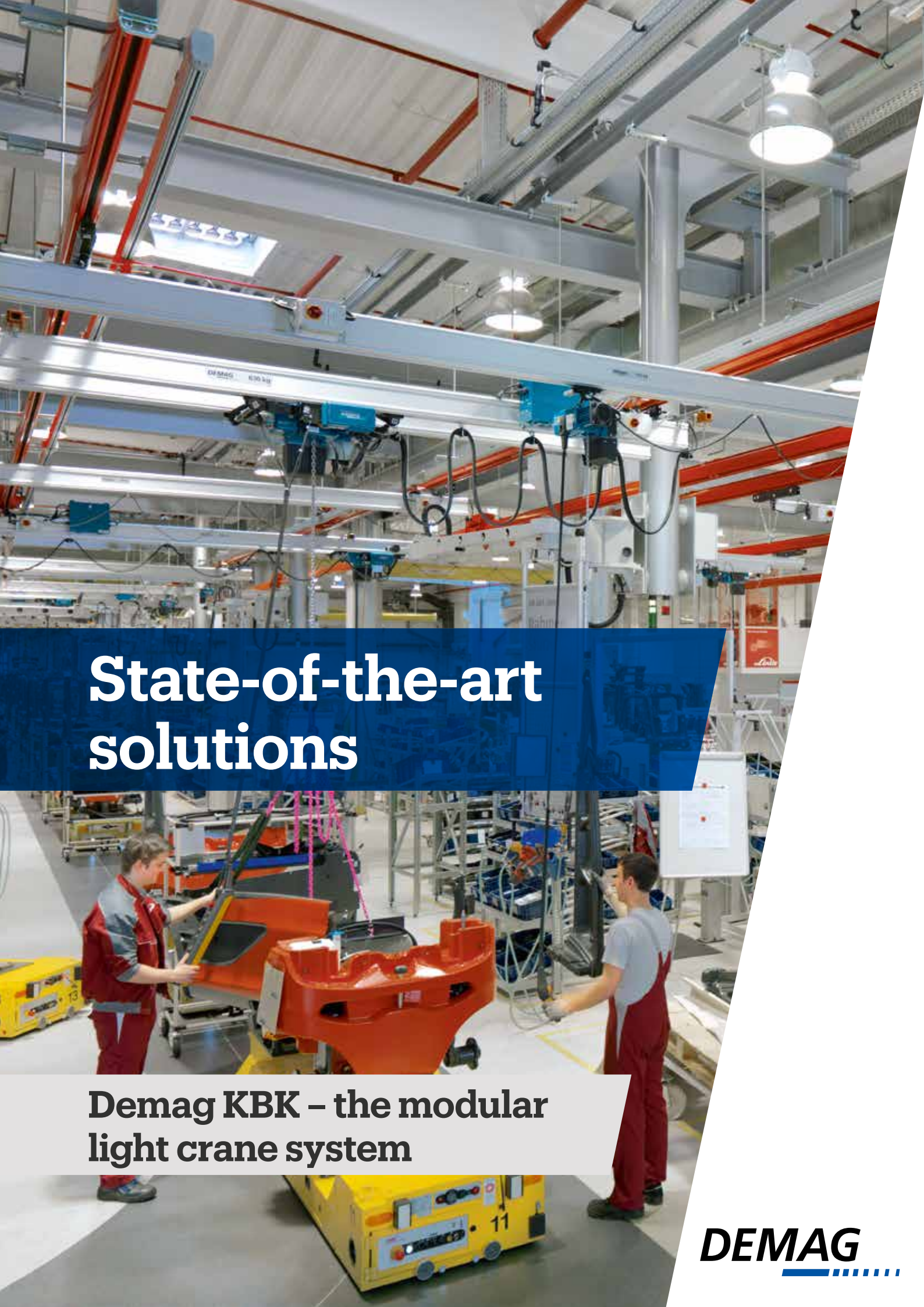


State-of-the-art solutions

Demag KBK – the modular light crane system

DEMAG

One system to meet all your needs

From simple workshop cranes to highly complex material flow systems, with Demag KBK, we can meet all your needs quickly and efficiently. The components of our modular construction kit system can be combined to create individual suspension monorail, suspension crane, pillar and wall-mounted slewing jib crane solutions. KBK installations can also be easily integrated into any production infrastructure – and modified at any time.

VERSATILE AND FOR SPECIFIC NEEDS

The modular construction kit system offers a high level of flexibility. Installations can not only be built with a combination of steel and aluminium profile sections, but existing installations can also be quickly and easily extended and additional components can be integrated. The system includes many matching modular parts for solutions to meet specific requirements.

SAFE, SIMPLE AND RELIABLE HANDLING

Rapid handling and, at the same time, precise and effortless positioning of your loads provide for efficient processes and improve your productivity. The KBK system is ideally suited for complex handling equipment as used in series production lines, such as in the automotive industry.

ERGONOMIC OPERATION

Demag KBK now makes load handling easier than ever before, requiring only little force for simple load handling – both with steel and aluminium profile sections. Reduced loads result in lower absenteeism due to illness and greater employee satisfaction.

RELIABLE

With more than 50 years of experience with light crane systems, our KBK crane construction kit provides for safe and reliable material flow in virtually all industries. Made of standardised products manufactured in large series, our components offer high operating reliability and a long service life.

DEMAG KBK:

- World's largest selection of system components
- Wide range of applications
- Optimum workplace design
- High productivity and efficiency
- Rugged design requires little maintenance
- Broad load capacity range up to 3,200 kg
- Maximum strength for a low deadweight
- Large distances between suspensions and span dimensions
- Can be connected to all building superstructures
- Quality made in Germany

Maximum flexibility

FOR MANY APPLICATIONS

Safe and reliable area-serving material handling

KBK SINGLE AND DOUBLE-GIRDER SUSPENSION CRANES

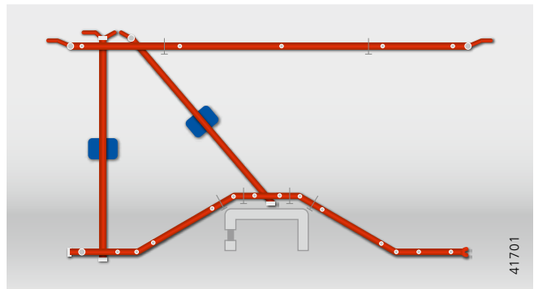
KBK suspension cranes can be easily moved by hand, which also enables bulky and heavy workpieces to be handled safety and precisely. Since they are suspended from a superstructure, such as roof beams, steel girders or concrete ceilings, they require no additional floor space. Both individual workstations or complete production and storage areas can be fully served with overhead systems. Available in steel or aluminium. .

FURTHER DETAILS

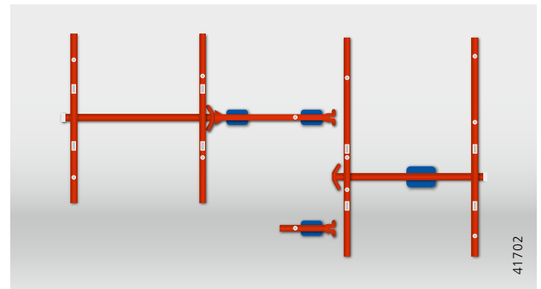
- Smooth-running, unhindered operation thanks to flexible suspension of the crane runways in connection with articulated attachment of crane girders
- Customer-specific configuration to meet individual requirements
- Designed for optimum height and can be adapted to building structure or process requirements
- Cranes can also operate on runways that are not parallel
- Very large spans when suspended from more than two crane runways
- Cranes can have overhangs of up to 2.5 m, depending on configuration, load and profile sections
- Electric travel possible for long and cross-travel motions (recommended for large spans or heavy loads)
- Load capacities up to 3,200 kg (steel) or 2,000 kg (aluminium)

- Profile section rail
- End cap with buffer
- Suspension
- Bolted connection
- Travelling hoist
- Latching device
- Travel drive
- Diagonal stiffener

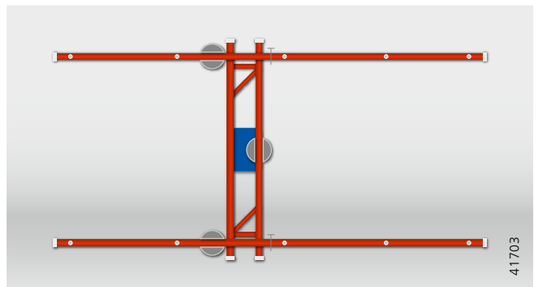
Single-girder suspension crane, parallel track



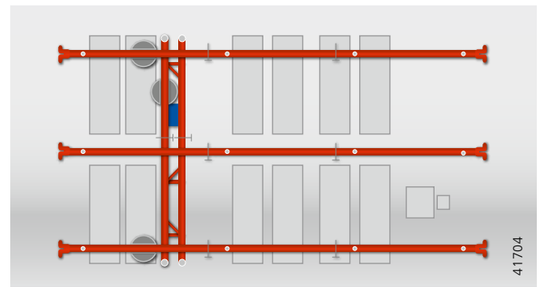
Single-girder suspension crane, angled track



Interlocking single-girder suspension cranes



Double-girder suspension crane



Double-girder suspension crane, on 3 runways

Overview of components:

KBK single and double-girder suspension cranes

KBK single and double-girder suspension cranes can be configured to meet individual needs thanks to their modular system design.

1 STEEL SUPPORT SUPERSTRUCTURE

Cantilever supports for universal applications:

- Support system can also be used wherever workshop ceilings and roof structures cannot bear loads
- High flexibility for planning and configuration
- Particularly easy assembly

2 PROFILE SECTIONS

Freedom for planning with a broad range of KBK profile sections to meet differing needs:

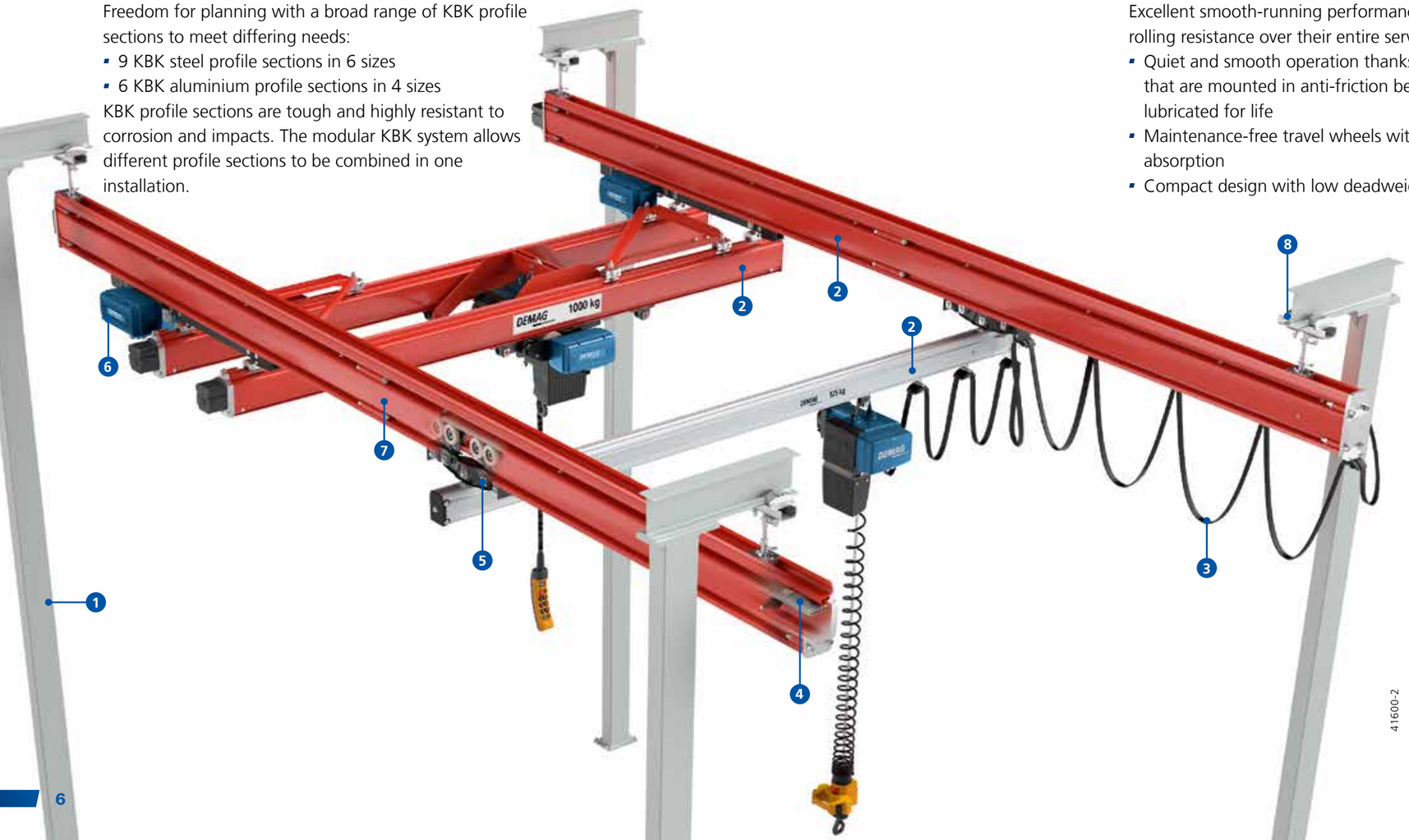
- 9 KBK steel profile sections in 6 sizes
- 6 KBK aluminium profile sections in 4 sizes

KBK profile sections are tough and highly resistant to corrosion and impacts. The modular KBK system allows different profile sections to be combined in one installation.

3 TRAILING CABLE

Reliable power supply:

- Highly flexible and cold-resistant flat cables
- Various cable carriers:
  - Narrow cable sliders made of tough plastic
  - Smooth-running cable trolleys



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KBK steel profile sections

KBK Aluline profile sections

4 INTEGRATED CONDUCTOR LINE

Safe and space-saving power supply via profile sections with integrated conductor line:

- Additional headroom gain
- No risk of collisions (e.g. with forklifts) thanks to lack of cables
- Additional external power supply fittings not required, which minimises assembly times and costs

5 KBK TROLLEYS

Excellent smooth-running performance and minimum rolling resistance over their entire service life:

- Quiet and smooth operation thanks to plastic wheels that are mounted in anti-friction bearings and lubricated for life
- Maintenance-free travel wheels with effective shock absorption
- Compact design with low deadweight

6 TRAVEL DRIVES

Recommended for use with heavy loads and complex installations:

- Electric and pneumatic variants
- Large friction wheels that have a high friction coefficient ensure reliable transmission of drive torque
- High traction: connection between travel drive and track does not depend on position and weight of the load
- Quiet-running drives

7 KBK II-H JOINT CONNECTION

Planning and project engineering can be simplified by the completely rigid rail connections on KBK II-H profile sections:

- The rail joint can be subjected to a full load – regardless of the position of the track suspension
- No additional steelwork required
- Efficient solution with short delivery times since straight sections in special lengths are largely eliminated
- Fast track connection assembly thanks to self-retaining nuts that are secured against turning

8 KBK SUSPENSIONS

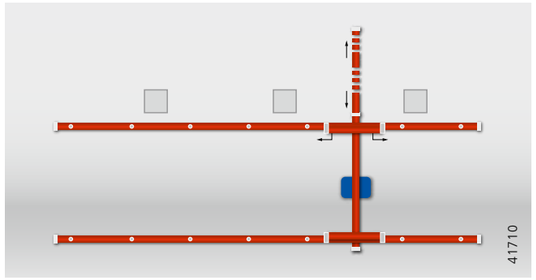
Secure attachment with articulated suspensions:

- Significant reduction of horizontal forces in roof and support superstructures
- Impacts and noise minimised by plastic shells in the ball joints
- Exact alignment down to the millimetre thanks to track height adjustment with threaded suspension rods
- Flexible mounting arrangements for connection to various superstructures
- Low maintenance requirement

Variable working area, efficient use of space

KBK EXTENDING CRANES

These cranes can also be used for precisely lifting and positioning loads outside the area covered by the crane runway. A valuable benefit: their operating range can be extended to serve almost inaccessible areas, such as between pillars and columns. Available in steel or aluminium.



Single-girder extending crane

- Profile section rail
- End cap with buffer
- Suspension
- Bolted connection
- Travelling hoist

FURTHER DETAILS

- Extending cranes consist of a fixed section and a crane section that can be extended
- High versatility, since the girders can be extended to one or both sides
- Extensions up to 2.5 m in length possible (depending on configuration, load and KBK profile section)
- Particularly ergonomic and efficient operation thanks to lockable travelling hoist, which can save time for the operator
- Push or electric travel (long-travel, extending, cross-travel motions)

Overhead solutions for complex handling tasks

KBK CRANES FOR HANDLING EQUIPMENT

Crane installations or tracks can be used as carrier systems for handling equipment (e.g. manipulators or lifting devices) for rigid load handling and bolting applications. They are optimised to accommodate kick-up forces and torques. Their low deadweight, high positioning accuracy and fast operating speeds form the basis for optimum ergonomics and efficient workplace design. Available in steel or aluminium.

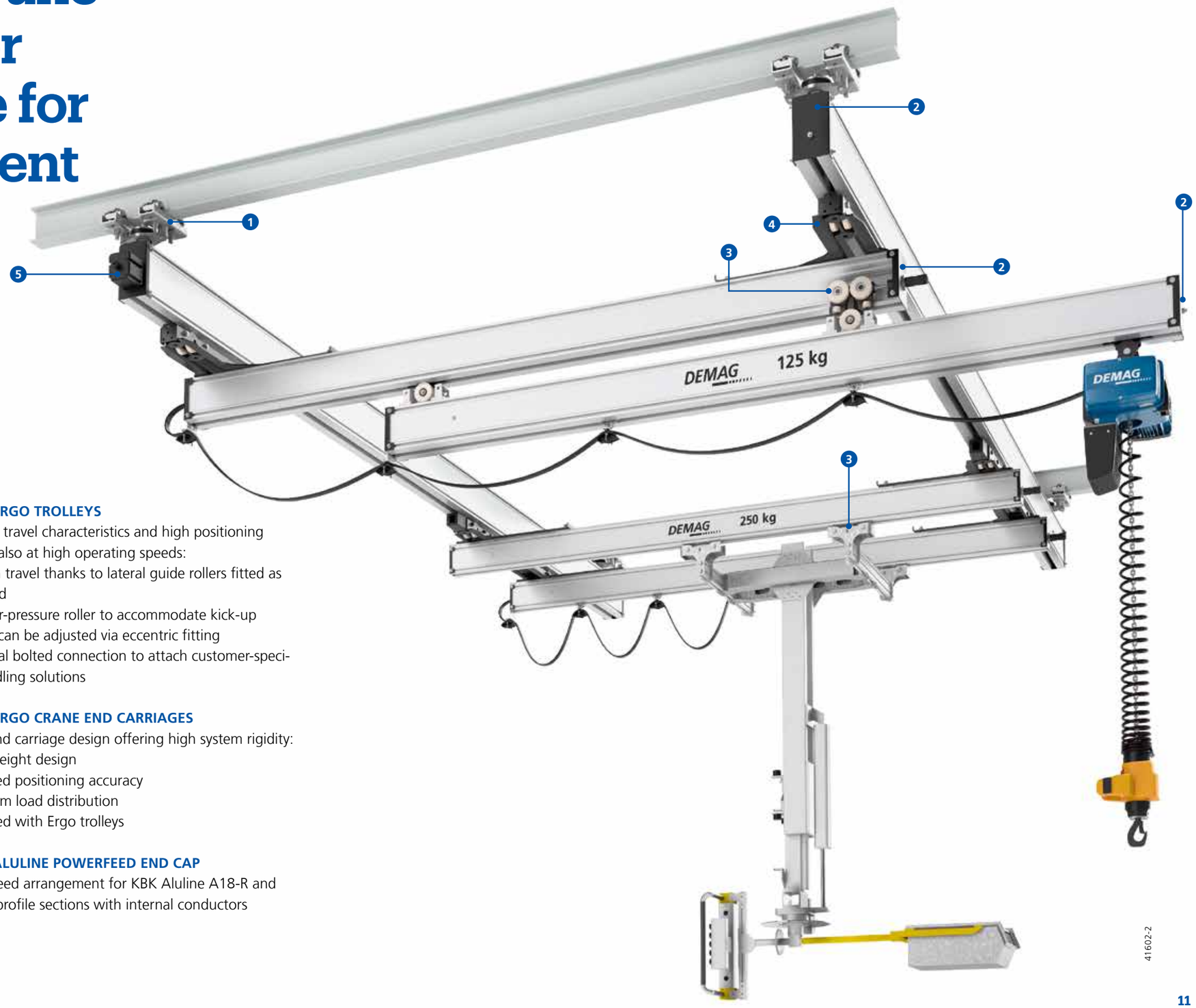
FURTHER DETAILS

- Manual or power-driven travel motions
- Arrangements for electric, pneumatic or mixed power supply

Overview of KBK Ergo components:

KBK extending crane and double-girder suspension crane for handling equipment

Ergonomics all along the line:
KBK Ergo can be used to implement tailored solutions to carry manipulators and lifting devices when kick-up forces need to be safely accommodated.



1 KBK ERGO SUSPENSIONS

Safely accommodate kick-up forces:

- Rigid design to transfer forces to the superstructure via rubber damping elements
- Height adjustment with millimetre precision
- Ideally suited for applications with manipulators, lifting devices, extending cranes or offset loads

2 KBK ERGO END CAPS

Easily installed track end cap:

- Precise damping elements for every application: rubber or cellular foam buffers and shock absorbers

3 KBK ERGO TROLLEYS

Optimum travel characteristics and high positioning accuracy also at high operating speeds:

- Smooth travel thanks to lateral guide rollers fitted as standard
- Counter-pressure roller to accommodate kick-up forces, can be adjusted via eccentric fitting
- Universal bolted connection to attach customer-specific handling solutions

4 KBK ERGO CRANE END CARRIAGES

Special end carriage design offering high system rigidity:

- Light-weight design
- Improved positioning accuracy
- Optimum load distribution
- Equipped with Ergo trolleys

5 KBK ALULINE POWERFEED END CAP

- Powerfeed arrangement for KBK Aluline A18-R and A22-R profile sections with internal conductors

Tailored solutions for linear overhead handling

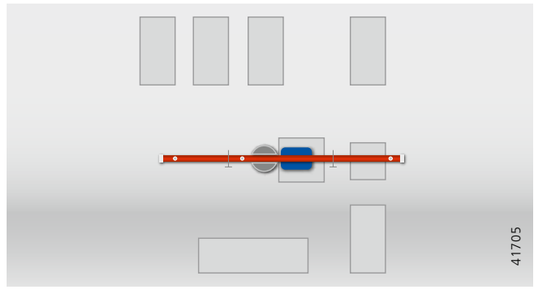
KBK SUSPENSION MONRAILS

Suspension monorails from our KBK light crane system give you the certainty of solutions tailored to meet your specific requirements for linear, overhead handling. Their special strengths are to be found in their many options. Thanks to many system components, such as straight and curved sections, track switches, drop sections or turntables, our proven KBK steel profile sections ensure that your specific requirements are met for handling loads weighing up to 3,200 kg.

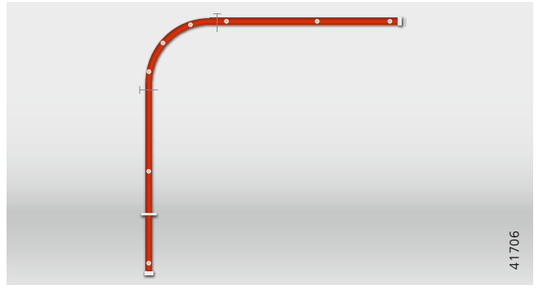
FURTHER DETAILS

- Simple straight tracks (also in aluminium up to 2,000 kg)
- Straight double-rail tracks, e.g. as carrier systems for rigid handling equipment, such as manipulators (also in aluminium up to 2,000 kg)
- Semi- or fully automated circuits with many branch tracks – for complex material flow requirements
- Connections between linear and area-serving transport systems: transfer sections to adjacent suspension cranes using latching devices
- Equipment to overcome different height levels
- Push or electric travel trolleys

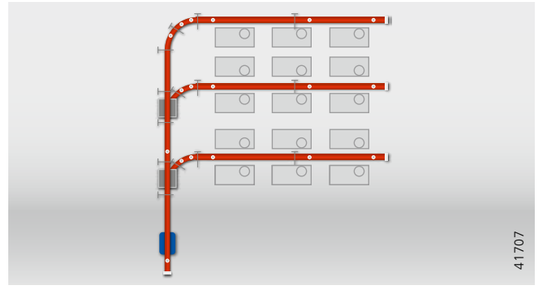
- Profile section rail
- End cap with buffer
- Suspension
- Bolted connection
- Travelling hoist
- Travel drive
- Track switch
- Drop section
- Turntable



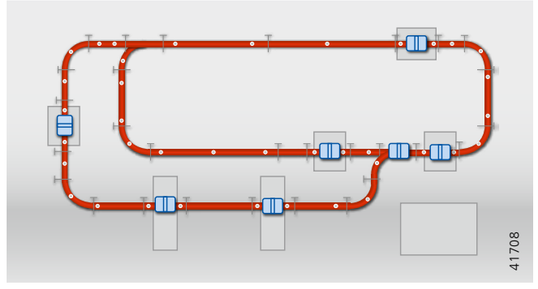
Straight suspension monorail



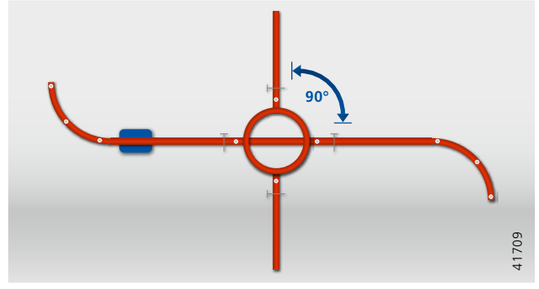
Suspension monorail with 90° curve



Suspension monorail with track switches



Monorail circuit with drop sections



Suspension monorail with turntable