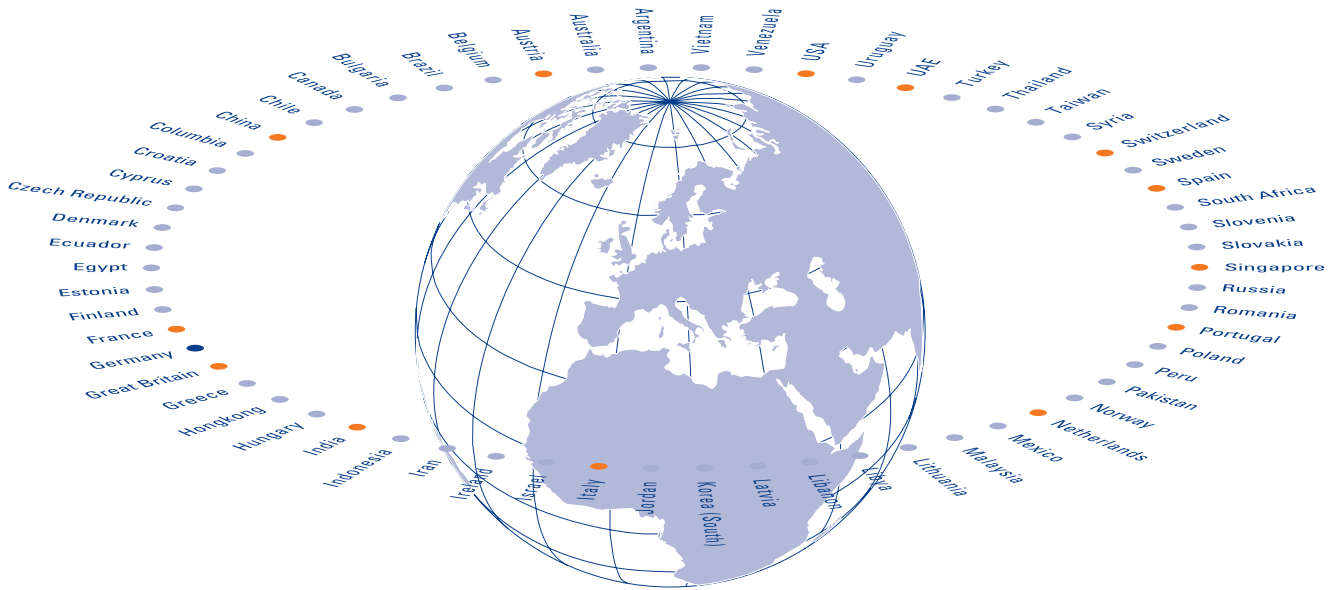
- 1 Service engineers regularly receive instruction and advanced training from STAHL CraneSystems in our own training centre
- 2 The electronic spare parts catalogue is a new medium for ordering spare parts.
- 3 The "Mobile Inspection Service" will check and maintain your load suspension equipment on site. This ensures that your production will be spared frequent downtimes.
- 4 Central spare parts warehouse in the Künzelsau-Hofratsmühle plant.
- 5 Modern diagnosis apparatus assists service engineers during inspection and maintenance work.

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● **Sales partners**

You will find the addresses of over 100 sales partners on the Internet at www.stahlcranes.com under Contact.

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