MANITOU



PRESS RELEASE

Manitou Group at CeMAT: creator of solutions for industry!

- MSI 25 and MSI 35: preview of two new semi-industrial trucks
- A new range of reach trucks
- ALL-IN and Easy MANAGER: customized, connected services
- Machines with optimized TCO (total cost of ownership)

Hanover, April 23, 2018 — The Manitou group, a world leader in rough-terrain material handling, is taking part in CeMAT, the international logistics and industrial trade fair in Hanover (Germany). Providing a perfect response to the challenges of today's industrial market, the group will be unveiling two new semi-industrial lift trucks and the first electric reach truck from the Manitou brand. Customized, connected services are provided with the ALL-IN offers and the Easy MANAGER application, making it easier for customers to manage their machines and enabling users to focus on their core business.



Industry and logistics: a variety of customized solutions

With nineteen machines exhibited, all providing solutions to material handling needs, the Manitou group is positioned as a key player in the logistics and industrial markets. With extensions to the ranges (a new ER16 reach truck, and the EP15 electrical pallet truck), revamping of existing machines (MSI 25 and MSI 35 semi-industrial trucks), tailored solutions (ES7 "special applications" stacker from the Loc brand), and dedicated service offerings, the group has

reaffirmed its ability to innovate and adapt to its customers' requirements. "We are proud to present such a comprehensive range of machines and services at this edition of CeMAT. It demonstrates our determination to address all the needs of the logistics and industrial sector. Whether they are leaders in their market, or start-up companies, our customers can count on the robustness of our products and the quality of our services to help them achieve their objectives, while reducing their total cost of ownership (TCO)" says Arnaud Boyer VP Marketing & Product Development for the Manitou group. The Manitou group is in fact committed to reducing the TCO of its existing machines and all new models. In addition to the new systems (Stop & Go, Eco-Mode...) available on some models, a number of services are offered to optimize the TCO, such as maintenance contracts or extended



warranties. Virtual reality is also presented in the booth, with three simulators. The imagined scenarios, aimed at logistics and industry professionals, are intended to make those involved aware of the need to adopt smooth and ecological driving habits.

MSI: this versatile range is now even better!

Two new semi-industrial trucks, the MSI 25 and MSI 35, are on show for the first time. Together with the new MSI 30, these two new machines comprise the revamping of this versatile Manitou range. This new generation of trucks is designed to meet the needs of users of semi-industrial machines. The main developments include: hydraulic pressure increased by 5% to give more power and control, the JSM® (Joystick Switch & Move) joystick on the floating armrest for greater working comfort, and a new panoramic roof to give the operator greater upward visibility. With their hydrostatic transmission, these new



MSI machines can reach a maximum speed of 13.7 mph (22 km/h), which is 2.5 mph (4 km/h) more than the previous generation, making these machines the fastest on the market. The driver's seat is located in front of the engine (a patented system), limiting the operator's exposure to machine vibrations and thus reducing the risk of musculo-skeletal disorders (MSDs), whereas most participants in the market provide a seat above the engine. Specially designed for making trips back and forth indoors and out, these semi-industrial trucks meet the needs of customers who have to handle materials in difficult conditions, e.g. on degraded ground, with bulky loads, or for operations that require a high level of precision. The new MSI machines are therefore ideally suited to professionals in the area of salvage and recycling of materials and waste, the agri-food industries, and the wood industry. Access to components is simplified, enabling the user to carry out recurring maintenance work more easily. Julien Hiltzer, the Manitou Group's industrial product range manager, explains: "We are working on a daily basis to provide material handling solutions tailored to the challenges faced by our customers, especially those that develop in difficult environments. This new MSI generation addresses those needs, indoors and out, with large loads, etc. We have listened to our customers, analyzed their daily work routine and worked in close collaboration with our engineering office to upgrade the range in line with their expectations, to provide greater comfort, visibility and productivity."

Key specifications of the three new MSI models:

	Dimensions (L x w x h)	Max. lifting height	Max. load capacity	Engine specification
MSI 25	10' x 4' 4" x 6' 10" (3.04 m x 1.33 m x 2.09 m)	23 ft (7 m)	5500 lb (2500 kg)	Kubota 36 kW stage IIIA
MSI 30	10' 1" x 4' 4" x 6' 10" (3.08 m x 1.33 m x 2.09 m)	23 ft (7 m)	6614 lb (3000 kg)	Kubota 36 kW stage IIIA
MSI 35	10' 4" x 4' 4" x 6' 10" (3.14 m x 1.33 m x 2.09 m)	23 ft (7 m)	7716 lb (3500 kg)	Kubota 36 kW stage IIIA



A new range: "ER" electric reach trucks

The Group presents its first Manitou electric reach truck at CeMAT. With a capacity of 3520 lb (1600 kg), the ER 16 is one of the six models in this new range. It has been marketed worldwide since the



beginning of the year. Arnaud Boyer adds: "These machines, intended mainly for storage and warehousing professionals, give users a real advantage in terms of productivity, precision, safety, and comfort. Initial customer feedback has been excellent, which bodes well for the future." The range includes trucks with a lifting capacity of up to 37 ft 9 in (11.5 m), and a load capacity of between 2640 lb (1200 kg) and 4410 lb (2000 kg).

The turning radius of less than 5 ft 7 in (1.7 m) makes it easier to use these machines in narrow aisles less than 9 ft 10 in (3 m) wide. The new range of reach trucks enables loads to be gripped at height in a restricted space. Of the six models available, the trucks with a capacity of 3520 lb (1600 kg) and 4410 lbs (2000 kg) offer a high intensity version, with a reinforced mast structure offering a better residual capacity at a very great height.

Optimized visibility and ergonomics

In order to facilitate cabin access, an ergonomic handle and an anti-slip footboard close to the ground have been fitted. The driver's cab has been expressly designed to improve comfort and reduce the user's risk of MSDs. The driver environment is fully adjustable: height of floor, armrest,

and seat length and suspension. The seat backrest of the ER 16, with its convex shape, supports the operator's back movements and facilitates neck movements. Lastly, the seat tilts 18° to move naturally with the operator when working at height, and adjusts to the operator's body.

The new range of reach trucks has been designed to maximize operator visibility, thanks in particular to the optimized positioning of the hydraulic hoses so as not to obstruct the operator's field of vision. In addition, the angled slats of the overhead guard combined with the "Clean Sight" design of the mast enable the operator to maintain continuous visual contact with the load — across the length of the mast — during handling operations.

In order to ensure optimum safety when handling loads, a blue spot lamp (optional) indicates the presence and movement of the truck.



Precision, safety and increased productivity

The ER 16 has a number of pieces of equipment fitted as standard, which optimize its applications and transport. The S3 pack, included as standard, constantly monitors and adjusts travel speeds and hydraulic movements to ensure optimum use of the truck. This dynamic stability control provides an unparalleled level of safety, without inhibiting machine performance.

The system for reducing oscillation movements of the mast, as standard from a lifting height of 23 ft (7 m), reduces mast vibrations by 80%, making working at height considerably easier. All these advantages make the ER 16 the partner of choice for logistics customers.



The ER 16, like the rest of the range, can be ordered with a wide selection of 48V batteries and chargers.

Key specifications of the ER 16:

Dimensions	Max. lifting	Max. load	Aisle width
(L x w x h)	height	capacity	
4' x 4' 2" x 7' 3" (1.23 m x	26 ft 1 in (7.95	3520 lb (1600 kg)	106 in (2689 mm) (across)
1.27 m x 2.20 m)	m)		107 in (2728 mm) (length)

3 new models have been added to the warehousing range

The Manitou ES-C 716 electric stacker, the most compact in its category, is presented for the first time at the show. With a capacity of 3520 lb (1600 kg), this counterweight model can lift loads to a height of 17 ft 9 in (5.40 m). To start the machine, a pin code system (patented) has been put in place, to avoid key loss and make it easier for several operators to use the same machine. Other innovations include the "Easy Snail" option, which offers a raised tiller to allow easier maneuvering in narrow aisles. This machine is ideally suited to handling special (sealed) pallets or where there is ground congestion. The ES-C 716 is one of the four models in the compact range, offering a tilting mast, and a capacity of between 2425 lb (1100 kg) and 4410 lb (2000 kg) for a maximum height of 17 ft 9 in (5.40 m). This machine will be on sale from the third quarter of 2018.





With a capacity of 3307 lb (1500 kg), the new EP 15 expands the range of electric pallet trucks, which now includes nine versions. This new electric model is an effective alternative to the manual pallet trucks, reducing the risk of MSDs. The EP 15 has the Manitou ergonomic tiller and a range of functions that enable control of the load, maneuvering in confined spaces, and ensure operator safety. The integrated charger and 70 Ah gel battery provide a high level of autonomy. Maintenance is facilitated by simplified access to all components. Designed for daily use, this model is highly reliable. All these features make the new electric pallet truck an ideal solution for the day-to-day handling of light loads, both in the warehouse and on the delivery/shipping bay. Its compactness and light weight (485 lb / 220 kg) make it easily transportable.

With its 3 driving wheels, the TMM 20 truck-mounted forklift, with a capacity of 4410 lb (2000 kg) for a maximum height of 12 ft 10 in (3.90 m), is a solution tailored to the last-mile logistical requirements of carriers. This model offers a new option: a fork positioner that is now integrated into the carriage to ensure better residual capacity. This versatile, rough-terrain machine is also available in a multi-directional, 4 driving wheel version (optional). With this model, drivers benefit from complete autonomy for loading and deliveries, particularly in the area of event management, beverages, or delivery to private individuals (capital goods...).





MT 425: "THE" telehandler for the industrial market!

The first Manitou Group telehandler dedicated 100% to the industrial market, the new MT 425 is on show at CeMAT. This ultra compact model (6 ft 3 in / 1.90 m in height and less than 5 ft / 1.50 m wide) enables a load of 2315 lb (1,050 kg) to be lifted to 8 ft 2 in (2.5 m) thanks to its integrated carriage and reinforced counterweight. Like the MT 420, dedicated to the construction sector, the MT 425 has been designed to reduce the TCO (Total Cost of Ownership) of the machine, thanks, for example,



to the reduction of preventive and corrective maintenance costs, its ease of transportation, and high residual value. A wide selection of compatible attachments is available: waste grippers, box dumper, big bag handler, fork positioner, etc. The new MT 425 is therefore an ideal solution for outdoor handling (docks, quays, ports, and foundries) and for containers.

Key specifications of the MT 425

Dimensions (L x w x h)	Weight	Max. lifting height	Max. load capacity	Turning radius	Engine
4' 11" x 11' 10" x 6' 3" (1.49 m x 3.60 m x 1.90 m)	9259 lb (4200 kg)	14 ft 3 in (4.35 m)	5500 lb (2500 kg)	117 in (2,980 mm)	Kubota 49 HP Stage IIIA

ES 7: a special application for a special demand

Demonstrating its ability to adapt to every demand, the Manitou Group presents the ES 7 "special applications" stacker, a unique, tailor-made solution. This machine, designed in close collaboration between the marketing and engineering office teams, addresses the challenge of assembling heavy components on an automatic assembly line. To facilitate assembly, the engineering office has modified the structure of a traditional stacker. The distance between the front and rear drive wheels has been reduced, and a motorized turn table (with motor in the wheel) has been added to the machine's chassis. The battery has been moved to the front to act as a counterweight and rebalance the loads. Lastly, a system has been put in place to automatically decrease the speed of the machine in conjunction with the speed of the line.

The ES 7 saves time and provides greater safety and comfort. The assembly process is not interrupted, operators are completely safe thanks to the integrated anti-collision sensors, and the truck's sideshift attachment allows precise alignment. This machine demonstrates the Manitou Group's ability to adapt to any any challenge of the warehousing market. More than 300 "special applications" machines were produced in 2017, each solution requiring between one day and four months of research.

MI ranges: new options for more comfort!

The Manitou range of industrial forklifts (MI) is strongly represented at this edition of CeMAT, with many new features presented, on small, medium and heavy load models.



With a 4 dB reduction, the perceived noise level while driving small-tonnage thermal models (with a capacity of 4410 lb / 2000 kg to 7716 lbs / 3500 kg) has been halved. To simplify use of the machine, mini-levers, already present in the electric range (ME), have been introduced. The MI 25D, with a nominal capacity of 5500 lb (2500 kg), which runs on diesel, is also available in a gas version, as are all the models in this range.

A new oil bath braking system provides a high level of performance and extends the maintenance intervals significantly on the medium tonnage range (8818 lb / 4000kg to 11,023 lb / 5000 kg model), represented at CeMAT with the new version of the MI 50D. Another new development is that these industrial forklifts are now equipped with a new Deutz 55 kW stage IIIB engine. Like the compact range, the new medium-tonnage versions of the MI machines benefit from a 4 dB reduction, a 50% decrease in the perceived noise level for the user.

Key specifications of the MI 50D

Max. lifting height	Max. lifting capacity	Turning radius	Power	Engine
19 ft 8 in (6 m)	11,023 lb (5000 kg)	9 ft 7 in (2.92 m)	Diesel	Deutz 55 kW Stage IIIB

Available in gas (11,023 lb / 5000 kg to 15,432 lb / 7000 kg) or diesel (11,023 lb / 5000 kg to 22,046 lb / 10,000 kg), the new high tonnage versions feature several improvements: a newly-designed counterweight, new ZF transmission for greater flexibility and a 3 to 4 dB reduction in cabin noise level, depending on the model, representing a 50% reduction.

A new Deutz engine has also been fitted in this range: 55 kW for 11,023 lb (5000 kg) to 15,432 lb (7000 kg) diesel models and complying with Stage IIIB standard, and 85 kW for 17,637 lb (8000 kg) and 22,046 lb (10,000 kg) diesel models, complying with Stage IV standard. The high tonnage version is represented at CeMAT by the MI 80D, with a capacity of 17,637 lb (8000 kg).

Key specifications of the MI 80D

Max. lifting height	Max. lifting capacity	Turning radius	Power	Engine
19 ft 8 in (6 m)	17,637 lb (8000 kg)	19 ft 8 in (5.66 m)	Diesel	Deutz 85 kW Stage IV

ME range: successful since 2016

Launched at the last edition of CeMAT in 2016, the electric forklift trucks are represented once again with four models on show, in three driving wheel (ME 315c and ME 316) and four driving wheel (ME 425c and ME 430) versions.

The high reliability of these products and their ease of use have proved very popular with customers as demonstrated by the 30% increase in sales between 2016 and 2017. In addition, constant development of options offers new opportunities for applications in this range.



Flexible, customized, connected services for greater productivity

Long-term rental offers with "ALL-IN" services, launched in 2016, continue to be developed, offering complete "turnkey" solutions aligned as closely as possible with customers' needs. The new Flexible offer includes: rental of the machine, the maintenance contract and the Easy MANAGER connected solution. This flexible offer enables the user to rent the machine over a long period of time (12 to 96 months) with annual use of up to 1,500 hours. Lessees can choose from two levels of maintenance: preventive or preventive and corrective, allowing them to focus on their work without worrying about financing, maintenance, and resale of their machine. Available on all the group's products, the

Flexible "ALL-IN" offer is open to users in Germany, Benelux, Spain, France and Portugal.

Now downloadable on smartphone using the "Manitou Easy MANAGER" application, the Manitou group's connected solution allows all the machine's data to be exploited, to optimize machine use. This means that diagnostics can be carried out remotely by technicians, and maintenance can be planned for, reducing downtime and increasing the machine's service life and productivity. Lastly, the integration of an "API" helps



develop this solution, making it possible for customers to integrate the Easy MANAGER data directly into their own management tools. Easy MANAGER is an important tool for managing and optimizing the TCO of the machines.

A platform for rental companies and major clients



The "Customer Service Platform" (CSP), which has been available in Germany for 18 months, provides customers running a large fleet with a simplified way of managing their machines: a single point of contact for all their equipment, distributed over a number of sites. This means the customer has just one telephone number to ring for all the work to be carried out, such as maintenance or repairs, with a response guaranteed in under 24 hours. As part of a continuous improvement approach, experience statistics and feedback are taken into account in order to develop this solution. This service is very popular with customers and is currently being

implemented in the United Kingdom and Benelux.

The Manitou Group will be presenting these new features at a walk-around on Tuesday, April 24 at 3.00 pm (Hall FG - booth L62)

Manitou Group, a world leader in rough-terrain handling, invents, produces, distributes and services equipment for construction, agriculture and industry.

The group's product lines include fixed, rotating and heavy tonnage rough-terrain telescopic forklifts, rough-terrain, semi-industrial and industrial masted forklifts, skid-steer loaders on wheels and tracks, articulated loaders, backhoe loaders, aerial work platforms, truckmounted forklifts, warehousing equipment and attachments.

Through its iconic brands - Manitou, Gehl and Mustang - and its network of 1,500 dealers worldwide, the Group offers the best solutions by creating optimum value for its customers.

Headquartered in France, the group recorded revenue of 1.6 billion euros across 140 countries in 2017, and it employs 3,900 people, all committed to satisfying customers.

