



Major moves with new ideas

State-of-the-art material-flow solutions make it possible to optimise production processes, reduce storage and transport costs, cut delivery times and create ergonomic workplaces in companies of all sizes – from small workshops to major industrial enterprises. To meet the diversified needs of our customers, we have developed a unique product range in which everything fits together. Our materials handling components and equipment are designed in such a way that they can be used as solo components, as well as modules used to create complex system solutions.

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Cranes

There is virtually no alternative to cranes wherever large, heavy or awkward loads have to be handled. As classic overhead materials handling systems, they do not sacrifice any floor space for purely transport functions. When used together with corresponding load handling attachments, process and universal cranes can serve virtually any point within their given working area for handling and storage tasks, for assembly applications or for interlinking fully automated production processes.

PROCESS CRANES

- Overhead travelling cranes, load capacities up to 470 t, spans up to 60 m
- Suspension cranes, load capacities up to 100 t
- Stacker cranes
- Maintenance installations for aircraft
- Crane installations, also fully automated, with dedicated warehouse management computers

UNIVERSAL CRANES

- Overhead-travelling and suspension cranes
 - Single and double-girder designs
 - Demag V-type cranes
 - Profile and box-section girder designs
- Load capacities up to 100 t
- Spans up to 35 m
- Wall-mounted travelling cranes
- Rope or chain hoist units

OPEN WINCH UNITS/OPEN WINCH CRABS

- Load capacities up to 235 t

CRANE END CARRIAGES

- Rail-mounted units for cranes and related mechanical engineering applications
- Load capacities up to 130 t
- Tandem operation up to 250 t

CRANE SETS

- Tailored component sets for suspension, single and double-girder overhead travelling cranes



Concepts tailored to meet your needs



Invest in profitability and efficiency

PROCESS CRANES: EFFICIENT SOLUTIONS FOR SPECIFIC NEEDS

Our process cranes are tailored to meet the needs of your production processes. They are designed and built to specific requirements. In this way, we ensure the highest efficiency, availability and safety for your installations. We offer cost-effective solutions for key industries with six focal applications:

- Paper industry
- Process interlinking
- Bulk material and recycling
- Aviation industry
- Steel production
- Steel handling

CONTROL CONCEPTS TO MEET SPECIFIC NEEDS

- Manual, ergonomic crane control by radio or from the crane cab
- Faster processes and improved safety thanks to semi-automated operating sequences with destination positioning
- Maximum handling rates and high levels of safety and reliability thanks to fully automated processes
- Demag warehouse management system with configurable storage strategies, comprehensive system visualisation and continuous inventory management



UNIVERSAL CRANES: TRIED AND TESTED IN THOUSANDS OF INSTALLATIONS

Our universal cranes provide you with quality, efficiency and reliability at the highest level. Every crane and every component reflects our decades of crane expertise and reliability throughout the industry.

The Demag V-type crane revolutionises load handling. Its innovative design featuring tapered diaphragm joints reduces oscillation frequency by 30%, cuts its weight by an average of 17% and doubles its service life to as many as 500,000 changes of load.

- Single and double-girder overhead travelling cranes: load capacities up to 100 t
- Suspension cranes up to 8 t
- Wall-mounted travelling cranes up to 6.3 t

CRANE SETS

Demag crane sets are packages of components tailored to meet specific customer requirements and are completed to form overhead travelling and suspension cranes using locally manufactured steelwork.

- Rapid availability and low transport costs
- User-friendly assembly on the plug-&-play principle
- For single and double crab operation
- Hoists to meet application requirements: Demag rope and chain hoists



The right solution for every requirement

Modular cranes

For more than 50 years, the Demag KBK light crane system has offered countless possibilities for handling loads quickly, ergonomically, safely and efficiently above the production level. This modular system can be combined to create individual suspension crane, suspension monorail, pillar and wall-mounted slewing jib crane, portal and stacker crane solutions.

This is demonstrated by installations tailored to meet specific application requirements, from equipment for individual workplaces to complex area-serving material flow solutions. Whatever the variant, one factor always remains the same: very smooth travel and minimum operating forces. Choose from profile sections made of steel or aluminium.

KBK SUSPENSION MONORAILS

- Load capacities up to 3,200 kg

KBK SINGLE AND DOUBLE-GIRDER CRANES

- Load capacities up to 3,200 kg

KBK STACKER CRANES

- Load capacities up to 500 kg

PUSH-TRAVEL PORTAL CRANES

- Load capacities up to 3,200 kg

PILLAR-MOUNTED SLEWING JIBS AND CRANES

- Load capacities up to 10,000 kg
- Slewing range 270° to n x 360°
- Jib lengths up to 12 m

WALL-MOUNTED SLEWING JIB CRANES

- Load capacities up to 10,000 kg
- Slewing range 180° or 270°
- Jib lengths up to 12 m

Flexible, overhead and extendible load handling

SUSPENSION MONORAILS:

MATCH THE MATERIAL FLOW

The ideal solution for linear handling requirements. Track switches, turntables, drop sections and travel drives can be used to realise virtually any layout.

EXTENDING AND OVERHUNG CRANES:

OVERCOME GRAVITY

Areas up to 2.5 m beyond the crane runway can be easily served by using KBK Ergo components.

SINGLE AND DOUBLE-GIRDER SUSPENSION CRANES: **AREA-SERVING, OVERHEAD HANDLING**

The most comprehensive modular system on the market provides for simple and efficient overhead materials handling. Installations can be altered and extended at any time thanks to their modular design.

PORTAL CRANES: **MOBILE AND MODULAR**

Our portal cranes make it possible to handle loads at changing locations. Assembled and dismantled with ease, they can be adapted to the load capacity and travel path requirements of the application thanks to the variable distance between their legs.



STACKER CRANES: STORAGE MADE EASY

Stacker cranes for simple storage, order-picking and sorting of unit loads, containers and pallets. Excellent handling of loads weighing up to 500 kg using forks, prongs or grippers that are designed to match customer requirements.

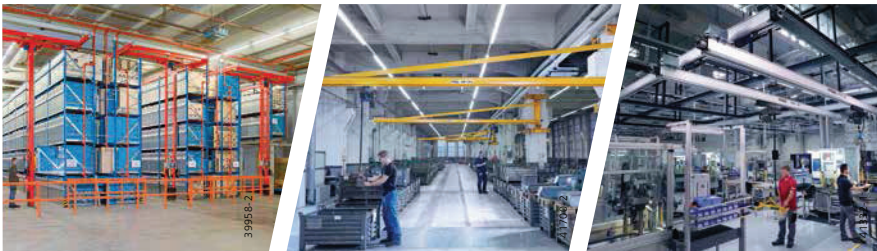
SLEWING CRANES AND JIBS:

FAST, SAFE AND RELIABLE LOAD HANDLING

Our pillar and wall-mounted slewing jibs and cranes are the first choice for fast, safe and reliable load handling direct at the workplace. They offer a broad spectrum of load capacities, slewing ranges and outreach dimensions.

KBK ALULINE

We also offer KBK profile sections in aluminium. They feature a low deadweight as well as an attractive, state-of-the-art industrial design and can be perfectly combined with our steel profile sections.



Hoists and accessories

Our hoist units serve as reliable components in cranes and materials handling systems.



Improved productivity
thanks to higher speeds

Customers in many industries all over the world rely on our technology and expertise. For good reason: we offer a unique range of products – from chain hoists to open winch units. They all feature high efficiency and ergonomic design. With a wide variety of load capacities, speeds and equipment variants, they offer reliability and maximum safety, relieve physical strain for workers and provide for improved productivity thanks to higher handling and transport speeds.

DMR/DR ROPE HOISTS

- Monorail and double-rail travelling hoists as well as foot-mounted hoists with load capacities up to 50 t
- Double hoist units with load capacities up to 100 t
- Very high FEM service life ratings
- Two-stage pole-changing or variable-speed drives for lifting and cross-travel motions

DH HOIST UNITS

- Monorail and double-rail travelling hoists as well as foot-mounted hoists
- Load capacities up to 100 t

DC-PRO AND DC-COM CHAIN HOISTS

- Load capacities up to 5,000 kg
- Lifting speeds up to 30 m/min
- Two-stage pole-changing or variable speeds
- Hook path up to 150 m (DC-Wind)

DCM-PRO MANULIFT

- Load capacities up to 250 kg
- Quick-release coupling for load handling attachments
- Also with variable speeds

D-BE ELECTRIC BALANCER

- Load capacities up to 160 kg
- Load handling and assembly modes

D-SH SPEEDHOIST

- Variable manual-force control or rocker switch
- Load capacities up to 160 kg
- Lifting speeds up to 70 m/min

CHAIN HOIST TROLLEYS AND TRAVELLING HOIST TYPES

- Push-travel and electric-travel trolleys
- Trolleys for low headroom dimensions
- Travelling hoists for handling big bags with extended hook lead-off
- Articulated trolleys for travel on curved tracks
- Double chain hoists for mechanically synchronised spreader bar operation
- Quadro chain hoists with four synchronised hook lead-offs

CONTROL EQUIPMENT

- Cable-connected control pendants
- Wireless control systems
 - Infrared system
 - Radio control system
- Electric control systems

LOAD HANDLING ATTACHMENTS

- Pantograph tongs
- Parallel gripper systems
- Compact magnets (battery, permanent magnets)

ELECTRIC AND ELECTRONIC COMPONENTS

- Overload protection devices
- Geared limit switches
- Wireless signal transmission



The right hoist for every application

DMR/DR ROPE HOISTS – FOR UNIVERSAL APPLICATIONS

Demag rope hoists are available in many varieties and can be used for solutions that are tailored to meet the specific requirements of each application.

- Load capacities up to 50 t and 100 t for double hoist units
- Minimum approach dimensions for crane applications
- High lifting speeds up to 25 m/min
- Optional co-axial or C-design
- Supplied as monorail and double-rail travelling hoists or foot-mounted hoists
- Control variants
 - Demag SafeControl
 - Contactor control or provided by the customer
- Operation via cable-connected control pendant or radio control

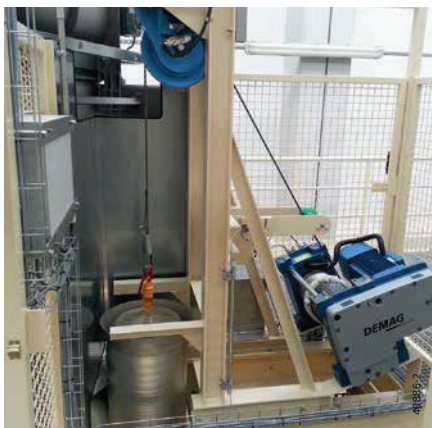
DH HOIST UNITS: FOR EXTREME LOADS

Our DH hoist units can be used for a wide variety of applications and offer a number of special technical features that enable loads to be handled reliably also for demanding requirements.

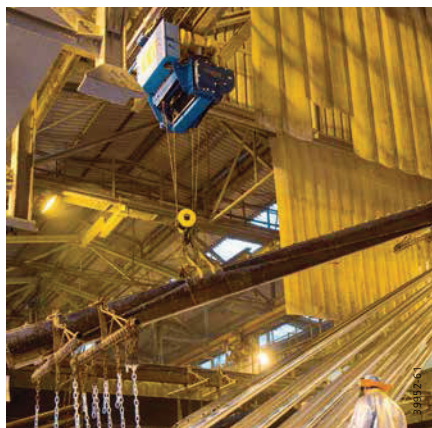
- Load capacities up to 100 t
- Rope lead-off possible in any direction
- Hook path up to 104 m
- Individual creep speed with high duty factor and stop/start frequency thanks to mechanical microspeed unit

DEMAG SMART SAFECONTROL SYSTEM

- Additional safety features, e.g.
 - Slack-rope monitoring
 - Tandem operation
 - Remote diagnosis in real time
 - Target positioning
 - By-pass control
 - Area-specific load reduction



Stationary hoist unit as an installation component



Semi-automatic monorail circuit with rope hoists in tandem operation



Double chain hoists operating in tandem with four chain lead-offs



Articulated trolleys: low headroom dimension with infinitely variable speed

DC-PRO AND DC-COM CHAIN HOISTS: HIGH SAFETY & RELIABILITY, SIMPLE OPERATION

DC chain hoists are extremely robust and rated for a long service life. They feature very high safety standards and rapid commissioning, coupled with ease of maintenance.

- Comprehensive standard scope of delivery and wide product range
- Ease of operation thanks to ergonomic control pendants and dedicated radio control
- **DCS-Pro:** variable-speed control for gentle positioning and higher speeds for reduced loads

D-BE ELECTRIC BALANCERS: SIMPLE AND PRECISE POSITIONING

Electric balancers enable loads to be handled safely and conveniently and positioned with millimetre accuracy.

- Unique ease of operation thanks to load handling and assembly modes for perfect manipulation of loads
- Intuitive lifting and lowering motions without the need to press buttons

DCM-PRO MANULIFT: CONVENIENT OPERATION WITH ONE HAND

Thanks to the control unit, which is rigidly connected to the load handling attachment for right and left-handed operation, the DCM-Pro Manulift unit can be operated and the load guided with only one hand.

- Quick-release coupling for simply swapping various load handling attachments
- **DCMS-Pro Manulift:** variable lifting speeds

D-SH SPEEDHOIST: VERY FAST LOAD HANDLING

The D-SH SpeedHoist is an electric rope winch for fast and frequent load handling.

- Up to 80 kg at 70 m/min
- Up to 160 kg at 35 m/min
- Variable manual-force control or operation via a rocker switch



**Universal application
also in plant engineering**



High system transparency thanks to integrated display

Comprehensive diagnostics during operation and system status documentation thanks to

- Bi-directional signal transmission
- High-contrast two-colour display to
 - Display status of the installation
 - Show warning messages
- For radio control: graphic display of battery capacity

Control units and systems

DSK CONTROL PENDANTS: ERGONOMIC, SAFE AND RELIABLE

Cable-connected solution, ideal for the control of hoist units that have one motion axis from the ground or for the control of machinery.

- High level of safety
- For direct or contactor control
- Can be configured to meet a wide range of needs

DST CONTROL PENDANTS: FOR UNIVERSAL APPLICATIONS

Universal, cable-connected control pendants for cranes, hoist units and machinery.

- Three sizes with up to nine control and switching elements
- High switching capacity
- Versatile combinations for utilisation
- For direct and contactor control
- High level of operating safety

DSE CONTROL PENDANTS: HIGHLY SHOCK AND IMPACT-RESISTANT

Ergonomic, cable-connected control units for hoist units and machinery.

- Available in two variants:
 - **DSE-10-C/CS** with interface for DC chain hoist
 - **DSE-10R** with interface for rope hoists and cranes equipped with Demag SafeControl
- Particularly ergonomic design for safe and fatigue-free operation
- Housing that is highly resistant to impacts
- Comprehensive accessories for operation in harsh environments and for protection against fluids and aggressive media

DRC D3 RADIO CONTROLS: THE NEW GENERATION

Efficient man/machine interface with many new functions:

- Coexistence: up to 40 D3 radio systems can operate in close proximity to each other
- Safety: stop function corresponds to category 3: PLd DIN EN 13849-1
- Endurance: 2.5 hours of charging for 5 days of continuous operation
- Speed limit function (30%, 50%, 70%)
- Transmitters handed over at the press of a button
- Vibration alarm
- Ergonomic design

IR INFRARED CONTROL SYSTEM: UNLIMITED CONTROL

- Improved safety by means of range limitation
- Decisive benefits under all conditions:
 - Simultaneous operation of up to 32 transmitters without frequency overlap
 - Multiple transmitter operation with monitored transmitter switchover

Drives

With our Demag industrial drives, we offer a wide range of products from sub-assemblies to complete systems. These include motors, gearboxes and wheel systems.

These components can be combined to create complete travel units. Frequency inverters and power supply lines round off our portfolio. Perfect drive element combinations and sophisticated controls provide for efficient integrated systems. We use our modular drive system to provide solutions to meet specific requirements on the basis of standardised sub-assemblies. This saves you valuable project engineering time and gives you the certainty of reliable product specification.

Geared motors

- Output range from 0.18 to 45 kW
- D helical geared motors from 90 to 1,800 Nm
- W angular geared motors from 120 to 12,000 Nm
- A offset geared motors from 130 to 11,500 Nm

GEARBOXES

- Helical, angular and offset gearboxes with a wide range of transmission ratios
- Torque ranges from 90 to 12,000 Nm

MICROSPEED DRIVES

- With conical-rotor brake motors for wide speed ranges
- Positioning with high stopping accuracy
- Speed ratios up to 500 : 1

BRAKE MOTORS

- Conical-rotor and cylindrical-rotor brake motors up to 45 kW

ELECTRIC MOTORS

- AC motors up to 45 kW
- Two, four, six and eight poles or pole-changing

CRANE END CARRIAGES

- Rail-mounted units for cranes and related mechanical engineering applications
- Standardised solutions up to 130 t
- Tandem operation up to 250 t

TRAVEL UNIT COMPONENTS

- Wheel blocks, travel wheel systems and wheel sets for applications with load capacities up to 60,000 kg per wheel

FREQUENCY INVERTERS

- For variable speed control of series three-phase motors as single or groups of drives for stopping and starting applications
- Motor shaft outputs up to 560 kW
- Current loads from 2.4 to 210 A or from 4.2 to 544 A
- Ddrive Compact STO and Ddrive Pro ranges

POWER SUPPLY LINES

- Demag DCL-Pro compact conductor line:
 - For currents up to 200 A in continuous operation
 - Up to seven conductors to supply power and control signals
- Demag DKK compact conductor line
- Demag DEL single conductors





Driving to the point

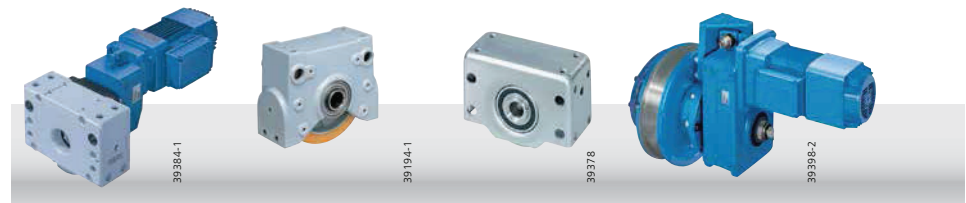
GEARED MOTORS: PRECISE AND GENTLE

Outstanding line-fed travel motors for one or two speeds, conical-rotor brake motors for the most demanding requirements in stopping and starting applications and cylindrical-rotor motors for standard applications.

Precisely matched to the Demag product range for your solutions from a single source.

ENERGY EFFICIENCY

All Demag motors are, of course, developed and manufactured to use energy effectively and guarantee a high level of efficiency. In this way, they help to ensure that efficient and environmentally friendly drive solutions are achieved.





Architecture in motion with Demag travel units, consisting of an angular geared motor, integrated wheel block and guide rollers

DRS WHEEL BLOCK SYSTEM: MODULAR SYSTEM FOR TAILOR-MADE SOLUTIONS

Versatile series-produced assemblies for travel units.

- Wheel loads up to 40,000 kg
- Eight models

LRS TRAVEL WHEEL SYSTEM: FOR UNIVERSAL APPLICATIONS

Robust and universal solution that is easy to specify, for a wide range of applications.

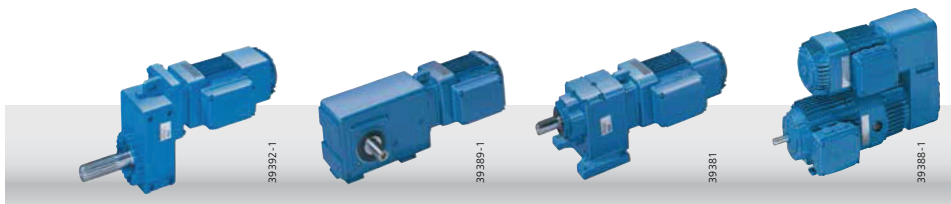
- Load capacity range up to 6,500 kg

RS WHEEL BLOCK SYSTEM: FOR SPECIAL APPLICATIONS

- Stainless steel or sheet-steel design, e.g. for high-temperature applications
- Load capacities up to 18,000 kg

DWS WHEEL SETS: FOR HIGH LOAD CAPACITIES

- Ideal for applications in the load range up to 60,000 kg per wheel



DEMAG FREQUENCY INVERTERS: HIGH PERFORMANCE AND SMART OPERATION

Demag DEDRIVE Compact STO and DEDRIVE Pro frequency inverters provide high performance and a wide variety of functions. Besides their large performance range, they include many smart crane functions for solutions to meet your travel and lifting application needs:

- Vector control for highly dynamic starting-and-stopping applications
- ProHub – load-dependent lifting speed with field weakening
- Master/slave function for double hoist units operating in tandem
- Load spectrum calculation depending on the load and speed

DEMAG DEDRIVE COMPACT STO: EXACT POSITIONING

- Line voltages from 380 to 480 V
 - Motor outputs up to 110 kW
- DEDRIVE Compact STO frequency inverters position loads with millimetre accuracy. Specific travel profiles can be used to approach up to 32 target positions.

DEMAG DEDRIVE PRO 880: DIRECT TORQUE CONTROL

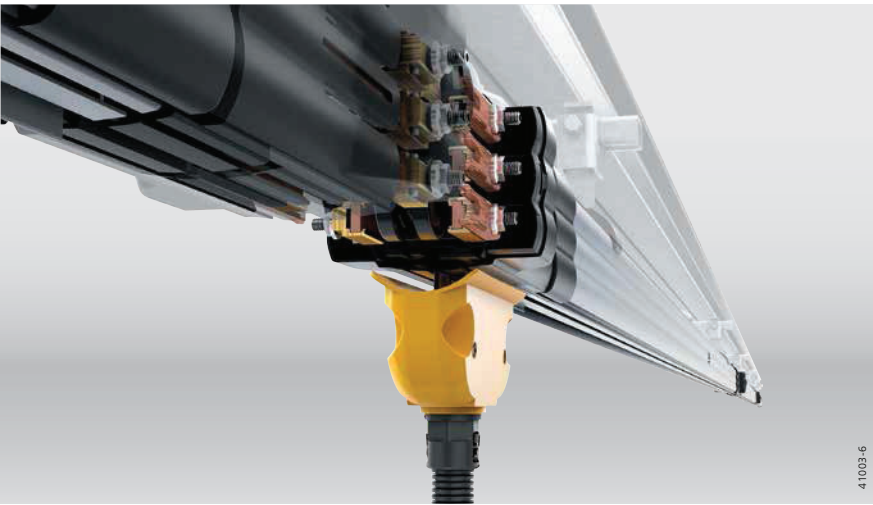
- Line voltages from 380 to 690 V
 - Motor outputs up to 560 kW
- Direct torque control for the fastest control of asynchronous motors.

SAFE TORQUE OFF SAFETY FUNCTION

The STO safety function (Safe Torque Off to EN 61800-5-2) is integrated in DEDRIVE Compact STO units as standard and also available as an option for DEDRIVE Pro units. It switches the drive torque off and prevents any unexpected start-up by the drive.

APPLICATION MODULES

Demag frequency inverters are also available as integral components for application modules. The standard design is already suitable for travel and lifting applications. In addition, the extended standard is also suitable for synchronised operation of hoist drives and for distributing loads between coupled drives.



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DCL-PRO COMPACT CONDUCTOR LINE: EASY TO ASSEMBLE AND SERVICE FRIENDLY

Reliable electric power supply to mobile equipment on straight and curved tracks.

- Up to seven conductors
- Supply of continuous current up to 200 A
- Six different sizes/cross-sections (10, 15, 25, 38, 56 and 70 mm²)
- **Smart interfaces:**
 - Simplified installation thanks to patented and pre-assembled connectors
 - Significant reduction in assembly times thanks to rail connector locating arrangement
 - Additional expansion joints do not need to be installed

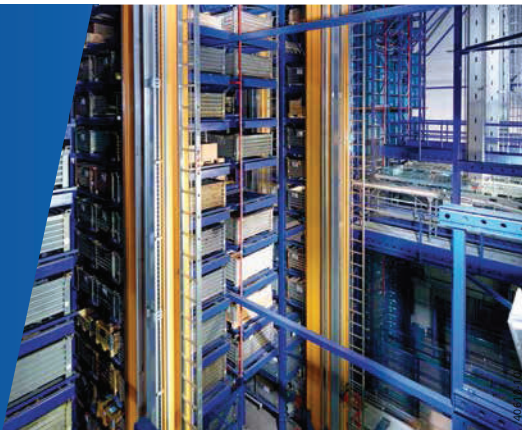
OTHER POWER SUPPLY LINES

- **Demag DKK compact conductor lines:** ideal for higher ambient temperatures
- **Demag DEL single conductors:** for universal and versatile use

Power supply for storage and retrieval machines with DCL-Pro

PRODUCT BENEFITS:

- High rigidity for low deadweight
- Reliable expansion compensation at each joint
- Long service life thanks to optimised current collector trolley design
- For speeds up to 200 m/min
- System can be inspected at every joint
- Rapid replacement of straight sections
- Power infeed at the ends or in the middle of the line
- Precise attachment to C-section rails or by means of threaded pins
- Existing installations can be easily extended thanks to compatibility with previous DCL model



Service

We offer you a wide range of innovative services to cover the entire life cycle of your installations. From a single source.

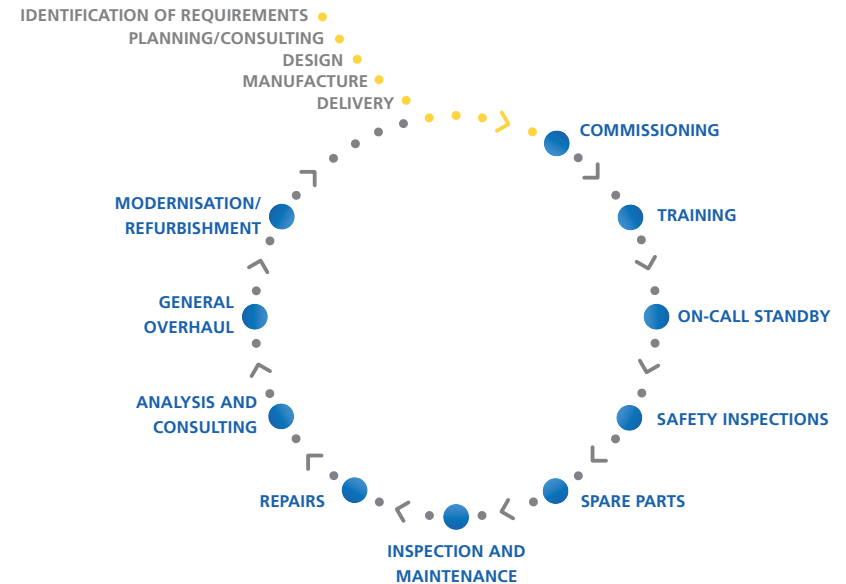
And the same applies to our Demag brand cranes, hoists, load handling attachments and related components and to products supplied by other manufacturers. Our goal is to enable you to concentrate fully on your core business by giving you the certainty that your installations operate reliably, efficiently and without any faults or malfunctions.

Our service consultants support you with a wide range of industry-specific expertise to incorporate your individual requirements into an optimum service strategy. Demag service engineers are extensively trained and receive continuous further training to maintain their qualifications. The result is extremely high-quality service from a single source.

With Demag brand cranes and hoists, we have the largest installed base worldwide. For this reason, our service organisation is also represented all over the world, with more than 2,300 service technicians and engineers and reliable spare parts logistics systems – always in your vicinity.

OUR SERVICE PROVIDES YOU WITH:

- Maximum availability of your installations
- Cost-effective operation
- Maximum safety and reliability
- Efficient utilisation
- Long-term maintenance of your investment





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Maintain value and improve performance



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Complete product care – for all brands and types

TAILORED SERVICE CONCEPTS

We provide concepts tailored to meet individual customer requirements to ensure the high availability of installations and maximum safety for owners and operating personnel. Downtimes can be cut to a minimum by regular preventive maintenance, safety inspections and rapid elimination of faults. The Demag Service Platform offers an improved overview and transparency to manage your installations.

TRAINING

Our product and operator training courses focus on safety for man and machinery. All of the specialist knowledge needed for the safe operation and maintenance of cranes and components is taught in a wide range of customer and industry-specific courses.

DEMAG STATUS CONTROL:

REMOTE DIAGNOSIS IN REAL TIME

Demag StatusControl provides you with all current and relevant operating data and an analysis at a glance – regardless of whether you are in the factory, in your office or on the road. Data is transferred via WLAN or GSM standards. Reduce the risk of downtimes, optimise your operating processes and plan the strategic and cost-effective maintenance of your crane installations.

SPARE PARTS

A reliable supply of genuine spare parts ensures that faults are rectified and downtimes are kept to a minimum. You can obtain Demag spare parts particularly quickly through our express spare parts service, from our simple and convenient Demag Shop system (at www.demagshop.com) or direct via your contacts in our regional offices.



FAULT ELIMINATION AND REPAIRS

The sudden failure of even the smallest component can bring complex systems to an unexpected standstill and jeopardise productivity. Demag Service ensures that faults can be quickly eliminated wherever they occur – direct on site or in our Demag repair centre.

INSPECTIONS OF LOAD HANDLING ATTACHMENTS AND LIFTING ACCESSORIES

Our mobile Demag Service can test your load handling attachments and lifting accessories in accordance with relevant regulations and using state-of-the-art testing methods. The results are documented in the system and any defects that are found can be either eliminated direct on site or at our Demag Repair Centre.

CRANE RUNWAY SURVEYS

Regular surveys of crane runways have a significant impact on the service life of various crane components. Surveys can be carried out quickly and easily with our patented LMS laser measuring system. Operating sequences hardly need to be interrupted and no additional measures such as protective barriers or temporary clearance of the building are necessary.

MODERNISATION/REFURBISHMENT

Operating requirements may change during the service life of cranes and components and, particularly in the case of older installations, higher operating costs are often incurred. Demag modernisation and refurbishment concepts can extend the range of application, cut costs and unlock the previously unused capacity of your installation.