

Demag Product Range



Cranes



Handling Technology



Drives



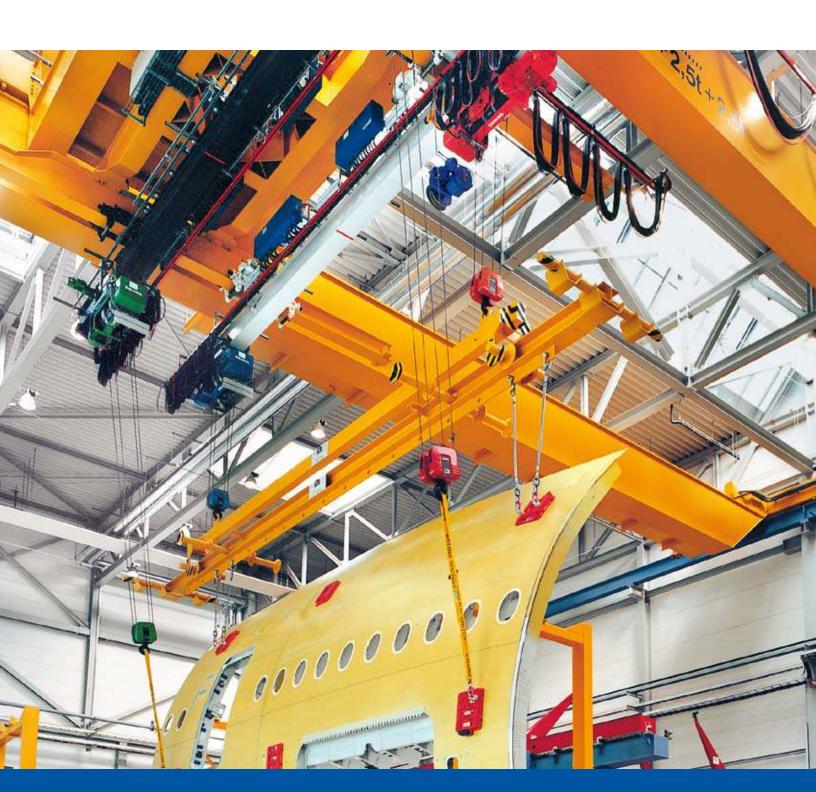
Service



Major moves with new ideas

State-of-the-art material-flow solutions make it possible to optimize production processes, reduce storage and transport costs, cut delivery times and harmonize workplaces in companies of all sizes – from small

workshops to major industrial enterprises. To meet the diverse needs of our customers, we have developed a unique product range in which everything fits together. 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. As a global player with locations in Germany and subsidiaries and foreign agencies all over the world, Demag Cranes & Components offers material flow, logistics and drive solutions for companies of all sizes and in all industries.



4 Cranes

Standard cranes
Process cranes
Industry-specific cranes
Rope hoists
Open winches
Crane components
Crane sets

8 Handling Technology

KBK crane construction kit Compact hoists Control pendants

16 Drives

Travel unit components Gear motors Frequency inverters Power supply lines

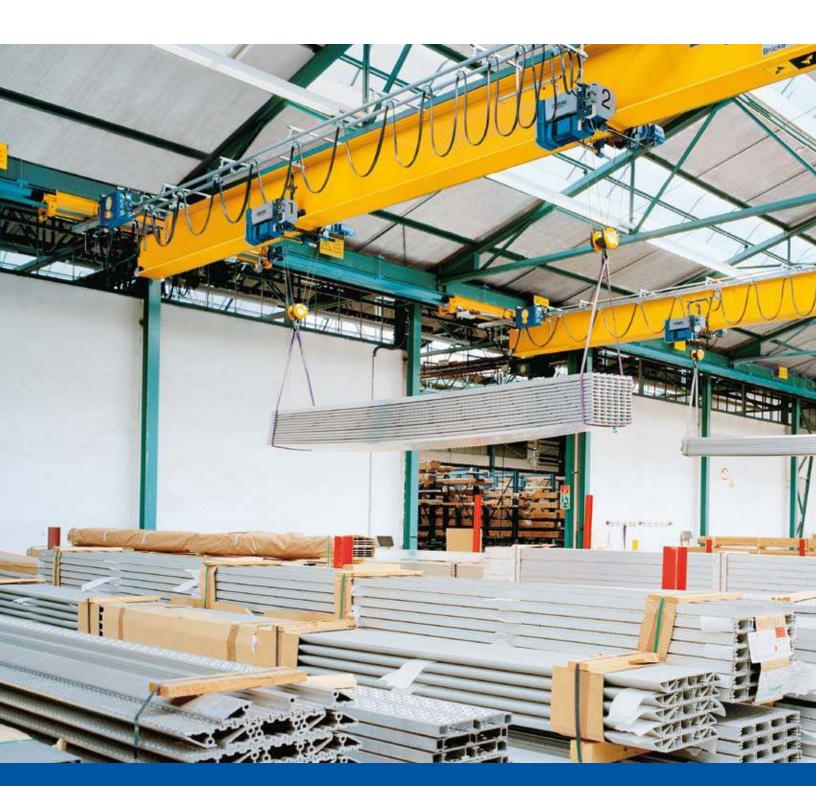
20 Service

Maintenance Modernization Refurbishment

The right crane for your needs

There is virtually no alternative to the crane wherever large, heavy or awkward loads have to be handled. As classic overhead materials handling systems, on the one hand, they offer the advantage of not wasting any

floor space for purely transport functions. When used together with corresponding load handling attachments, cranes can serve virtually any point within their given operating area for handling and storage tasks, assembly



purposes or for interlinking fully automatic production processes. From standard cranes to fully automatic process cranes, Demag offers solutions to meet application requirements for all industries.



Overhead travelling and suspension cranes

of single and double-girder design with travelling hoists/double-rail crabs, capacity up to 50 t, spans up to 100 ft (30 m)

Process cranes

as overhead travelling bridge cranes, capacity up to 300 t, spans up to 200 ft (60 m); suspension cranes, capacity up to 100 t; stacker cranes, maintenance installations for aircraft

DR rope hoists

as travelling hoists, double-rail crabs and foot hoists, capacity up to 50 t, minimum hoist speed 20 ft/min (6 m/min), FEM classification 2m+, infinitely variable cross-travel speeds

Open winch units/open winch trolleys

capacity up to 170 t

Load handling attachments

Tongs, parallel griper systems, compact magnets, magnet spreaders, grabs

Electrical and electronic components

Power feed systems, control pendants, radio remote controls, overload protection, geared limit switches

Crane travel units

as driven rail-bound units for cranes or related mechanical engineering applications, load capacities up to 130 t, tandem operation up to 250 t

Crane kits

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

We would be pleased to send you further information on the individual products.

Investment in profitability and efficiency







Standard cranes

Standard cranes are largely constructed of standardized component assemblies. They range from single-girder cranes with a 1 ton load capacity to large double-girder cranes with a maximum load capacity of 100 tons. Standardized subassemblies enable you to benefit from series manufacturing methods, which guarantee consistently cost-effective and high-quality results. Extended standard cranes provide tailored solutions that go far beyond the already wide range of standard designs.

Process cranes

Automatic process cranes are optimized to meet the specific requirements of the given application. Automation pays off when the crane connects production, storage and retrieval operations as an integral part of the in-house logistics solution. In this case, the crane has a great influence on the efficiency and flexibility, and, ultimately, also on the profitability of the entire process.

Industry-specific cranes

The MasterLine concept corresponds to the requirements of the various industries with its Papermaster, Castmaster, Coilmaster, Steelmaster, Containermaster and Bulkmaster crane variants. Classic meets the basic requirements for a professionally organized storage facility with a high level of space utilization. Advanced also features semi-automation, a warehouse management system as well as the Storage Manager and ensures greater transparency in storage facilities. Premium features fully automated operation programmed for optimum storage and retrieval schedules and sequences, as well as inventory management.





DR rope hoist

Demag DR rope hoists and Demag standard cranes make it possible to achieve a wide variety of designs which guarantee to provide an optimum balance between costs and performance to meet your specific needs. In addition to a space-saving design, they offer particularly high hoist speeds for fast handling rates and comprehensive standard features. The range of possible applications for the rope hoist is extended by the compact double-rail trolley and the versatile foot-mounted hoist.

Control system

Ergonomically optimized control pendants that are suspended by cable and travel separately on the crane and radio remote controls for wireless operation are available for Demag cranes. Variable frequency radio operation provides for interference-free transmission and reception. Installation statuses can be conveniently called up via the standard integrated display.

Crane Designer online

Crane Designer can be used to configure a crane installation that is tailored to meet your needs. After the entry of only a few parameters, such as the crane type, load capacity, lifting height and span, Crane Designer configures the finished crane within a few minutes.

www.demag-us.com

Hoist Designer online

You can also see the DR rope hoist at **www.demag-us.com**

KBK track and crane installations – tailored solutions as standard

The KBK crane construction kit is a system designed for building a wide variety of cranes and suspension monorails from only a few standard components. Various profile section sizes can be combined within a crane installation to achieve the optimum configuration. This is

demonstrated by installations tailored to meet specific application requirements, from simple suspension monorails to complex area-serving material flow solutions. Whatever the variant, one factor always remains the same: the cranes utilize the free space



beneath the ceiling, thus leaving valuable floor space free for other productive activities. Manufactured in production series, KBK components offer high functional reliability, a long service life and great value.



KBK crane construction kit

Suspension monorails and cranes, capacity up to 3.2 t,

Stacker cranes

Capacity up to 1100 lbs (500 kg)

Gantry cranes

Capacity up to 3.2 t

KBK Aluline crane construction kit

Suspension monorails and cranes, capacity up to 1 t

Pillar-mounted slewing jibs, pillar-mounted slewing cranes and wall-mounted slewing jibs

Pillar-mounted slewing jibs and cranes, capacity up to 10 t, slewing range 270/300° to n x 360°, jib lengths up to 40 ft (12 m), wall-mounted slewing jibs, capacity up to 10 t, slewing range 180/270°, jib lengths up to 40 ft (12 m)

We would be pleased to send you further information on the individual products from the KBK crane construction kit.

Flexible, overhead and extendible load handling







Suspension monorails

They are the solution for linear handling requirements. Virtually any load handling problem can be solved by combining straight and curved sections, track switches and turntables, drop stations and travel drives to match the structural design. Two locations can be connected by means of a reversing solution or a circular system.

Single and double-girdersuspension cranes

Suspension cranes are used for area-serving applications. Their low dead weight and suspension fittings for various structures allow them to be used for universal applications. Double-girder suspension cranes can be used for larger crane spans than single-girder suspension cranes for the same load capacity. Suspension cranes can be moved by hand with ease, however, the use of travel drives is recommended for higher load capacities and larger crane spans.

KBK ergo

KBK ergo components are an extension of the standard construction kit and are used wherever forces occur that act against gravity. A KBK crane installation in the form of an overhung or extending crane can therefore also pick up loads and transport them safely if they are arranged up to 8.0 ft (2.5 m) outside the crane runway.











Gantry cranes

Mobile gantry cranes are the ideal solution wherever loads weighing up to 3.2 t have to be moved at changing locations. They can be assembled with ease and quickly dismantled again when no longer needed. The variable distance between the legs enables them to be adapted to the load capacity and travel path requirements of the application.

Stacker cranes

Stacker cranes from the KBK crane construction kit can be used for storing, order picking and sorting unit loads, containers and pallets weighing up to 1,100 lbs (500 kg). Fitted with forks, prongs or gripper tongs to match the loads the be handled, they provide ideal support in stores.

Pillar-mounted slewing jibs, pillar and wall-mounted slewing cranes

They are the right choice wherever loads have to be moved quickly and safely at the workplace. They relieve workers of the physical burden and also accelerate working processes.

Thanks to a wide range of sizes and designs, they meet the most diverse requirements in terms of load capacity, slewing range and outreach. They can be easily attached to walls or building columns, erected as free standing units or fitted to machinery and installations.

KBK Aluline

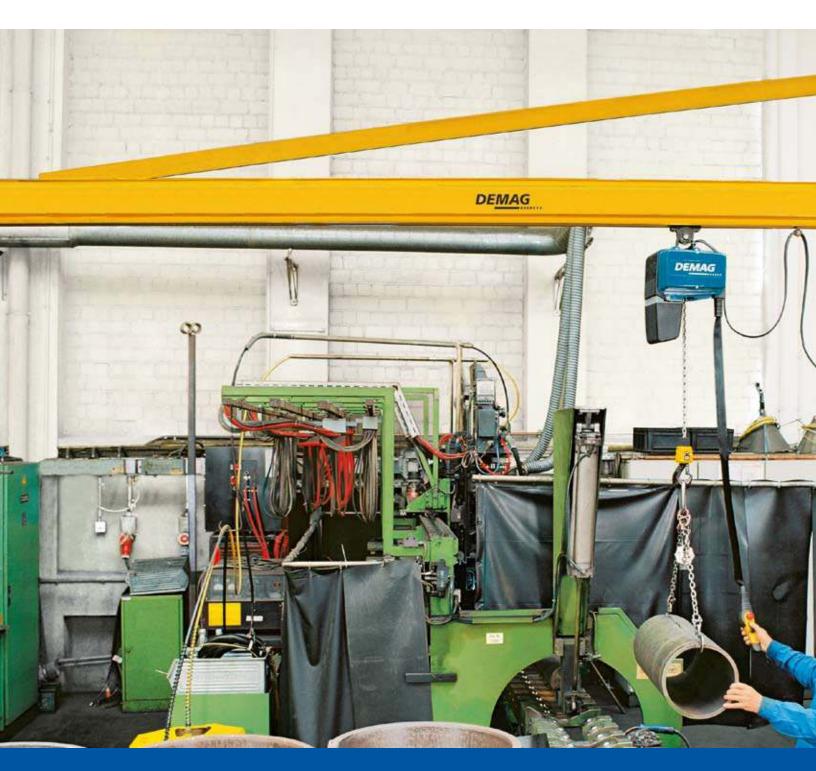
In addition to the steel design, the KBK profile section is also available in aluminium. KBK Aluline offers an extremely low deadweight, an attractive modern design and good opportunities for mounting system components thanks to integrated slots.



Compact hoist units - ergonomic and efficient

Efficient and ergonomic compact hoist units offer a wide variety of load capacities, speeds and features for a maximum of safety and reliability. They can be flexibly employed to meet individual application requirements in industry, workshops and the trade sector. They feature

high versatility for the design and implementation of handling systems, which facilitate the lifting and positioning of loads at the workplace as well as for serving machinery, installations and racking. Regardless of whether hoists are used with push-travel or



electric-travel installations, they always provide optimum relief of the physical burden for the worker and, therefore, greater efficiency and safety with faster handling rates during transport and assembly operations.



Electric chain hoists

Capacities up to 11,000 lbs (5,000 kg), electric chain hoists with stepless speed control up to 5,500 lbs (2,500 kg)

Trolleys and drives

Manual and electric-travel trolleys suitable for the relevant hoist

Manulift

Capacities up to 550 lbs (250 kg)

Electric rope winches

Capacities up to 880 lbs (400 kg)

Rope balancers

Capacities up to 250 lbs (110 kg)

Small load handling attachments

Tongs, battery magnets, permanent magnets, parallel gripper system

Control units

Control units, infrared and radio remote controls

Trailing cable power supply lines

We would be pleased to send you further information on the individual products.

The right hoist for every application







DC-Pro/DCS-Pro chain hoist

The DC-Pro chain hoist for loads up to 11,000 lbs (5,000 kg) is a fully featured and can be installed and put into service in a minimum of time. It is extremely user- and maintenance-friendly and features an ergonomic design with a high standard of safety and reliability. The particularly long service life (FEM 2m+, HMI 4) provides greater operating 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 and hoist motions can be performed even more quickly thanks to the high operating speed in the partial load range.

DCM-Pro/DCMS-Pro Manulift

The DCM-Pro Manulift was developed for simple single-handed operation. Thanks to the control unit which is rigidly connected to the load handling attachment, the operator only needs one hand to operate the hoist and guide the load. A quick-change coupling enables the various Manulift load handling attachments to be changed with ease. The DCMS-Pro also provides a Manulift unit with infinitely variable speed control.

DC-Com chain hoist

The quality basic unit is quick to install and very easy to service. It is the ideal solution for everyday needs in the load range up to 4,400 lbs (2,000 kg). The DC-Com provides the most economical solution for basic lifting applications.

Hoist Designer online

You can select Demag chain hoist configurations to meet your needs and simply integrate them into your design (AutoCAD) using the Hoist Designer.

www.demag-us.com







Trolleys and travel drives

DC chain hoists can be moved by hand or electrically. The newly developed electric travel drive can be quickly fitted to the trolley. The drive can operate at two travel speeds or infinitely variable speeds, and features smooth starting and adjustable sway damping for the cross-travel motion.

D-BP pneumatic rope balancer

The D-BP pneumatic rope balancer can be used for weightless positioning and handling of loads weighing up to 250 lbs (110 kg). Various control systems are available: up/down control with DSK control pendant or Manulift control element, balancer controls for constant loads as well as manual force control for intuitive operation.

D-SH SpeedHoist electric rope winch

The D-SH Speedhoist was developed for fast and frequent transfer of loads. He features infinitely variable manual force control or a rocker switch as well as a quick-change coupling for load handling attachments. It can be used for handling loads weighing up to 175 lbs (80 kg) at a speed of 230 ft/min (70 m/min), or up to 350 lbs (160 kg) at a speed of 115 ft/min (35 m/min).





Control units and radio controls

Various pendant switches and DRC-MP radio remote controls with DRC-10 pushbutton transmitters or DRC-J joystick transmitters are available as control units.

Perfectly matching products

You can configure drive solutions for every application with the comprehensive modular system consisting of travel unit components, gear motors, frequency inverters and application modules as well as power supply lines.

Every component is designed and tested for unbeatable functional reliability, continuously optimized and manufactured in first-class quality and with maximum precision. Demag Cranes & Components is the only



supplier of drive products also to offer complete travel drive units consisting of precisely matching parts, ranging from travel wheels with housings and gearboxes to motors and frequency inverters.



Travel unit components

Wheel blocks, travel wheel systems and wheel sets for applications with loads weighing up to 132,000 lbs (60,000 kg)

Electric motors

Three-phase motors up to 70 HP with 2, 4, 6 and 8-poles or pole-changing motors

Brake motors

Conical-rotor and cylindrical-rotor brake motors up to 70 HP

Gearboxes

Helical, angular and offset gearboxes with a wide range of transmission ratios, torque ranges from 90 to 8,850 lb-ft

Geared motors

Outputs from 0.18 to 70 HP,

D-type helical geared motors from 65 to 4,275 lb-ft, W-type angular geared motors from 90 to 8,850 lb-ft, A-type offset geared motors from 95 to 8,480 lb-ft

Microspeed drives

with conical-rotor brake motors; for high speed stages and positioning with high stopping accuracy; speed ratios up to 500:1

Frequency inverters

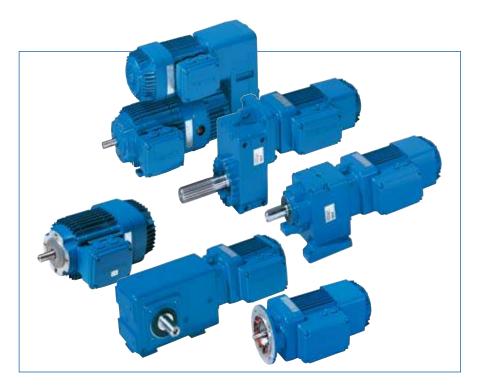
for infinitely variable speed control of standard three-phase motors as single or groups of drives for stopping and starting applications, motor shaft output up to 750 HP, current loads from 2.4 to 60 A or from 4.2 to 544 A, Dedrive Compact and Dedrive Pro ranges

Power supply lines

Demag Compact Line DCL for currents up to 200 A with up to 7 conductors

We would be pleased to send you further information on the individual products.

Driving to the point





Geared motors

Excellent line-fed travel motors for one or two speeds, conical-rotor brake motors for highest demands for starting and stopping applications, as well as cylindrical-rotor motors for standard applications are available for outputs ranging from 0.18 to 70 HP as D-type helical geared motors for 65 to 4,275 lb-ft, as W-type angular geared motors for 90 to 8,850 lb-ft and as A-type offset geared motors from 95 to 8,480 lb-ft.

DRS wheel block system

Innovative series-produced assemblies for travel units with wheel loads up to 88,000 lbs (40,000 kg).

LRS travel wheel system

Robust, universal and easy to select for a wide range of applications in the lower load range up to 14,000 lbs (6,500 kg).





Dedrive Compact frequency inverters

For the lower motor output range up to 75 HP.

Dedrive Pro frequency inverters

The universal solution for line voltages from 380 to 690 V and motor outputs up to 750 HP.







RS wheel block system

Stainless or sheet steel design for special applications (e.g. at high temperatures up to 662°F/350°C) for loads weighing up to 39,600 lbs (18,000 kg).

RAE/RNE wheel sets

Perfect for applications in the highest load range up to 132,000 lbs (60,000 kg).

Application assemblies

The standard design is already suitable for travel and lifting applications with one or several motors. The extended standard is suitable for synchronised operation of hoist drives and for distributing loads between coupled drives.

Power supply lines

Compact Line DCL is compact and easy to install and service.

DKK compact conductor lines are ideal for higher ambient temperatures.

Universal and flexible **DEL single conductors** can be used for a wide variety of applications.

Easy project engineering with Drive Designer online and CalDrive

Drive Designer Online (www.demag-us.com) makes it possible to select helical, angular and offset geared motors as well as travel components easily, fast and reliably. Everything you need for your design can be called up direct by mouse click.

CalDrive calculation software quickly enables you to find a solution to meet

your drive needs. You can easily specify drives for travel and hoist applications, as well as for roller, chain or belt conveyors.

Maintain value and improve performance

Demag Service offers all of the services that help to keep your crane installations, hoists and their components in operating condition, such as maintenance, inspections and repairs. This means that you benefit from the high availability and efficient operation of your installation at all times. Besides routine maintenance, the modernization and refurbishment of crane installations plays an important role. Since requirements often change during the long service life of a crane, concepts are needed for the corresponding modifications. Demag Service provides the



basis for the safe and economical use of cranes and components throughout their entire life cycle with its wide range of services and tailored concepts.



With a worldwide network of service team expertise and a complete range of service products, Demag Service provides all the services required throughout the product life cycle, both for Demag as well as for third-party installations:

- Installation and commissioning
- Safety inspections
- Inspection and maintenance
- Fault elimination and repairs
- On-call standby and 24 hour availability
- Modernisation and Refurbishment
- Crane and crane runway surveys
- Product and operator training
- Documentation and spare part supplies also online via the Internet
- Factory repairs
- Customer support

We would be pleased to send you further information on the individual services.

Complete product care







Tailored service concepts

Demag products are used all over the world. Demag Service provides concepts tailored to meet individual customer requirements to ensure the high availability of installations and maximum safety for operating personnel. Downtimes are cut to a minimum by means of regular preventive maintenance, methodical problem analysis and rapid elimination of faults.

Demag spare parts

A reliable supply of genuine spare parts ensures that faults are rectified and downtimes are kept to a minimum. Whether particularly fast delivery via the express spare parts service, via the simple and convenient Demag Shop (www.demag-shop. com) or via your contacts in our regional offices – genuine Demag spare parts and Demag spare part sets guarantee the efficient operation and long service life and availability of your installations.

Modernization

Components are replaced when installations are modernised. Further developments in the industrial drives, electrical and materials engineering sectors as well as new control methods can be incorporated. Older installations often have hidden reserves that can be unleashed by modernising selected components, for example.

Refurbishment

Refurbishment involves the modification of an installation to meet changed operating requirements. This primarily refers to the key data of the crane, such as the load capacity or span dimension.







Crane runway surveys

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

Service training

All of 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 crane and components is taught in a wide range of customer and industry-specific seminars.

Customer support

The Customer Support team is ready to provide help quickly if you have any technical questions or claims.

Contacted by phone:

Normal Business Hours: Demag North American Headquarters 800-756-8221 Demag Service – Chicago 847-513-7030 Canada 514-851-9641

After Hours: Demag Field Service – U.S. 847-344-8028 Canada 514-851-9641 Spare Parts 440-506-2914

Additional Service Locations:
Contact Crane America Services
937-293-6526 or www.craneamerica.com



Sales and Service Centers in North America

California 5435 Industrial Parkway • San Bernardino, California 92407

Telephone (909)880-8800 • Fax (909)880-4469

Georgia 254 Lake Ruby Drive • Suwanee, Georgia 30024 Telephone (678) 546-0593 • Fax (678) 482-7653

Telephone (070/540 0555 Tax (070/402 7055

Illinois 11261 Kiley Drive • Huntley, Illinois 60142 Telephone (847)515-7030 • Fax (847)515-7040

Michigan 46545 Continental Drive • Chesterfield, Michigan 48047

Telephone (586) 949-6035 • Fax (586) 949-2038

Missouri 3375 Hwy 185 • Washington, Missouri 63090

Telephone (636) 390-2495 • Fax (636) 390-0366

South BTC 560, Suite 150, 454 S. Anderson Road • Rock Hill, SC 29730

Carolina Telephone (803) 909-9000 • Fax (803) 909-9001

Ohio 29201 Aurora Road • Cleveland, Ohio 44139

Telephone (440) 248-2400 • Fax (440) 248-3874

Ontario 1155 North Service Road West, Unit 1 • Oakville, Ontario L6M 3E3

Telephone (905) 825-5900 • Fax (905) 825-5901

Quebec 3524, Rue Ashby • St-Laurent, Quebec H4R2C1

Telephone (514) 336-5556 • Fax (514) 336-4349

Texas 16430 Aldine-Westfield Road • Houston, Texas 77032

Telephone (281) 443-7331 • Fax (281) 443-7308

Washington 704 - 228th Avenue NE • Sammamish, Washington 98074

Telephone (425) 883-4668 • Fax (425) 883-4828

Demag Cranes & Components Corp.

29201 Aurora Road Cleveland, Ohio 44139 Telephone (440) 248-2400 Fax (440) 248-3874 www.demag-us.com

1008 US/EN 213 576 49 701 IS 000