Demag track and crane systems
from the KBK crane construction kit

Overhead transport, exact positioning, ergonomic handling
Keep your materials off the floor

Track and crane installations from the KBK crane construction kit by Demag Cranes & Components have a successful track record going back many years. Installations built with these components can be found in facilities and workshops of almost any type and every size.

Characteristic for the KBK classic crane construction kit are the many possibilities for handling loads quickly, safely and efficiently above the working and production level – without having to use any of the available floor space for crane runway supports or travel paths. In addition, you can arrange all workplaces for maximum productivity.

The components included in the KBK ergo modular construction kit make it possible to accommodate kick-up forces, such as those which occur on cranes with a large overhang or manipulator arms.

Besides the modular construction kit with steel profile sections, aluminium profiles are also available. KBK Aluline features a low deadweight and provides for convenient handling of loads weighing up to 1,000 kg.
Demag KBK crane construction kit ...
KBK installations are suitable for linear as well as area-serving transport operations, for point-to-point connections or systems with many branch tracks. They can be built in a range of load capacities up to 3,200 kg to provide highly effective handling operations to meet your requirements.

... rugged design and flexibility ...
Made up of many modular components, the KBK crane construction kit can be tailored to meet your individual equipment requirements. The basic elements are cold-rolled special profile sections in various sizes. They feature high rigidity and strength for a low deadweight. They also make it easy and cost-effective to extend and convert KBK installations as your business grows or when production requirements change.

... simple installation, reliable and efficient
A further typical benefit is simple and fast assembly thanks to standardised connection dimensions and plug or bolted connections. Installations are easy to commission and maintenance work can be quickly carried out.

Made of standardised products manufactured in large series, KBK components give you the certainty of
■ optimum cost-benefit ratio,
■ high functional reliability,
■ long service life.

Comprehensive service
We offer you comprehensive services for your KBK project:
■ Consultation on site
■ Project engineering including state-of-the-art IT support; design for special solutions
■ Delivery, assembly and commissioning
■ Demag Service to maintain the high safety and reliability and to maintain the value of your installation, including compliance with all accident prevention regulations and guidelines

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Suspension monorails for overhead material handling over long distances

**Suspension monorails**
For linear handling and to provide a direct link between pick-up and deposit points in reversing operation or a closed circuit. Many designs from simple, manually operated straight sections to complex, semi- or fully automated circuits; flexible routing using straight and curved track sections, track switches and turntables.
Suspension cranes to link production processes

**Single-girder suspension cranes**
For area-serving transportation; minimum approach dimensions, low deadweight; easily moved by hand. Articulated connections between the crane girder and end carriages for smooth operation; cranes can even operate on tracks that are not parallel.

**Double-girder suspension cranes**
For handling heavier loads and bridging greater spans; favourable installation dimensions, also as manipulator cranes, optimum design for use in state-of-the-art handling systems. Maximum possible hook paths by arranging the hoist between the crane girders; large spans can be bridged by cranes running on more than two runways.
Overhung and extending cranes –
With large overhang, for extended overhead handling

**Overhung cranes**
Crane girder with overhang extending up to 2.5 m beyond the runway span.

**Extending cranes**
Crane girder with intermediate girder that can be extended by up to 2.5 m to one or both sides. Optimum design for serving areas added at a later date or featuring ventilation pipes, radiant heaters, cables and similar items, or areas otherwise inaccessible due to columns or supports.
Jib cranes –
Workplace cranes integrated into the material flow

Stacker cranes, portal cranes
Ideal workplace units

Pillar-mounted jib cranes
Free-standing workplace cranes at almost any location; with a wide operating radius. Simple traversing of the jib at any load position due to low deadweight.

Wall-mounted jib cranes
Workplace cranes mounted on walls, columns or machinery; no additional floor space required.
Also as tool tracks for handling test equipment, tools, etc. as well as cable or hose suspension tracks.

Stacker cranes
Double-girder suspension cranes with special rotating stacker trolleys, easily moved and rotated by hand. For storing and retrieving unit loads, containers and pallets.

Portal cranes
Floor-travelling, not rail-bound; ideal for repair and assembly work. Good manoeuvrability; easily dismantled and re-erected.
Demag KBK track and crane installations – all types and possible designs at a glance
Suspension monorails –
Ideal for linear handling

Suspension monorails from the KBK construction kit are the optimum solution for linear, overhead handling.

Outstanding versatility
A wide range of components makes it possible to adapt the route precisely to meet the structural requirements of your workshop.

At the same time, the system ensures that all specific product and workplace requirements of your production facility are met.

KBK classic suspension monorails can be built to almost any design: from simple, manually controlled straight sections to complex, semi- or fully automated closed-circuit monorail systems. Transfer between suspension monorails and adjacent suspension cranes is also possible using latching devices.

Ideal equipment carriers
The special profiles of the KBK system are particularly suitable for applications such as tracks for load balancers fitted with test equipment.
and electric and pneumatic tools, etc. and power supply lines for cranes and other mobile equipment.

Cable trolleys can also be used for suspending hoses for transporting fluids or gases.

Profile selection: max. distances between supports, headroom dimensions

<table>
<thead>
<tr>
<th>KBK profil</th>
<th>Adjustable headroom dim. (mm)</th>
<th>Load capacity (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Distance between supports for suspension monorail ( L_\text{m} ) (mm)</td>
<td>80</td>
</tr>
<tr>
<td>100</td>
<td>220</td>
<td>3.0</td>
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<tr>
<td>I</td>
<td>250</td>
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<tr>
<td>II-L</td>
<td>370</td>
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<td>II</td>
<td>400</td>
<td>8.0</td>
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<tr>
<td>III</td>
<td>446</td>
<td>8.0</td>
</tr>
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</table>
Single-girder suspension cranes – Favourable dimensions, low deadweight

Single-girder suspension cranes from the KBK classic construction kit make it possible to achieve fast and reliable area-serving overhead handling and exact positioning of a wide variety of goods.

**Easy and cost-effective**

KBK classic single-girder suspension cranes can be simply suspended from the building roof or superstructure. Additional supports for the crane runway are not necessary. Even partial areas of a workshop may be easily fitted with suspension cranes at low cost.

**Smooth and reliable handling**

Thanks to their low deadweight and smooth-running trolleys, the cranes can be easily moved by hand. They ensure that heavy and awkward workpieces can also be handled safely and reliably.

The benefits of KBK classic single-girder suspension cranes include latching devices that allow direct transfer of the hoist trolley between the crane and suspension monorails. Articulated connections between the crane girder and end carriages enable single-girder cranes to operate on tracks that are not parallel.

**Profile selection: Max. distances between supports, crane spans, girder lengths**

<table>
<thead>
<tr>
<th>KBK profil</th>
<th>80</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>1600</th>
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<tbody>
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<tr>
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<tr>
<td>Girder length</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>I</td>
<td></td>
<td></td>
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<td></td>
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<td>Crane span</td>
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<tr>
<td>II-L</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
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<td>7.0</td>
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<tr>
<td>II</td>
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<tr>
<td>III</td>
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<td></td>
</tr>
<tr>
<td>Crane span</td>
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<td>7.0</td>
<td>5.0</td>
<td>4.0</td>
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<td></td>
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</table>
Double-girder suspension cranes –
Large lifting heights, spans and high load capacities

Double-girder suspension cranes from the KBK classic construction kit feature a low deadweight and favourable structural dimensions. In addition, the pendulating suspension largely absorbs the horizontal forces caused by starting, braking and stopping. They can even be installed in buildings of light steel construction.

**Large lifting heights**
Arrangement of the hoist unit between the two crane girders provides KBK classic double-girder cranes with a greater useful lifting height.

**Large spans**
KBK classic double-girder cranes can also operate on several runways, thus providing large spans to cover extensive storage and production areas.

**Profile selection: Max. distances between supports, crane spans, girder lengths**

<table>
<thead>
<tr>
<th>KBK profil</th>
<th>Load capacity (kg)</th>
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<tbody>
<tr>
<td></td>
<td>80</td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crane span l_kr</td>
</tr>
<tr>
<td></td>
<td>Girder length l_H</td>
</tr>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crane span l_kr</td>
</tr>
<tr>
<td></td>
<td>Girder length l_H</td>
</tr>
<tr>
<td>II-L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crane span l_kr</td>
</tr>
<tr>
<td></td>
<td>Girder length l_H</td>
</tr>
<tr>
<td>II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crane span l_kr</td>
</tr>
<tr>
<td></td>
<td>Girder length l_H</td>
</tr>
<tr>
<td>III</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crane span l_kr</td>
</tr>
<tr>
<td></td>
<td>Girder length l_H</td>
</tr>
</tbody>
</table>

Power supply cable trolleys travel in the KBK runway or crane girder sections. If required, the control pendant can also travel independently of the hoist when fitted to a separate travel rail.
Overhung and extending cranes – Large overhang, constant or variable

If you also want to move loads beyond the limits of the crane suspension – we can make this possible with KBK.

**Extending cranes**
KBK classic and KBK ergo extending cranes feature additional girders that are arranged between or beneath the crane girders. Depending on the design, they can be extended to one or both sides beyond the crane runway width. These cranes can also be used for precisely lifting and positioning loads in almost inaccessible areas, such as between pillars and columns.

**Overhung cranes**
KBK ergo overhung cranes are fitted with crane girders that extend up to 2.5 m beyond the width of the crane runway. This enables you to reach bays added at a later date, for example. These cranes can even handle loads below ducts, radiant heaters, pipes or similar obstacles between the wall and roof, which result in the crane runway having to be positioned at a distance to the wall.

**Max. permissible overhang dimensions**
*depending on profile and extension type; also dependent on the load.

<table>
<thead>
<tr>
<th></th>
<th>KBK I</th>
<th>KBK II-L</th>
<th>KBK II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-girder crane</td>
<td>–</td>
<td>1.5 m</td>
<td>1.8 m</td>
</tr>
<tr>
<td>Double-girder crane</td>
<td>1.6 m</td>
<td>2.3 m</td>
<td>2.5 m</td>
</tr>
</tbody>
</table>

**Max. permissible overhang dimensions**
*depending on profile and extension type; also dependent on the load.

<table>
<thead>
<tr>
<th></th>
<th>KBK II-L</th>
<th>KBK II</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1/1</td>
<td>1.5 m</td>
<td>1.8 m</td>
</tr>
<tr>
<td>B2/1</td>
<td>1.5 m</td>
<td>2.0 m</td>
</tr>
<tr>
<td>B2/2</td>
<td>2.3 m</td>
<td>2.5 m</td>
</tr>
</tbody>
</table>
Manipulator cranes –
Optimum ergonomic load handling

Double-girder suspension cranes can also be designed as manipulator cranes using KBK ergo components. They can be designed to meet the exact needs of the relevant loads, processes and production conditions. They make it possible to
- Move workpieces and subassemblies into the most favourable positions for the relevant process,
- Serve workplaces, machinery and installations from any direction,
- Perform operations outside the suspension area, thus increasing the operating range.

Innovative and ready to meet tomorrow’s needs
Manipulator cranes are built using selected KBK ergo components. They feature the ability to accommodate kick-up forces.

In addition, they offer outstanding positioning accuracy, together with high operating speeds. In this way, you can optimise handling operations in line with ergonomic requirements for maximum efficiency.

Fast upgrade
If you already have double-girder suspension cranes from the KBK classic crane construction kit, they can be easily and quickly modified with KBK ergo components to become manipulator cranes.
Stacker cranes, portal cranes – Specialised handling equipment for warehouse and factory

Stacker cranes
Stacker cranes from the KBK classic crane construction kit mainly of a KBK classic double-girder suspension crane and a special stacker trolley. They are used wherever unit loads, containers or pallets weighing up to 500 kg have to be transported, sorted and stored. They make it possible to complete all tasks in one operating cycle without the need for ladders, order picking trolleys or similar equipment.

The stacker crab can be fitted with forks, prongs, gripper tongs or other load handling attachments in accordance with the specific load handling requirements. The mast with its trolley is easily moved by hand and can rotate through 360°.

Portal cranes
Portal cranes from the KBK classic crane construction kit with a load capacity up to 1,000 kg can be used wherever a suspension crane is not cost-effective or cannot be installed. They run on solid, even surfaces and can be manoeuvred easily in all directions, making them ideal for repair and assembly work.

A particular advantage in many applications is that KBK classic portal cranes can be easily dismantled, transported and quickly re-erected elsewhere. The crane girder span can also be adjusted.
KBK installations can even be built in facilities where the workshop ceiling and roof structures cannot bear loads. Support structures tailored to meet your needs can be built quickly and efficiently using a range of standardised steel superstructure components. The required crane runways or suspension monorails can be attached direct to the supports or beams.

All supports are supplied with foot plates that are dimensioned according to the design. They can be secured to the floor using foundations featuring anchor rods or by means of anchor bolts.

As an alternative to conventional steelwork, the Hilti MI rail system can be used to create a support superstructure for installations with a load capacity up to 500 kg. This system is also of modular design, can be adapted to meet your specific needs and is also easy to assemble.
### KBK classic crane construction kit components

#### Profile sections
The basic elements are special cold-rolled steel track sections available in five different sizes:

- **KBK 100**  
  Load capacity up to 125 kg

- **KBK I**  
  Load capacity up to 500 kg

- **KBK II-L**  
  Load capacity up to 1,000 kg

- **KBK II**  
  Load capacity up to 2,000 kg

- **KBK II-R**  
  KBK II with internal 5-pole power supply

- **KBK II-T**  
  Reinforced KBK II profile section, for single and double-girder suspension cranes

- **KBK III**  
  Load capacity up to 3,200 kg

For each size, all standardised components and assemblies, such as straight and curved track sections, track switches, turntables, drop sections, etc., have the same uniform joint dimensions. Self-centring plug-in and bolted connections allow them to be easily assembled in any combinations.

#### Suspensions
To prevent bending stresses and to minimise horizontal forces in the superstructure, KBK track sections are suspended so as to allow pendulation.

Plastic shells in the ball joints reduce impacts and noise. They also reduce maintenance to a minimum. The track height can be easily and precisely adjusted by means of the threaded suspension rods that connect the ball joint heads.

#### Straight and curved sections
Profile sections for loads weighing up to 2,000 kg are hollow track sections with protected inside running surfaces.

The KBK III profile of outside-running design is available for loads weighing up to 3,200 kg. KBK II and KBK III profile sections can also be supplied with integrated conductor lines.
Track switches
Of compact, enclosed design, track switches are branching or converging components in the material flow. They can be supplied for manual, electric or pneumatic switching for semi- or fully automatic control.

Turntables
Turntables make it possible to change direction in a minimum of space. Integrated mechanical locking devices prevent trolleys from leaving or entering the turntable section while it is turning. Turntables can be manually or electrically operated.

Push travel trolleys
Fitted with bearing-mounted plastic wheels, push travel trolleys are easy to move. The rollers are maintenance-free and designed for a long service life. They effectively absorb all impacts and are silent-running.
Friction wheel travel drives
Friction wheel travel drives with large friction wheels and a high friction coefficient ensure that the drive forces are transmitted efficiently. Springs provide constant pressure between the drive wheels and the running surface of the track. Therefore, the connection between the friction wheel and the track does not depend on the position and weight of the suspended load. At the same time, friction wheel travel drives are quiet-running.

Various drives are available depending on the load to be moved and the required travel speed. In addition, variable-speed travel drives and a pneumatic drive to support the movement of handling devices can be supplied.

Power supply
Flat cables are preferably used to supply power. With more than two cranes on a runway or more than two travelling hoists on a suspension monorail and in the case of track systems with switches, turntables, latching devices or drop sections, power is supplied via conductor lines: with 5 internal conductors for KBK II-R track sections, with up to 10 individual conductor lines for KBK III track sections. All power supply lines are robust and require little maintenance.

Compressed air or electric power and compressed air are frequently required for the operation of modern handling equipment. They can be supplied by means of a particularly smooth-running trailing helical cable system.

Drop sections
Drop sections are mainly used in closed-circuit tracks to pick up and deposit loads at predetermined positions. This eliminates the need for hoist units. When lowered in the drop section, the trolley is mechanically locked in place. Mechanical locks in the track stop other trolleys on either side of the drop section.

Latching device
Latching devices make it possible to connect single-girder suspension cranes and suspension monorails so that the hoist trolley can transfer between them. When disengaged, the crane travels past the end of the monorail without any mechanical contact.
KBK ergo components

KBK ergo components can be used to build cranes that have to accommodate kick-up forces. This may be the case for overhung, extending and manipulator cranes.

**Suspensions**
Fitted with integrated damping elements, KBK ergo suspensions absorb energy from various directions.

**Trolleys**
KBK ergo trolleys feature articulated axles and correspondingly dimensioned rollers for lateral guidance. They reliably absorb any upward and lateral forces and moments.

**End carriages**
End carriages provide improved rigidity and increased positioning accuracy.

**End caps**
Special shock absorbers are required on rigid systems with uncompensated loads. Shock absorbers integrated in the end caps dissipate the energy transmitted by the loads to all components and assemblies as well as the support superstructure.

**Crab frame**
The specially developed crab frame is a rugged, high load bearing system for mounting specially equipped hoists and manipulators.
KBK Aluline – The lightweight

KBK Aluline is used for applications in which a wide variety of lifting, transportation and handling tasks can be carried out by lighter track and crane systems.

**Whatever you need to lift, wherever it is**
Whether for industrial, retail or service facilities, in special manufacturing environments and storage facilities or even theatres and studios – KBK Aluline systems provide the optimum solution.

Typical features of KBK Aluline include:
- very low weight for high rigidity
- highly precise components
- anodized surfaces with an attractive finish
- very easy assembly
- compact design
KBK Aluline can be used to construct both single and double-girder suspension cranes for area-serving transport requirements as well as straight suspension monorail systems for straight connections between workplaces.

Standard lengths are suspended from articulated fittings (KBK classic suspensions).

KBK ergo components are used for overhung and manipulator cranes.

Aluminium and steel profile sections can be combined within an installation. For example, a steel profile section can be used for a crane runway and a light aluminium profile section as a crane girder.

Versatile and extendible for many applications
Existing installations can be modified easily and cost-effectively by adding new parts or replacing existing components to meet new needs.
**Smooth and reliable handling**
Thanks to their low deadweight and smooth-running trolleys, the cranes can be easily moved by hand.
They ensure that heavy and awkward workpieces can also be handled safely and reliably.
KBK Aluline suspension cranes can be simply suspended from the building roof or superstructure. Additional supports for the crane runway are not necessary.

Specific areas of a workshop may be easily fitted with suspension cranes at low cost.

**Single-girder cranes**, manual travel for smaller loads, double-girder cranes for larger loads and spans; electric or pneumatic travel drives can be fitted.

**Double-girder suspension crane**
Compared to single-girder cranes, **double-girder cranes** have more favourable installation dimensions and provide the maximum possible hook paths thanks to the arrangement of the hoist between the crane girders.
In combination with KBK Aluline ergo components, they are also ideally suited as **manipulator cranes** for the use of state-of-the-art handling systems.

### Suspension monorail

<table>
<thead>
<tr>
<th>Section</th>
<th>Lifted load $G_H$ (kg)</th>
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<tbody>
<tr>
<td></td>
<td>80</td>
</tr>
<tr>
<td>Aluline 120</td>
<td>l_w (m)</td>
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<tr>
<td>Aluline 180</td>
<td>l_w (m)</td>
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### Single-girder suspension crane

<table>
<thead>
<tr>
<th>Section</th>
<th>Lifted load $G_H$ (kg)</th>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Aluline 120</td>
<td>l_Kr (m)</td>
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<tr>
<td></td>
<td>l_H (m)</td>
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<tr>
<td>Aluline 180</td>
<td>l_Kr (m)</td>
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<td></td>
<td>l_H (m)</td>
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### Double-girder suspension crane

<table>
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<th>Section</th>
<th>Lifted load $G_H$ (kg)</th>
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<tr>
<td></td>
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<tr>
<td>Aluline 120</td>
<td>l_Kr (m)</td>
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<tr>
<td></td>
<td>l_H (m)</td>
</tr>
<tr>
<td>Aluline 180</td>
<td>l_Kr (m)</td>
</tr>
<tr>
<td></td>
<td>l_H (m)</td>
</tr>
</tbody>
</table>

$l_w$ = distance between track suspensions  
$l_Kr$ = crane span dimension  
$l_H$ = crane girder length
KBK Aluline components

Simple and reliable assembly
The KBK Aluline crane construction kit enables you to design almost any overhead suspension crane or monorail system. The track sections measuring up to eight metres in length are simply and reliably connected. They can be assembled quickly and precisely by hand as a “do-it-yourself“ kit.

Profile sections
The basic element is a profile section rail that is available in two sizes. The unique matt silver look of anodized aluminium gives KBK Aluline an almost weightless appearance. Cavities in the upper and lower parts of the track sections ensure great mechanical rigidity. Slots along the track sections make it easy to mount attachments.

Trolleys
The trolleys run smoothly and quietly on plastic travel wheels mounted in anti-friction bearings which are lubricated for life. KBK classic trolleys feature an articulated, torque-free pin connection. KBK ergo trolleys can also accommodate kick-up forces.

Joint connections
Matching interface dimensions and precise bolted connections enable KBK Aluline profile sections to be assembled quickly and easily.

Suspensions
Standard systems are fitted with KBK classic suspensions. Equipped with articulated joints, they provide a low-torque connection to the support superstructure. Special systems designed to accommodate offset loads are fitted with KBK ergo suspensions.

Power supply
Highly flexible and cold-resistant flat cables are individually suspended from cable sliders or cable trolleys in groups.
Compact hoists – With rope or chain

Demag compact hoist units offer a wide variety of load capacities, speeds and features for a maximum of safety and reliability. They can be used to meet individual application requirements in industry, workshops and the trade sector. Compact hoists are supplemented by a wide range of load handling attachments for every application.

The Demag DC-Pro chain hoist is available in two versions for loads weighing up to 5,000 kg: as the DC-Pro with a DSC control pendant switch and as the Demag DCM-Pro Manulift for quickly handling loads with only one hand. They feature a wide range of integrated standards, offer outstanding ease of operation and maintenance, high standards of safety and optimum efficiency.

Thanks to the infinitely variable speed control of the Demag DCS-Pro chain hoist, sensitive parts can be lifted, lowered and positioned more gently and carefully. Hoist motions can be performed much more quickly thanks to the higher lifting speed in the partial load range due to the Pro-Hub function.

The variable speed type is also available as the DCMS Pro Manulift for single-handed operation.

The Demag DC-Com chain hoist is an inexpensive, high-quality entry-level variant with basic features, just right for everyday use for loads weighing up to 2,000 kg.
The **SpeedHoist rope winch** is specially developed for fast handling applications with loads weighing up to 160 kg. This makes them ideal for fast transfer sequences in series production lines or in order-picking operations, for example.

The D-Grip and rocker switch control handles facilitate precise, extremely light and fatigue-free control. The operator’s hand motions are translated into exact lifting movements at infinitely-variable speeds.

The **D-BP pneumatic rope balancer** with a load capacity up to 110 kg can be used for weightless positioning and handling of loads. It is available with various control systems:

- Up/down control with DSK control pendant or Manulift control element
- Balancer controls for constant loads
- Manual force control for intuitive operation

Here, too, various load handling attachments can be connected using the proven quick-change coupling.
Components for manual and automatic controls

Installations made from the Demag KBK crane construction kit can either be fitted with manual controls or semi- or fully automatic control systems. All components correspond to the latest design and accident prevention regulations and meet the requirements of international rules and regulations.

DSK, DST and DSE control pendants
The ergonomic design and sloping housing facilitate fatigue-free operation and permit operators to work in a natural comfortable position. DST and DSE control pendant switches offer a wide variety of switch combinations for hoists, crabs and cranes and can also be used to control machinery and installations.

DRC-MP radio remote control
For wireless control of KBK installations as well as other cranes, hoists, industrial doors, machinery or installations. Suitable for a maximum of three motion axes.

- optional pushbutton or joystick transmitter units
- impact and temperature-resistant housing design
- reliable data transmission

Dematik IR infrared remote control
For wireless control of KBK installations as well as other facilities or machinery. Available in three sizes.
- Ergonomic transmitter enclosure with carrier
- Range limited to approx. 40 m
- Simple upgrade
Integrated electrics
Arranged directly on the units to be controlled and featuring plug-and-socket connectors, integrated electrics guarantee fast and easy connection of control units and cables. Integrated electrics are also subjected to punishing long-term shock and vibration resistance tests as well as function tests at varying temperatures and under various climatic conditions.

PLC programmable logic control automation systems
These systems make it possible to implement optimum solutions with maximum efficiency for any materials handling automation requirements. Based on compact modules, existing control systems can be extended at any time. Operating sequences can also be visualised.

Frequency inverters
Frequency inverters that can be adapted to specific operating sequences make it possible to implement infinitely variable speed control of drives, for example.

Load detectors
Optional electronic load detectors on hoist units provide overload protection for maximum safety and efficient utilisation. Additional load summation and digital load displays can be added.

Pulse generators
Pulse generators integrated into electric motors provide countable signals for measuring speed and rotation in both directions. The units can be automated.
Load handling attachments

Mechanical load handling attachments
Grippers, load pins, load forks, load hooks and tongs are mainly employed as mechanical load handling attachments. They are primarily combined with versatile hoist units, e.g. Manulift or rope balancer units. They are connected by means of a quick-change coupling. The load handling attachments are fitted with a connecting pin with a swivel lock, which snaps into the quick-change coupling.

Gripping devices as well as tongs are usually based on a scissor mechanism. Fitted with a variety of jaws, PGS parallel grippers can be used for many applications, e.g. for handling shafts, containers or bins.
**Load handling magnets**

The range of load handling magnets includes:

- DPMN compact permanent magnets, suitable for flat and round materials, operation independent of the mains.
- DBM 34/68 rectangular battery magnets, operation independent of the mains.
- R15–30 electro-magnets, round single magnets with outstanding power, with integrated rectifier and switch as standard.

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**Vacuum load handling attachments**

Vacuum load handling attachments can be operated by compressed air via injectors and electric vacuum pumps or fans. The latter operate with comparatively low underpressure, but with high volume flows, and are particularly suitable for handling air-permeable workpieces such as textiles and cartons, for example.

Available options include: devices for supplying compressed air to suction pads for rapid load deposit and safety circuits and underpressure reservoirs to maintain the suction energy in the event of a power failure.
Pillar and wall-mounted slewing jibs and cranes – For improved workplace efficiency

Pillar and wall-mounted jib cranes help to cut setting-up and idle times and reduce unnecessary waiting times. With a wide range of sizes and designs, these cranes can be adapted to provide the optimum solution for the most varied requirements in terms of load capacity, slewing range, outreach and features – even including cranes with two jibs.

The main characteristic of all variants is the low jib deadweight and correspondingly large outreach and high load capacity. Demag jib cranes are normally supplied complete with the electrical equipment and hoist including the corresponding trolley, however, also without these components, if required. Special hook path dimensions can be achieved by means of longer masts or pedestals. Parts are also available to anchor the mast to foundations or existing workshop floors.

### Pillar-mounted slewing jibs
**Slewing range 270°/300°**

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- Type KBK 100 – slewing range = 270°. Specification to H2B3. See technical data sheet 203 565 44.

### Pillar-mounted slewing cranes
**Slewing range n x 360°**

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- Type D-MS 360 – Manual slewing or with electric slewing drive. Specification to H2B3. See technical data sheet 203 502 44.

### Wall-mounted jib cranes
**Slewing range 180°/270°**

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- Type D-MS 360 – Manual slewing or with electric slewing drive. Specification to H2B3. See technical data sheet 203 502 44.* Intermediate lengths possible
Pillar-mounted slewing jibs and cranes
They can be installed almost anywhere. They are completely free-standing and are ideal as workplace cranes as well as for outdoor storage areas, loading ramps and for workshops in which other handling equipment cannot be used for structural reasons.
The pillar requires only a minimum footprint. Even where only little headroom is available, pillar-mounted jib cranes provide maximum hook paths.

Wall-mounted jib cranes
They require no floor space as they are mounted on load-bearing concrete walls or pillars or machinery and installations. Thanks to the braced design, the jibs of KBK wall-mounted jib cranes have a low deadweight and can be easily moved with the load by hand.
www.demag-kbkdesigner.com is the address where all important facts and data on the KBK crane construction kit can be found. This information and planning platform provides you with a comprehensive product overview and contains all the data you need for project engineering.

The KBK Designer system provides you with project engineering support for KBK crane installations made of steel and aluminium and for slewing jibs and cranes. You can download corresponding CAD drawings and integrate them into your design drawings.

The practical and intuitive user interface ensures that you find the right solution to meet your needs quickly and easily. You can then send us your specific enquiry at a click.

You can also use the form on the opposite page to send us your enquiry. Experienced Demag engineers are also ready to provide you with help and advice. Call the Demag information line on +49 (0) 2335 92-2922 to find a contact in your area.
Enquiry

Demag Cranes & Components GmbH
HT Product Promotion Dept.
P.O. Box 67
58286 Wetter/Germany

by fax to
+49(0)2335 92-2406

or by e-mail to
handling@demagcranes.com

Please send an offer/the information to:

Company

P.O. Box/Street

Town/post code

Contact

Telephone/extension

Telefax

E-mail

Project engineering for KBK installations

I am interested in

☐ Suspension monorails
☐ Single-girder suspension cranes
☐ Double-girder suspension cranes
☐ Manipulator cranes (KBK ergo)
☐ Overhung cranes (KBK ergo)
☐ Extending cranes (KBK ergo)
☐ Stacker cranes
☐ Portal cranes
☐ Crane runway support structures
☐ Pillar-mounted slewing jibs
☐ Wall-mounted jib cranes

I require

☐ Telephone contact

☐ Quotation

☐ Detailed information on

Details of the planned installation

Weight of the load ____________ kg

Description of the load ________________________________

Workshop dimensions

Width ______________________ mm
Height ______________________ mm
Length of the monorail / crane runway ______________________ mm

Length of the crane girder ______________________ mm
Manipulator crane outreach length ______________________ mm
Overhanging crane outreach length ______________________ mm
Extending crane intermediate girder length ______________________ mm
Pillar-mounted crane jib length ______________________ mm
Wall-mounted crane jib length ______________________ mm
Required hook path ______________________ mm

Additional information: ____________________________________________________________

________________________________________________________

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