

TH5.5-19P





**Quality, craftsmanship and innovation.
The secret lies in precision. Having clear ideas is vital:
we need to know where we want to go and what we want to create.
And at Magni, we throw our all into accomplishing it.**

Riccardo Magni – President

Magni Telescopic Handlers was founded in 2013. Thus began the development of the widest range of telescopic handlers on the market; from rotating telescopic handlers to fixed, heavy-duty models and fixed-boom construction telescopic handlers. Italy was no longer enough and so six further branches have been set up: Magni TH France, Magni UK, Magni America, Magni Deutschland, Magni SA and Magni Asia Pacific. To offer our clients the best technical and commercial service around, we have created a network of over 300 dealers, a number that is constantly increasing. And that is just the beginning of our story.

MAGNI: **EXPERIENCE,** **RELIABILITY AND VERSATILITY**

PRODUCTIVITY

The TH range of telescopic handlers for construction and light industry is designed to ensure maximum performance in every situation. Standard **4-wheel drive** guarantees maximum grip on any kind of ground. The hydrostatic transmission ensures optimal off-road performance. The compact size is ideal for tight working spaces, guaranteeing maximum manoeuvrability in any location.

VERSATILITY

The choice of attachment is essential in defining the work of the machine. Its **three-in-one** nature ensures maximum versatility, allowing you to use it as a telehandler, crane or man platform*. Thanks to the wide range of interchangeable attachments, you can carry out different works with ease. All attachments are compatible with all models, ensuring maximum flexibility.

* homologated as standard only on some models.



TH 5.8 P / TH 5.8



TH 6.10 P / TH 6.10



TH 5,5.15 P / TH 5,5.15

How to read the
model names

All model names identify the range and its main features, such as maximum lifting capacity and maximum lifting height.

FUNCTIONALITY

The function management software is easy and intuitive and suitable for all types of users. The thematically organised display and iconographic graphics make it easier to learn the basic functions, making the **system user-friendly**. The **CAN BUS** electrical system simplifies the machine management, allowing all relevant data to be displayed on the touchscreen in the cab. The L/S hydraulic system features a 350 bar working pressure. It has been designed to optimize daily work.

COMFORT

Ergonomics and operator comfort are prerogatives of Magni machines. The seat and adjustable steering column are designed to ensure an optimal driving position. The full-visibility cab is designed to guarantee a **360° view** during every movement. The many standard features of the cab (such as air filtration and pressurization) ensure operator comfort in any season and location.



TH 5,5.19 P / TH 5,5.19

TH 5,5.24

TH 6.20

TH **5,5** **.** **19**

product
range

maximum lifting
capacity (ton)

maximum lifting
height (m)

P identifies the 75 kW models
The TH 5,5.24 and TH 6.20 models
feature a 100 kW engine only.

Safe, strong and reliable

our fixed Telehandler range combines craftsmanship with innovation and technology, to offer high-end performance in each application.

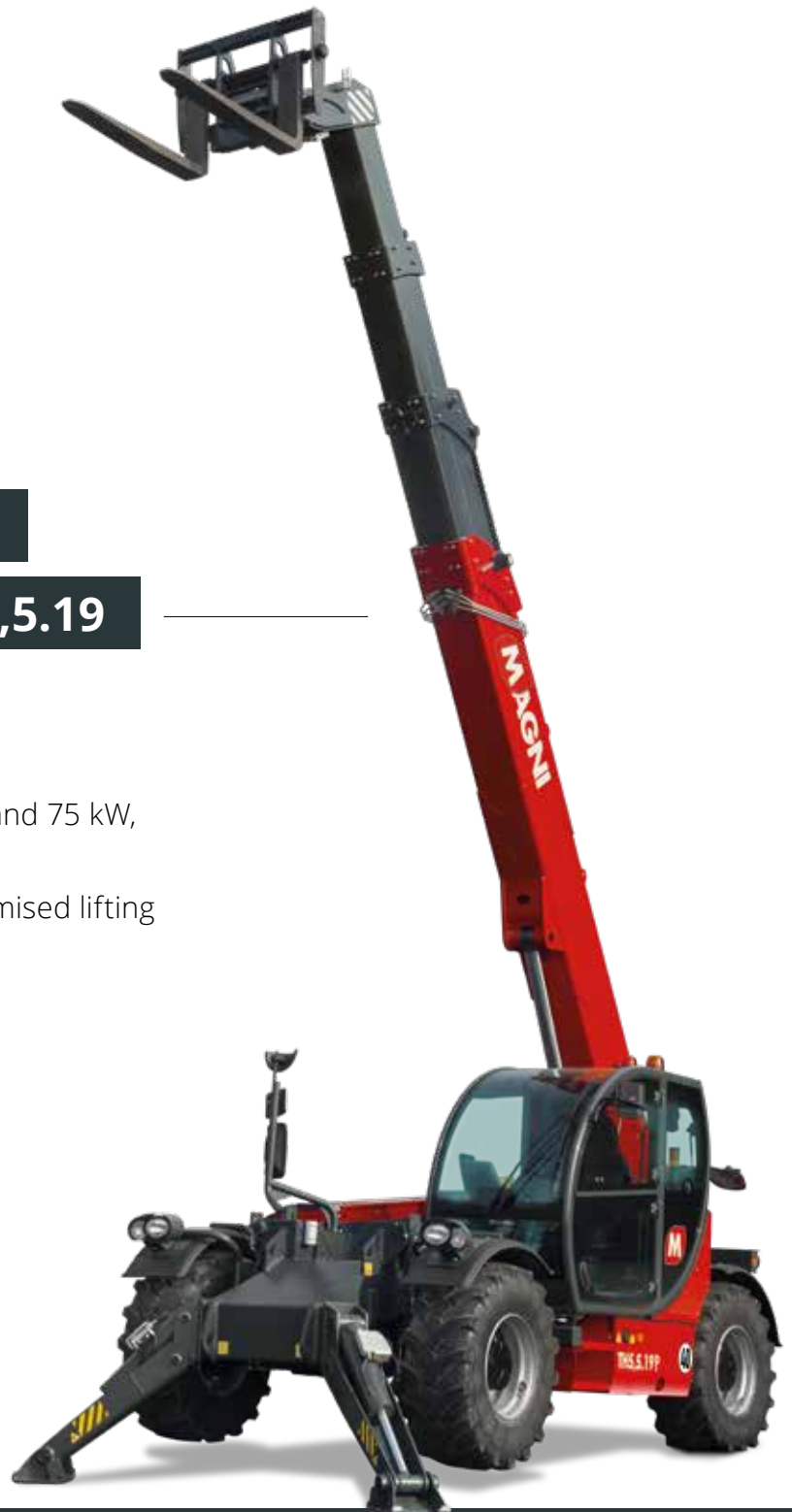
TH 5,5.15 P / TH 5,5.15

TH 5,5.19 P / TH 5,5.19

- Lowered design for greater stability
- Available with Deutz Stage V engines
- Available in two engine sizes, 55 kW and 75 kW, to suit your needs
- Standard pivoting stabilisers for optimised lifting capacities up to 5.5 tonnes
- 350 bar L/S hydraulic system
- 4WD



Compatible with a wide range of attachments



COMFORT CAB



**REGISTERED CAB
WITH FULL VISIBILITY**

The innovative design of Magni's cabs ensures unbeatable operator comfort and safety. The cab has **full visibility** thanks to a large windscreen which extends from the operator's head to their feet, allowing them to view the load even when it is suspended overhead or with the boom completely lowered.



**FOPS LEVEL 2 / ROPS
PRESSURISED CAB**

The cab is **FOPS** (Level 2)/**ROPS** certified and equipped with an upper grill guard to guarantee operator safety even during the most delicate operations. The cabin is also airtight and fully pressurised, to ensure a safe working environment for the operator at all times.





HEATING AIR-CONDITIONING

Our TH range can be used in any part of the world, from Siberia to the African deserts. All machines in the TH range are therefore equipped as standard with a **heating and air conditioning system**. (Except for models with 55 kW engines, for which it is an option).



MUG HOLDER

Recently added to the cab, you will now find a **mug holder**. This is a big hit with operators, allowing them to enjoy their morning coffee or other beverages during their breaks. The cab also features a USB port as standard, ideal for charging tablets and smartphones.



ERGONOMIC DESIGN

Achieving the most **comfortable and ergonomic driving** position is essential while working. The Magni TH cab allows you to easily adjust the steering wheel to the most ergonomic and comfortable position. Nevertheless, when the column is straight, you can effortlessly access the cab. The seat can also be moved forwards and backwards to achieve the perfect support for your back.



100% AIR FILTRATION

Magni machines feature **100% air filtration**. This feature, which is standard on all TH models, enables the machines to be used even in polluted or contaminated environments. You simply need to change the filter according to your requirements.



CONTROL PANEL

STANDARD TOUCH SCREEN

All Magni models from 4 to 5 ton capacity are equipped with a **7"** touchscreen display. The machine management software installed on the touchscreen gathers all usage data and displays them conveniently over five different pages. Navigating between these pages is extremely easy and intuitive, even for less expert users.

MAGNI CONTROL PANEL

The user-friendly touchscreen display is used to manage the whole machine: it is extremely intuitive,

and communicates with the operator via more than **170 written fault messages** in **12 different languages**. The stabilisers and auto-levelling can also be managed via dedicated buttons.

INTEGRATED DIAGNOSTICS

Fast and simple troubleshooting of electrical and electronically managed components allows for reductions in machine downtime. When a fault is detected, the system automatically shuts off any movement likely to worsen the fault and displays an alarm code which identifies the fault type.



DRIVE PAGE

All data on the transmission and its components are shown in the upper section, just like a traditional instrument cluster, whereas the lower section allows the driver to select the type of steering. This selection is facilitated by the presence of two alignment sensors. It is also possible to set the speed (tortoise/hare).



STABILISATION PAGE*

This page displays all data relating to the load chart of the attachment. The movement of the load within the stabilisation area is displayed in real time, so that you can always have everything under control.

**Available only for models with stabilisers*



LOAD CHART PAGE

Magni machines use the "Load Moment Indicator" system which meets all regulations for cranes. The screen displays a dynamic load chart which allows the operator to keep a constant view of the payload's centre of gravity and of its movement in the chart.



CONTROL PAGE

The upper section is used to manage basic cab commands (such as temperature and ventilation), the middle section is dedicated to the machine lights, while the lower section displays the various available options for switching from the cab controls to remote control.



CUSTOMISATION PAGE

This page displays the limitations for working height and the hydraulic speeds for lifting/lowering and extension/retraction of the boom, as well as tilting and attachment functions for repetitive manoeuvres in tight spaces.

PRODUCTIVITY AND EFFICIENCY



MANOEUVRABILITY AND OFF-ROAD

Every model is equipped with **4-wheel drive** and steering to ensure maximum stability in every operation. This solution allows for maximum freedom of movement and 3 types of steering: round steering, front steering and crab steering.



EXCELLENT PERFORMANCE IN THE WORK SITE

The powerful hydrostatic transmission provides each wheel with all the power necessary to tackle the roughest terrain and the toughest slopes. Thus, the operator will be able to use the machine for every work in total safety. The impressive ground clearance allows the machine to overcome any obstacle. Available as an option on the entire range, we offer solid tyres to further improve performance.



Interchangeability

The R.F.ID **automatic attachment recognition system** automatically recognises the attachment coupled to the machine. The display is consequently updated with the corresponding load chart and the load limit device is set for that specific attachment. This solution is conceived to complete the coupling phase in total safety.

LEVELLING SYSTEM ON TYRES

This mechanism lets the driver adjust the machine levelling and have the full load chart for all operations, even with ground inclinations which would normally affect the lifting performance. Magni has also introduced an additional levelling safety device: if the operator tries to manually correct the inclination of the machine on uneven terrain, the system detects the machine inclination and only allows compensation to be performed in the correct direction, preventing any movement which could worsen the situation.



UNPARALLELED STRENGTH AND HIGH-QUALITY COMPONENTS

DESIGN AND CONSTRUCTION PLUSSES

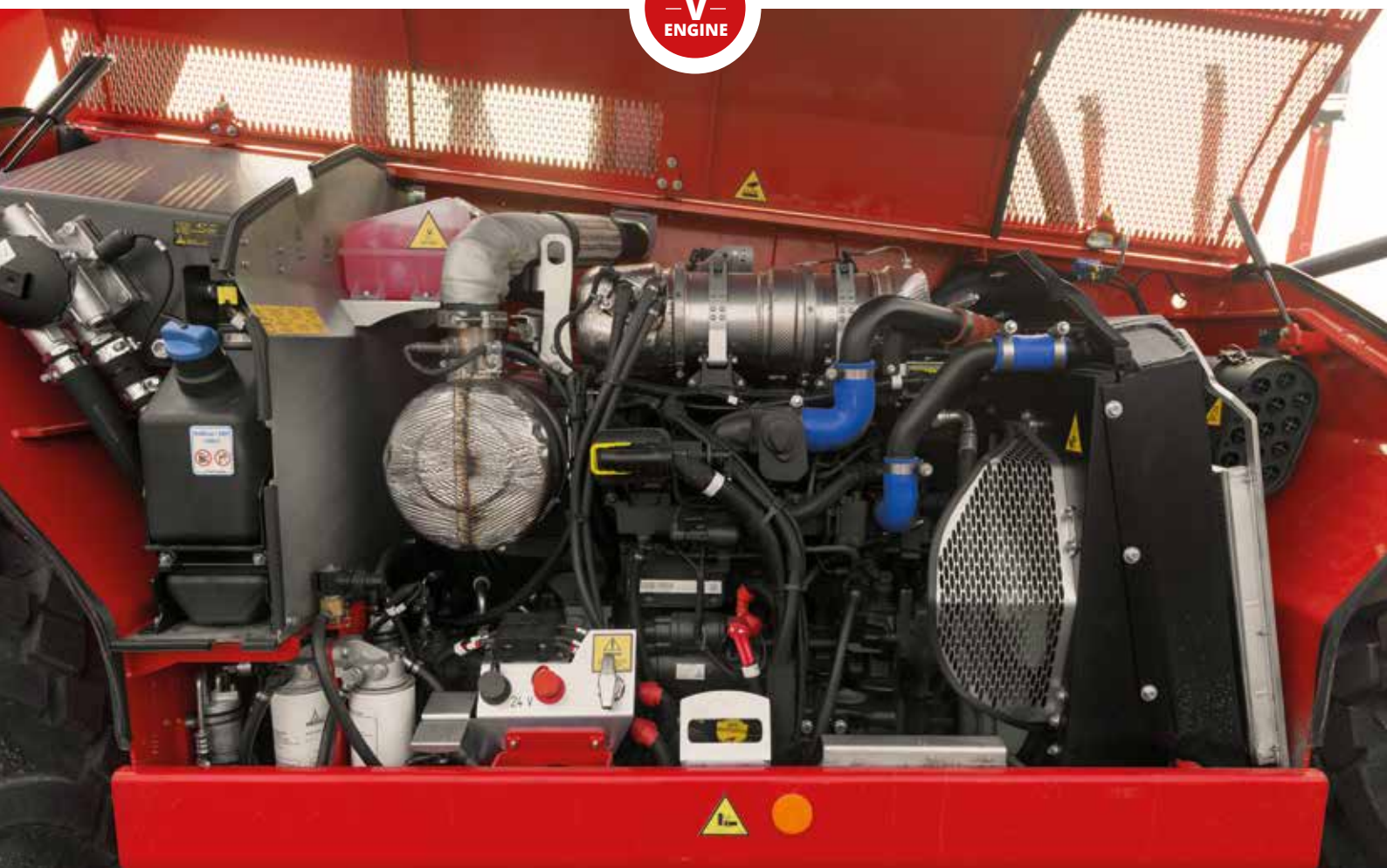
ENGINE

All TH models feature Stage V engines to meet the requirements of Regulation (EU) 2016/1628 regarding emissions. All the models are also available with Stage IV final and IIIA engines. This choice was dictated by the desire to be able to easily find the entire range in all markets, without the need for conversion kits. The TH 5.5.19 and TH 5.5.15 models are available with two different motor powers for each available engine. Thus, we can meet the most diverse requirements of each customer, adapting to their needs in the best possible way.

WARRANTY

All TH models feature a 24-month parts and service warranty*. The Magni warranty requires your machine to be regularly serviced from new by an authorised Magni dealer. Our warranty covers any defects attributable to faulty materials or workmanship for a maximum of 2 years or 2,000 machine working hours. Our Aftersales Team and Spare Parts Department are always ready to support you, every day of the year.

**Consumables are excluded from the warranty.*



MOTORIZATIONS

	Deutz TCD 3,6 L4 Stage V			Deutz TCD 3,6 L4 Stage IV - Tier IVf			Deutz TCD 3,6 L4 EDG Stage IIIA		
	100 kW	75 kW	55 kW	100 kW	75 kW	55 kW	100 kW	75 kW	55 kW
TH 5.8 P		✓						✓	
TH 5.8			✓						✓
TH 5.8 MINING								✓	
TH 6.10 P		✓			✓			✓	
TH 6.10			✓			✓			✓
TH 5,5.15 P		✓			✓			✓	
TH 5,5.15			✓			✓			✓
TH 5,5.19 P		✓			✓			✓	
TH 5,5.19			✓			✓			✓
TH 5,5.24	✓			✓			✓		
TH 6.20	✓			✓			✓		

✓ Available



AUTOMATIC PARKING BRAKE

This function greatly improves the management of the parking brake, making the machine easier and even

safer to drive. It can be applied to all the models of the range. This function means it is no longer necessary to use the dedicated button on the steering column to engage and disengage the parking brake. The brake is automatically engaged whenever the vehicle's speed approaches zero, and is disengaged when the FNR is in drive mode and you hit the drive pedal.

HYDRAULIC CIRCUIT

All TH range features a load-sensing system with **power sharing** and **350 bar**. This solution allows to accurately manage all hydraulic movements, providing exceptional precision in every movement. The entire system is SIL 2 certified and complies with EN 13849 concerning the safety of electronic controls. Gas-tight

couplings, thermoplastic hoses and steel pipes ensure a perfect seal. The electronic management of the hydraulic system allows it to select the best engine speed for the hydraulic power required, providing reductions in fuel consumption. Magni software allows management of flow sharing, guaranteeing both safety and precision of each hydraulic movement (up to 3/4 movements at a time).

DESIGN AND CONSTRUCTION PLUSES

TRANSMISSION

The electronically controlled hydrostatic transmission guarantees **up to 500 bar** working pressure, ensuring accurate and progressive speed regulation. The automatic calibration of the hydrostatic pump and motor with variable displacement offers the perfect balance between speed and pulling force. The dynamic system automatically adapts the pressure to the transmission parameters in order to meet the needs of the machine. The two-speed gearbox offers a high and low speed range for on-road and off-road driving, respectively.

AXLES

The axles feature a planetary reduction gearbox and multi-disc wet brakes. The steering cylinder is located on the upper part in order to protect them from accidental collisions. The rear axle is a tilting model to ensure the best off-road performance. When the boom exceeds a 55° angle during static work, the automatic differential lock is engaged to ensure better stability.

ELECTRICAL CIRCUIT

The IP67-rated electric circuit is protected against water and dust ingress, and runs at 24V. The TH range is equipped with a **CAN BUS**, which handles all data relating to the electronic components. All information regarding the engine, transmission, hydraulic

system and load moment indicator is shown on the touchscreen display. CAN BUS technology requires around a third less wiring, reducing the risk of faults on the circuit and increasing overall reliability of the machine.





Manufactured from high-tensile steel, **the boom** is extremely tough and rigid but at the same time very light, increasing the load capacity and preventing it from flexing.

The telescopic extension of the sections is actuated by a cylinder. A dual-chain system and hydraulic hoses completely contained inside the boom itself significantly reduce accidental breakages due to collisions. The block is composed of welded hoses, preventing rubbing between the individual lines and maintaining alignment, thus also contributing to a significant reduction in faults. The sliding pads are fastened to steel blocks, ensuring smooth movement of the structure.



The New Fleet Management

Enjoy MyMagni free of charge
all new machines.



EFFICIENT

Technical alarms and maintenance
and in perfect condition at all times.



SMART

A simple and intuitive interface,
optimised for both desktops and
portable devices. MyMagni allows you

world.



SAFE

You can set movement alarms
through "geo-fence" and curfew
in real time when the machine leaves
unauthorised use.

Discover how the new GPS system can help you manage and monitor your fleet. A total overview that enables you to map and track every movement of your fleet, and displays the most critical items on your dashboard.

MyMagni Mobile

This app helps you identify machines in need of immediate care, forestalling potential breakdowns. The events engine collects and displays all important machine events such as CAN fault codes, pre-checks and service, damage and even overdue service.

CHAT: this message centre helps keep track of ongoing communication between you and your customer.

You can also share high-quality pictures and video content. MyMagni is available on both the Apple Store and Google Play Store.



Have fun with the MyMagni Mobile.



TOP FEATURES:



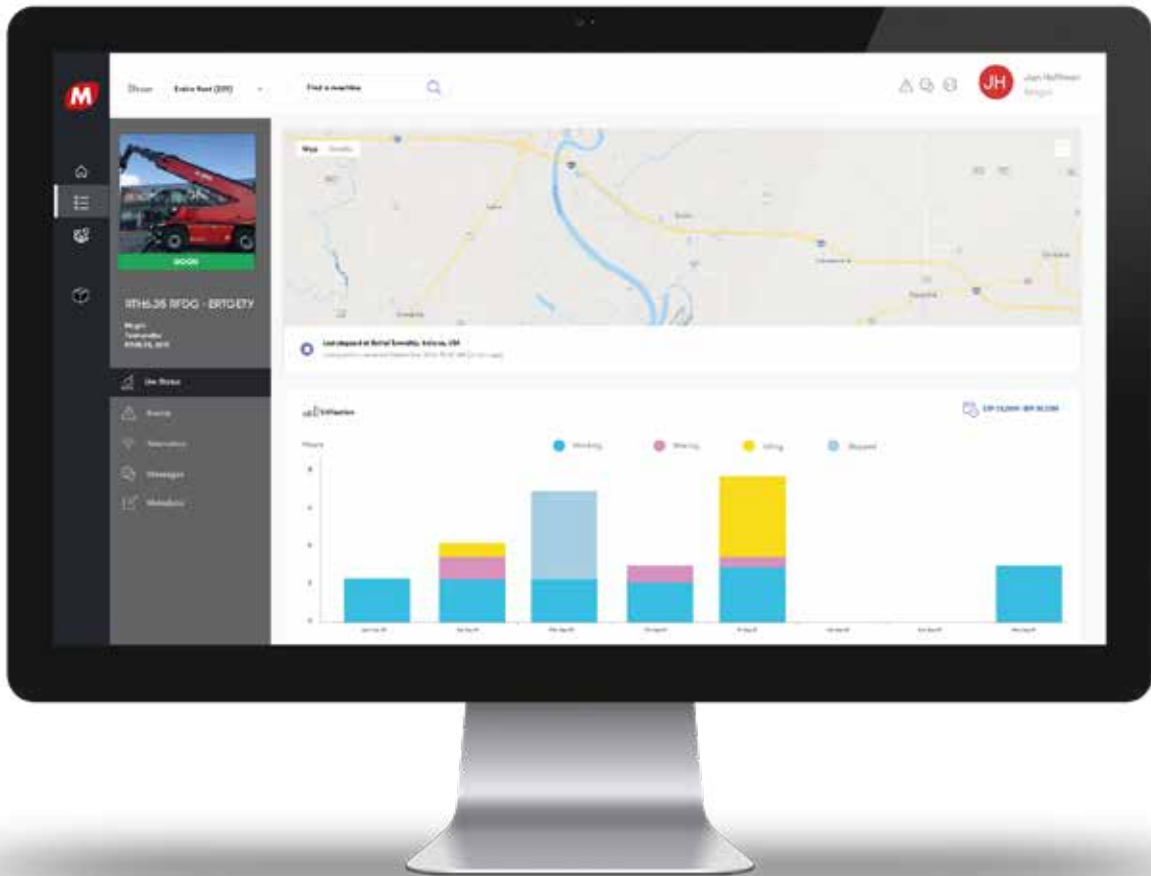
MAINTENANCE

- Schedule your maintenance
- Hours left to maintenance
- Check oil level
- Check filter wear



SAFETY

- Alarm Code Error from LMI
- Machine Alarm SPN
- FMI Error Code of Engine Alarm
- Key Bypass



MyMagni Desktop

FLEET HOME

This page displays the exact position of each unit and its operating status, via a colour legend.

CLASSIC

This is an embedded section that provides access to standard modules such as reports, servicing, alarms and access control.

FLEET INVENTORY

Here you can easily segment and chart your fleet, helping you make informed business decisions.

SEARCH FOR A UNIT

Here you can find all the relevant information, such as geolocation and GPS status, in real time simply by setting the appropriate filters available on the page.

CAN BUS DATA

This is the landing page where you can check daily usage, CAN BUS data, and even investigate any current active events for all the machines in your fleet.

The MyMagni system is available as an option on all TH models.



ENGINE

- Engine Hours / Total Vehicle Hours
- Engine Total Fuel Used
- Engine Coolant Temperature
- Engine Oil Temperature
- Engine Oil Level & Pressure



LOAD / BOOM POSITION

- Current boom length & height
- Actual load & current max. load
- Machine load
- Max load capacity
- Boom in motion



MACHINE CHECK-UP

- Vehicle speed and direction
- Gear engaged & DEF level
- Working mode & tool configuration
- Post-treatment diesel exhaust fluid tank level
- Battery voltage

STABILISERS

Models with a maximum lifting height of **more than 10 m** feature standard front pivoting stabilisers. This solution ensures better performance and greater stability when lifting. When stabilisers are closed they do not protrude from the outline of the machine, facilitating movements and manoeuvring operations. The large contact surface of each foot assures maximum grip on any kind of ground, guaranteeing optimal stability.

This kind of stabilisers is quick to position. When working on slopes or irregular ground, just one button press allows you to automatically level the machine. An electronic level detects the machine's inclination and brings it back to the horizontal. An electronic level on the display allows you to monitor the levelling at all times.

TH 5,5.15 P / TH 5,5.15
TH 5,5.19 P / TH 5,5.19
TH 5,5.24 / TH 6.20



USE OF THE PLATFORM



All models from 75 kW to 100 kW can be coupled with our man platforms.

These models comply with **EN 1459-1**, allowing for total safety of the platform when staying at altitude. All baskets also feature non-slip floor, anchoring eyebolts and electronic safety devices allowing for constant monitoring when staying at altitude. Contact your local dealer to check the compatibility of 55 kW models.

LOAD MOMENT INDICATOR

In order to ensure maximum safety, all machines in the TH range meet product standards for forklift trucks, cranes and aerial work platforms. All Magni telescopic handlers are equipped with a Load Limit Device (LMI). The LMI stores specific load charts for each attachment and continuously analyses the spatial positioning of the load, dynamically displaying the correct load chart based on the machine's working configuration. If an overload occurs, it automatically stops any movement which would aggravate the situation, allowing only retraction.



- 1 LOAD WEIGHT DETENTION**
Detection via 4 pressure transducers: 2 installed on the lifting cylinders and 2 on the compensation cylinder.
- 2 ANTI ROLL-OVER**
It automatically limits the machine's speed and heavy oscillations.

- 3 ANGLE/LENGTH TRANSDUCER**
This device detects the length of the boom and the corresponding angle of inclination from the ground.

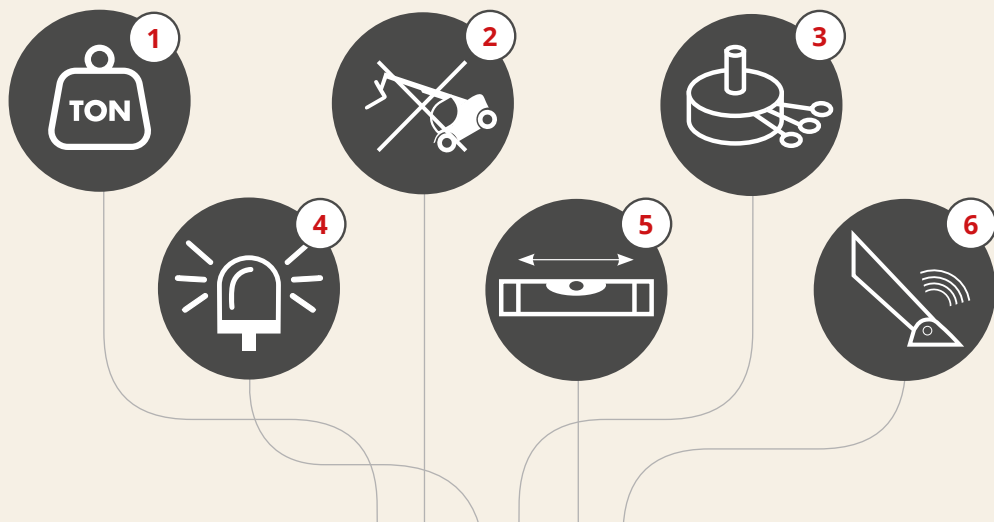
- 4 FLASHING LIGHT**
The steady red light and the buzzer send a visual and acoustic signal to all people nearby the machine.

- 5 DIGITAL INCLINOMETER**
This device updates the weight reading according to the inclination of the machine.

- 6 POSITION DETECTION OF THE STABILISERS**
The **TH 5,5.15**, **TH 5,5.19**, **TH 5,5.24** and **TH 6.20** models feature stabilisers with sensors which detect their extension. When stabilisation is completed, the load chart is automatically updated, providing full load capacity to the machine.



Constant analysis of the load



GRAPHIC REPRESENTATION

The easy and intuitive display offers a representation of the load in the space.

DYNAMIC LOAD CHART

The system automatically provides the correct load chart of the coupled attachment, setting the software with all the necessary load limitations.

MOVEMENT LIMITATION

Sensors detect the load on the attachment in use and communicate it to the system. Thus, the system automatically limits the lifting height and reach.





TECHNICAL DATA



TH RANGE

TECHNICAL DATA TH 5,5.19 P / TH 5,5.19

Machine model	TH 5,5.19 P		TH 5,5.19				
	Telescopic handler						
Maximum lifting capacity	5,500 kg (center of gravity 600 mm)		5,500 kg (center of gravity 600 mm)				
Maximum lifting height	18.80 m		18.80 m				
Engine	Type	Deutz TCD 3,6 L4 Stage V	Deutz TCD 3,6 L4 Stage IV	Deutz TCD 3,6 L4 EDG Stage IIIA	Deutz TCD 3,6 L4 Stage V	Deutz TCD 3,6 L4 Stage IV	Deutz TCD 3,6 L4 EDG Stage IIIA
	Rated power	74,4 kW (101,2 hp) @ 2,200 rpm			55,4 kW (75,3 hp) @ 2,200 rpm		
	Maximum torque	410 Nm @ 1,600 rpm			405 Nm @ 1,300 rpm	390 Nm @ 1,300 rpm	390 Nm @ 1,300 rpm
	Displacement	3,6 l			3,6 l		
	Cylinders	4 in line			4 in line		
	Engine configuration	Diesel direct injection turbocharged			Diesel direct injection turbocharged		
	Cooling system	Water – intercooler			Water – intercooler		
Transmission	Type	Hydrostatic			Hydrostatic		
	Model	Bosch Rexroth			Bosch Rexroth		
	Maximum pressure	470 bar			470 bar		
	Displacements	Electronically controlled variable displacement pump Variable displacement motor			Electronically controlled variable displacement pump Variable displacement motor		
	Gear box	Dropbox, 2 speeds forward-reverse			Dropbox, 2 speeds forward-reverse		
Axles and brakes	Type	Axles with planetary gearboxes			Assali con riduttori epicicloidali		
	Rear axle	Oscillating and steering with hydraulic locking			Oscillating and steering with hydraulic locking		
	Front axle	Oscillating and steering with levelling +/- 8°			Oscillating and steering with levelling +/- 8°		
	Service brake	Hydraulically operated wet multi-disk brakes on each axle			Hydraulically operated wet multi-disk brakes on each axle		
	Parking brake	Hydraulic with negative action			Hydraulic with negative action		
	Tyres dimensions	445/65 R22,5			445/65 R22,5		
Performance	Max. travel speed	35 km/h			25km/h		
	Drawbar pull	72 kN			72 kN		
	Gradeability	52%			52%		
	Turning radius (end of forks)	5,610 mm			5,610 mm		
Weights	Total unladen	14,100 kg			14,100 kg		
	Front axle unladen (boom retracted and lowered)	5,900 kg			5,900 kg		
	Rear axle unladen (boom retracted and lowered)	8,200 kg			8,200 kg		
Tank and system capacities	Fuel tank	145 l			145 l		
	AdBlue	10 l *			10 l *		
	Hydraulic oil tank	90 l			90 l		
	Engine oil tank	9 l			9 l		
Cooling liquid	20 l			20 l			
Hydraulic circuit for movements	Max. operating system pressure	350 bar			350 bar		
	Circuit type	Load sensing			Load sensing		
	Service pump	Bondioli & Pavesi - Variable displacement			Bondioli & Pavesi - Variable displacement		
	Controls for boom movements	Danfoss – SIL 2 Electro-proportional valve			Danfoss – SIL 2 Electro-proportional valve		
	Controls for stabilizers	Bosch Rexroth – Electro-hydraulic actuators			Bosch Rexroth – Electro-hydraulic actuators		
	Movements control	1 joystick Danfoss with FNR switch and dead man safety device - Management with CAN bus technology			1 joystick Danfoss with FNR switch and dead man safety device - Management with CAN bus technology		

Standard met EN 1459-1: concerning standards for variable-reach trucks
 EN 13000: concerning standards for mobile cranes
 Only for model TH 5,5.19 P: EN 280: concerning standards for mobile elevating work platforms
 FOPS Level 2 / ROPS
 UE 2016/1628: concerning engine emissions standards

*necessary only for models with Stage IV and Stage V

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