

**SERVING HEROES. SINCE 1864.** 



# FIRE-FIGHTERS DON'T SIMPLY DO A JOB. THEY FOLLOW A CALLING.

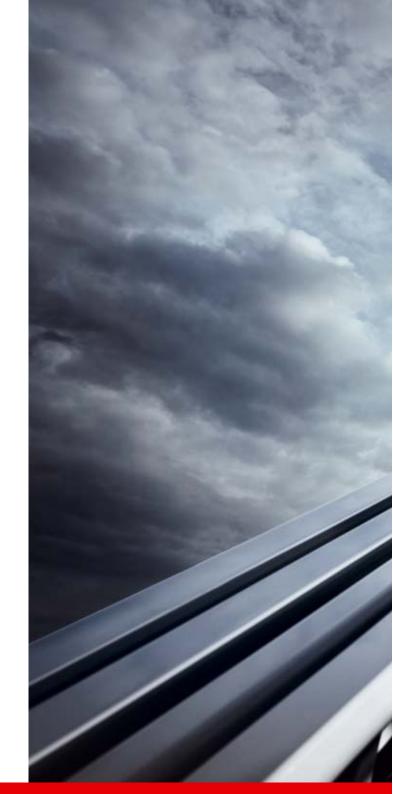
### Our job is to support them with first-class equipment.

Every day, fire-fighters and disaster relief workers around the world do their best to save lives, defy the forces of nature and rescue people from difficult situations. But again and again, they outdo themselves to become the true heroes of our day. These people don't simply do a job, but follow their calling. Just like us at Magirus.

Our passion is to build the best fire-fighting equipment in the world, the best turntable ladders, the best fire-fighting vehicles, rescue vehicles and the best logistics vehicles, special vehicles, airport fire-fighting vehicles and components. We are utterly convinced that the best fire-fighting equipment is built by fire-fighters. Only they know what their comrades need in an emergency, what makes their work easier and what gives them the greatest possible safety. Many of our employees are active in fire-fighting and disaster response themselves and work closely with their customers, who are at the same time also their colleagues.

In this manner, we have developed and manufactured innovative solutions for 150 years – from major developments down to the small improvements that continually make a difference and make life easier for everyone involved in a mission. Our motto is likewise our claim. Rooted in history, oriented towards the future.

Magirus. Serving Heroes. Since 1864.



"Because you don't get a second chance in an emergency. Everything must be right the first time."

# TO LEAVE YOUR MARK, YOU HAVE TO LEAVE THE BEATEN PATH.

Of this we are convinced. Innovation is a 150-year-old tradition at Magirus.

150 years ago, Ulm fire-fighter Conrad Dietrich Magirus had only one goal: Making life safer for himself and his fire-fighting colleagues and making it easier to respond to missions. With this motivation, he developed the revolutionary Ulm ladder, the first two-wheel extension ladder that could be climbed when free-standing and moved when extended. In 1873, it was awarded the Gold Medal at the Vienna World Exhibition. Soon, there were no longer any fire departments that didn't use this ladder. In the following decades, Magirus developed one ground-breaking innovation after another. From the elevator patent ladder, the petroleum-motor pump, the first automobile electric turntable ladder to the first light pumper and the first airport fire-fighting vehicle.

Of course, much has happened since the early days. The brand of the founder has become a global brand. A global brand, driven to this day by the joy of innovation and comradeship, these innovations time and again advance an entire industry. For example, with the highest turntable ladder in the world, the CS control (CS: Computer Stabilized), the innovative Magirus articulated arm technology, the unique VARIO jacking technology, the AluFire podium setup and much more.

It is the people at Magirus, the developers, the engineers, the technicians, welders and fitters who stand for the quality of all Magirus developments. Those who bet their life that each Magirus airport fire-fighting vehicle offers proven reliability and superior technology, even under the toughest conditions. When someone says 'turntable ladder', they mean Magirus. For 150 years.



"Only those who know fire can handle it successfully."

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# EXCEPTIONAL PERFORMANCE IN SERIES: THE PROVEN MAGIRUS STANDARD TURNTABLE LADDERS.

Standard turntable ladders with up to 42 m rescue height are the most frequently used ladder class in the world. This is why we have made ours extremely powerful.

Two series – unique quality.

- / Semi-automatic turntable ladders with sequential movements according to EN 14044. This technology enables the performance of various hydraulic movements in succession. This series is perfect for simple customer needs. Ladders with 27 m and 32 m working height are available.
- / Fully automatic turntable ladders with combined movements according to EN 14043. Thanks to modern load-sensing hydraulic systems and intelligent control and monitoring technology, this technology allows different hydraulic movements to be performed simultaneously. Magirus fully automatic turntable ladders meet the most demanding customer requirements in the world. Ladders are available with 27 m, 32 m, 39 m, 42 m, 55 m and 60 m working height as well as with articulated arm technology.

Magirus turntable ladder technology – including decisively more performance.

- / Maximum safety due to the unique Magirus CS (CS: Computer Stabilized) oscillation damping system with all fully automatic ladders.
- / Electronic monitoring system (CANbus) of the entire ladder with retrievable menu programs for special customer requirements as well as remote diagnostics and service information. GPS and SMS optional. This saves service costs.
- Magirus VARIO jacking systems for smooth and thus flexible outreach control that simultaneously allows driving over and under obstacles.
- / AluFire-panel podium set-up with integrated floodlights, safety steps in the centre and rear of the vehicle and lots of space for equipment. Torsion-resistant substructure for optimum stability.





M27L



M42L

# FOR MISSIONS IN DIZZYING HEIGHTS: THE BIG ONES FROM MAGIRUS.

With working heights of up to 60 meters, our large ladders are perfect for fire brigades in modern cities and urban centres.

Our large Magirus ladders, the M55L and M60L, offer all top features of the smaller turntable ladder classes and likewise convince with:

- / Increase of active and passive safety due to mature computer technology.
- / The sensitive levelling turntable that operates with no need for readjustment.
- / Enhanced motion comfort and shorter set-up times with the load-sensing hydraulic system.
- / Maximum reliability thanks to digital signal processing.
- / Quick, easy entrance and exit via the rescue lift with automatic delivery rails to the ground.







# THE FASTEST WAY IS NOT ALWAYS THE STRAIGHTEST: INNOVATIVE MAGIRUS ARTICULATED ARM TURNTABLE LADDERS.

Narrow, winding streets and balustrades: Fire brigades must reach any destination.

Our revolutionary technology brings them to their destination.

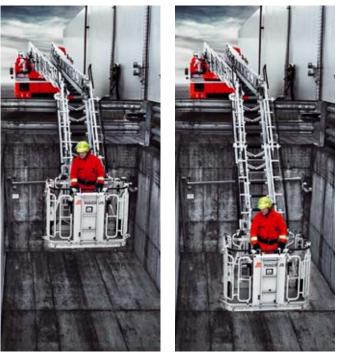
Magirus turntable ladders with articulated arms and telescopic articulated arms considerably expand the application area of each fire department. Their unique technology can provide more comprehensive, faster and safer assistance – especially under complicated conditions. They bring rescuers to places where conventional ladders reach their limits:

- / Missions in old, narrow city areas with very little distance between buildings and façades
- / Winding, contorted industrial facilities
- / Gabled windows, pitched roofs and skylights on gable rears
- / Recessed galleries and terraces
- / Underfloor areas
- / Balustrades
- / Overhead electrical lines
- / Lighting and telephone cables

Each Magirus articulated ladder of our comprehensive model range is in a class of its own.

Magirus articulated arm turntable ladders feature:

- / A significantly expanded rescue range
- / Flexible solutions depending on local needs:
- Articulated ladders
- Telescoping articulated ladders
- Articulated ladders with single-extension system
- / 3- or 4-person rescue cage, removable, with 2 multifunction columns for rotating nozzles or stretcher support, pressure fan, thereby extension of application field.
- / Instant access from the podium or direct entry into the rescue cage stored in front of the cab, which provides more comfort and saves time.
- Pre-piped water delivery in the topmost ladder section for extinguishing and monitor operation.
- / Podium with a high equipment box and large capacity; thus, more volume for additional equipment.



Penetration depth of an articulated arm turntable ladder and an articulated arm turntable ladder with telescope in comparison (left to right).

# FASTER, HIGHER, FARTHER: THE MAGIRUS SINGLE-EXTENSION SYSTEM.

There is nothing that can't be improved. For example, to attain even more outreach,

more payload, even easier operation.

Fire departments around the world are convinced of the practical benefits of articulated arm turntable ladders and no longer want to do without them. This great acceptance has further motivated us to develop our technology further. Although it has proven itself thousands of times, we have examined everything for optimisation potential. The result: The proprietary Magirus individual singleextension system, which was first shown at the INTERSCHUTZ 2010. Another revolution!

Among many other advantages, the new Magirus technology also offers a decisive plus: It allows significantly greater rescue heights than were ever achieved before with an articulated arm turntable ladder.

The M42L-AS (AS stands for Articulated Single Extension) with 5-piece ladder set is the highest articulated arm turntable ladder in the world. With it, fire departments can reach areas that were previously inaccessible.

#### Features

- / Not all ladder sections of the four- or five-piece ladder set are extended simultaneously; first, the uppermost section is extended on its own, followed by the other ladder sections.
- / The articulated arm is integrated in the first ladder section and the 4.70 m-long articulated arm can be reached without any additional telescoping sections.
- / The improved water piping brings a higher capacity of max. 2500 l/min.
- / Two versions are available: the M32L-AS with 32 m working height and the M42L-AS with 42 m working height.

#### Your advantages

/ Increased reliability through the integrated articulated arm and reduced number of moving parts

/ Shorter set-up times

- / Improved weight distribution between front and rear axle, more payload on the rear axle
- / Larger outreach due to reduced weight on the cage top
- 32 m (M32L-AS) or 42 m (M42L-AS) working height with four- or five-piece ladder sets
- / Reduced overall weight and more capacity for additional loads
- / Stronger extinguishing power



M32L-AS





M42L-AS

# POWERFUL YET COOL: THE MAGIRUS CS-CONTROL.

Intelligent control systems ensure that Magirus turntable ladders are stable and virtually oscillation-free -

even in strong winds and fast approaches to the rescue position.

### Magirus CS control

#### Features

In order for a turntable ladder to impress with its stability, Magirus turntable ladders have active oscillation damping CS (CS: Computer Stabilized), which makes them unique in the world.

Since its introduction in 2000, it has been further perfected and is now a standard feature of all Magirus turntable ladders.

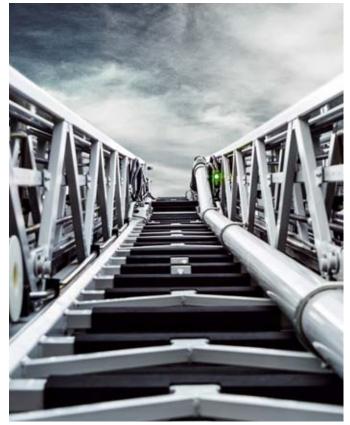
/ All dynamic movements of the ladder set in the horizontal and vertical directions are immediately detected by the computer via a sensor and actively damped in a split second by hydraulic countermeasures. This applies to wind gusts as well as missionrelated oscillation – such as when a person jumps into the cage. In addition, any oscillations in the joint are prevented from the outset.

#### Your advantages

- / More accurate and focused driving and control, even with large ladder lengths
- / Faster and safer rescue of persons due to faster working speeds
- / More comfort due to a "smoother" ride
- / Improved feeling of safety in the cage
- / Active protection of the material and low wear of the ladder set
- / Greater durability and substantial cost savings



/ The shaft rescue function allows absolutely perpendicular lifting – e.g. to safely rescue people from pits or shafts. The ladder control maintains the vertical position automatically and highly precisely; manual adjustment is unnecessary.



/ There are no tripping hazards in the climbing area of the ladder; no components or hydraulic cylinders that can restrict the range of motion. High handrails additionally increase safety. A safety circuit with traffic light function (optional) ensures risk-free climbing of the ladder set.



/ More know-how rather than more steel: the Magirus oscillation damping system.

# WHEN SECONDS MATTER, EVERY CENTIMETRE COUNTS: MAGIRUS VARIO TECHNOLOGY:

Maximum reliability, simple operation, increased jacking width and extremely fast set-up -

our VARIO technology provides unique advantages in series!

### Features

- / The VARIO system was developed exclusively for fire brigade turntable ladders.
- / Jacking widths from 2.40 m to 5.20 m.
- / Flexible adaptation of outreach through smooth outreach control.
- / Optimum adaptation to the space through variable support ensures secure positioning at all times. Level differences of up to 700 mm can be compensated. Even with asymmetric support, maximum outreach is guaranteed.
- / Consistent, comfortable unloading height because the chassis has permanent contact with the ground.
- Maximum safety through ground pressure monitoring in all jacking situations.
- / Via a cable as well as hydraulic cylinders, the rear axle can be securely locked even in the case of a tilted or twisted vehicle.
- / In principle, the wheels remain on the ground in each jacking situation.

### Your advantages

/ Fast, easy operation.

- / Optimal accessibility to equipment spaces due to jacking supports that can be climbed over and unchanged removal heights.
- Maximum stability even on inclined or slippery surfaces because the chassis remains on the ground.
- / Highly stable construction, since the load bearing is done by square profiles instead of free-standing hydraulic cylinders, for example.
- / Enlarged possible outreach and extended recovery area through max. jacking width of 5.20 m.
- / Optimal outreach.
- / No aids (e.g. ice claws or wedges) are necessary.
- / Shorter set-up times.
- / Wider jacking widths and thus greater outreach due to undercutting of obstacles (e.g. vehicles).
- / Absolutely safe position, no slippage on slopes, safe downhill descent on ladder.

/ Relief of operating personnel.



/ Driving under obstacles still remains possible only with Magirus VARIO technology.



/ When the going gets difficult, it is easy to climb over the jacking supports.



/ Every centimetre of additional support width increases the potential outreach and thus the work and usage area of the turntable ladder. The automatic level control to 10° and the underfloor work area of -17° allow full outreach – without lifting the axles or other emergency solutions.



/ The clearly arranged control panel is integrated in the rear of the vehicle and appropriately protected against the weather. The ergonomically-optimised joystick can be easily operated with gloves.



/ Every centimetre of additional support width increases the potential outreach and thus the work and usage area of the turntable ladder. The automatic level control to 10° and the underfloor work area of -17° allow full outreach – without lifting the axles or other emergency solutions.

# INTELLIGENT TECHNOLOGY MAKES COMPLEX THINGS EASY: THE MAGIRUS CONTROL AND MONITORING SYSTEM.

So that every crew member can focus on his task, we have developed a system that

guarantees maximal safety and simple operation.

The Magirus control and monitoring system: It virtually thinks for itself.	The Magirus displays: Optimal overview for more security.	
<ul> <li><u>FEATURES</u></li> <li>/ The actual load torque in the upper and lower flanges is monitored by strain gauges.</li> </ul>	FEATURES / Optimally readable colour displays as standard equipment.	YOUR ADVANTAGES  / Sophisticated, reliable, practical and well-proven display and monitoring system for turntable ladders
/ The actual load and maximum possible performance are permanently synchronized.	<ul><li>/ Simple, convenient menu structure.</li><li>/ All functions can be activated and all possible user errors are</li></ul>	/ Optimal design and preparation of all information
<ul> <li>When defined limits are achieved, any movements that increase the load torque are slowed down and turned off.</li> </ul>	displayed as plain text. No "interpretation" of symbols is necessary!	<ul><li>/ Best clarity</li><li>/ Reliable user interface</li></ul>
/ All electronics components used are trouble-free, vibra- tion-proof and protected against electromagnetic interference	<ul> <li>The display shows the optimal load, e.g.:</li> <li>The load with which the operator can still drive, and how far</li> <li>Resulting remainder load <m-specification> with the current load</m-specification></li> </ul>	<ul> <li>Secure extension of the ladder without worrying about data/ numbers etc.</li> </ul>
frequencies. YOUR ADVANTAGES / Dual protection via range control and load torque monitoring	<ul> <li>How many people can still get on</li> <li>/ The outreach is optically shown by an optical (!) security indicator (traffic light with the colours red / yellow / green).</li> </ul>	
<ul> <li>Maximal safety, even during hectic missions or with inexperi- enced operators</li> </ul>	/ The display of the outreach is done with current and maximal specification.	
/ Highest operational safety	<ul> <li>Outreach, range and payload are displayed in the control stand as standard.</li> </ul>	



/ Display main control stand/Menu view



/ Ladder in EMC test

# BECAUSE NOTHING IS MORE IMPORTANT THAN ON-THE-JOB SAFETY: MAGIRUS TURNTABLE LADDER CAGES.

Here, practical experience and innovative technology combine to make turntable ladder cages the perfect refuge, rescue and attack equipment and workplace in one.

#### Features

- / Closed side walls and a closed safety bar around the cage prevent objects from falling out.
- / Two separate lateral cage entries with lateral fold-away doors and protection bars offer the greatest possible variability and are tactically ideal for use, e.g. when ascending with the ladder on building facades with cage corners. More comfortable access to the cage is important to personell wearing BAs.
- / The control stand is located in the middle of the cage, allowing a clear view in all directions and to the ladder unit. In particular, the left adn right edges fo the ladder unit always remain in view.
- / Optimal weight distribution and balance is also ensured when only one person is in the cage.
- / The left or right function column can be used for the stretcher support (KTL), enabling great flexibility.
- / The two multi-function columns can be used to mount the KTL or the monitor and a positive pressure ventilator simultaneously, which saves substantial time.
- / Various stretcher supports are available for payloads of up to 270 kg.

- / The floor of the cage is illuminated by LED lights, resulting in maximal working safety.
- / Three LED strobes integrated in the cage improve warning effects (standard wtih RC400, optional for RC300).
- / The cage features attachment points for personal protective aquipment against falls.
- / New to the cage floor is an integrated electric continuously extendable cage platform with a maximum payload of 150 kg (optional). It can be used as a work platform or to assist stepover into or out of the cage.
- / Sensitive mechanical collision-prevention in all directions. In the event of two impulses (e.g. in the front and bottom), the blocked movements can be released via an override function, so that it can move itself free.
- / The hydraulic cage-levelling system is completely installed in the cage. Between the ladder set and cage, no hydraulic lines must be coupled to or from the cage during its assembly or disassembly.

### Your Advantages

- / Maximum safety for cage occupants and emergency personnel, regardless of number of occupants or their body size and weight
   / Highly practical, tactically flexible
- / Maximal radius of action, especically when working with stretchers
- / Multifunctional
- ${\sc \prime}$  Highly variable due to rapid installatoin/removal of hte cage
- / High operator safety
- / Highest possible reliability



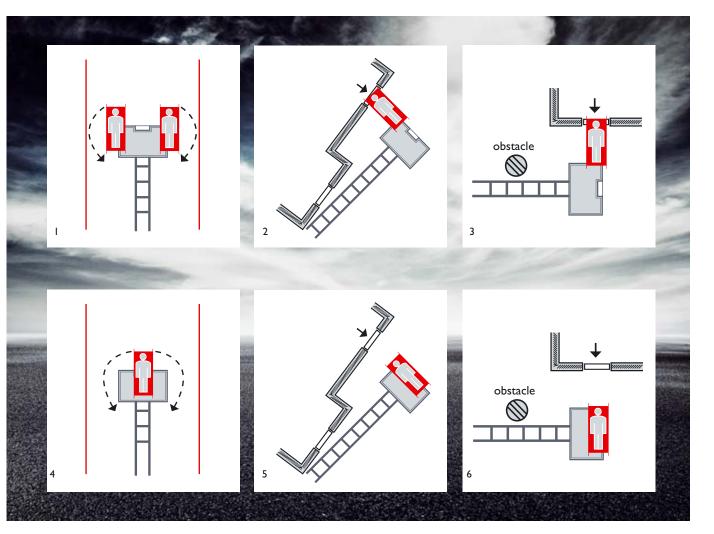
A safety bar prevents objects from falling out of the cage. This increases safety and practicality.

### Magirus technology with two-sided stretcher support

- / I. Depending on the situation, the stretcher can be attached on the left or the right side of the cage. This enables a significantly wider radius of action in all directions.
- / 2. The lateral multifunction support makes it possible to attache the stretcher in the secure area for the stretcher support. This increases rescue possibilities and provides greater safety.
- / 3. Even in case of obstable, the lateral support further bridges the gap between the stretcher and the edge of the building.

Conventional technology with a central stretcher accommodation

- / 4. In conventional solutions with just one pickup option, the range of action is smaller.
- / 5. In conventional solutions, recovery options are limited. Placement of the stretcher on the support is not optimally secured.
- / 6. In conventional solutions, barriers significantly restrict rescue opportunities and safety.



# ONE TECHNOLOGY. TWO OPTIONS. ALL ADVANTAGES: MAGIRUS RC300 AND RC400.

As versatile as the extreme demands that they must fulfil: our rescue cage series with

proven technology and many customisation options.

All Magirus turntable ladders are equipped with the RC300 three-person rescue cage.	The RC400 four-person rescue cage is optionally available.
Features: RC300 three-person rescue cage	Additional Features: RC400 four-person rescue cage
/ Payload 300 kg / floorspace for three persons	/ Payload 400 kg / enlarged floor space for four persons
/ Two multifunctional columns positioned at the sides	/ Two LED floodlights integrated into the front of the cage
/ Control stand in the cage centre	/ Stationary water piping in the ladder set from cage floor to cage front
/ Four sockets (1 x 400 V, 3 x 230 V)	
/ LED floodlights integrated in the cage front	/ Attachable or permanently installed water monitors in the cage front; each up to max. 2,500 l / min.
/ Attachable water monitor, to max. 2,500 l / min.	/ 2 self-protection nozzles
/ Lateral water piping outside of the cage	/ I B- and C-pressure outlet in cage
/ 300-kg load eye integrated in the cage floor	/ 400-kg load eye integrated in the cage floor
/ Practical corner entrances	
/ Increased safety margin around the cage floor	
/ Hydraulic system installed in cage for cage levelling	

/ Quick and easy to separate from the ladder set



/ RC300









### Cage accessories

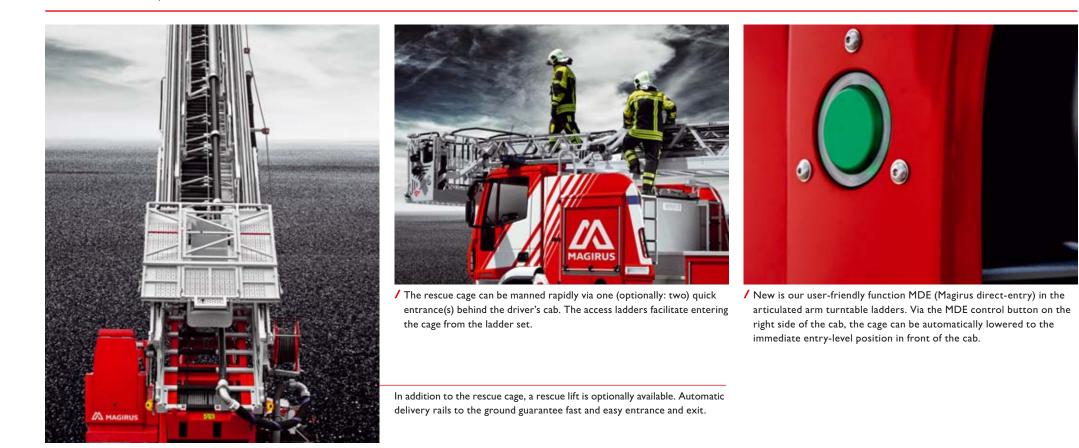
/ For stretcher support, the left or right function column can be used flexibly. The operator control booth in the middle of the cage enables an optimal overview in all directions and situations.

/ Two separate cage entrances with fold-away doors on the sides and protection bars ensure free access – important for those wearing breathing masks.

/ The two multi-function columns can be used to mount either the stretcher support or the monitor and a positive pressure ventilator simultaneously.

# FROM THE TURNTABLE LADDER TO MULTIFUNCTIONAL EQUIP-MENT: MAGIRUS'S COMPREHENSIVE RANGE OF ACCESSORIES.

With diverse, customised accessories, each Magirus turntable ladder becomes the perfect tool for the most diverse missions.





/ A standard feature of this four-person rescue cage is the water-monitor piping integrated into the cage floor. The water monitor can either be attached to one of the two multifunctional columns in the classical manner or – optionally – be permanently installed in the front of the cage. This integration considerably optimises set-up times. Special emphasis has been placed on extremely space-saving installation, which leads to optimal use of the cage space. The maximum output power of the monitor is 2,500 litres. Water outlets and shut-off valves are conveniently located in the front area.



/ When extinguishing a large fire, the cage can be removed and replaced with the high-performance Magirus ViaGara® water monitor. Its performance is max. 4,000 l/at 8 bar; its water supply is the result of two B75 hoses with a dual connector. The MZV 4000 hollow jet and spray jet nozzle is mounted; other nozzles and foam nozzles are available. The ViaGara® monitor can be vertically rotated by 130°; horizontally by a maximum of 30° each. It is controlled electrically from the main control stand.



/ The hose can easily be coupled from the ground to the permanently installed riser. When the ladder is extended, the hose is pulled upwards as well. A hose guide is optionally available.



 Built-in fire pumps and foam proportioning systems transform the turntable ladders into high-performance devices during fire-fighting missions (optional).

# WELL EQUIPPED FOR ANY JOB: MAGIRUS'S INNOVATIVE RANGE OF ACCESSORIES.

Special equipment and functional accessories make Magirus turntable ladders

efficient and multifunctional rescue devices.



/ The new Ambulance Heavy Loader with a payload of up to 500 kg meets all practical requirements. The system was developed for the quick and safe rescue of obese, adipose patients. Assembly at the ladder top is simple and can be done with no loss of time. The basket stretcher is attached to the Safety Peak via the optional connector, which is useful, for example, during rescues from deep construction sites. The connector enables the required double securing of the patient and is certified according to EN 795. The maximum payload is 500 kg; the length can be variably adjusted from 3 to 15 m. Rescue accompanied by a crew member beside the stretcher is possible.



/ The top ladder section (1) and turning drive (2) of all Magirus turntable ladders are series equipped with anchor points for rope rescue and fall protection. (Certified anchor points for personal safety based on EN 795; protection for up to 500 kg / 2 people)







The Magirus Safety Peak, an optional cage-mounted protection bar, allows convenient and even safer work in the cage during rescue work and fall protection. A basket stretcher, for example, can be mounted on the Safety Peak.

Standard features include Magirus anchor points on the top of the turntable ladder / on the top ladder section.

/ With the standard load eye at the lower ladder section, loads of up to 4000 kg can be moved (up/down/ turned).

# A TURNTABLE LADDER DOES NOT BELONG IN THE WORKSHOP, BUT AT ITS PLACE OF OPERATION.

The major effort we make to ensure that our turntable ladders are extremely reliable is worth every cent.

That's why they're the most popular in the world.

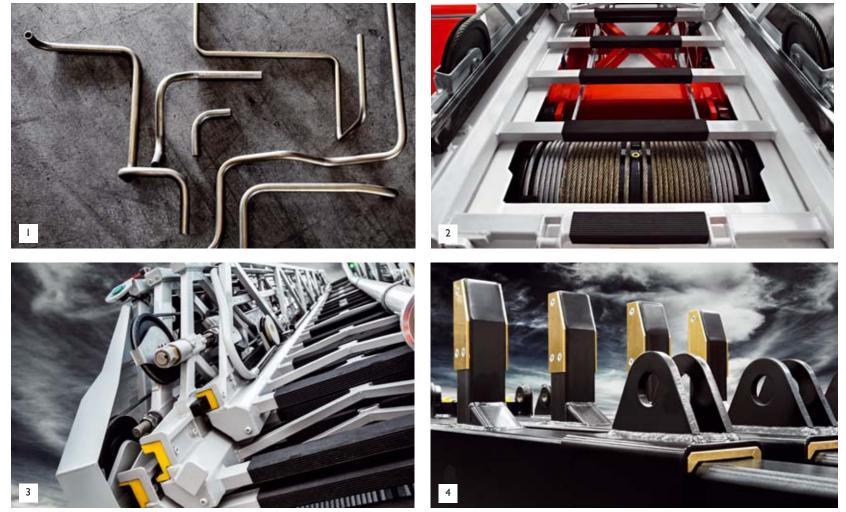
The greatest performance, easy operation, maximal reliability and the greatest safety in use – for rescuers and those who need help: This is what Magirus turntable ladders stand for. And even though they are highly complex rescue tools, they are extremely durable, less prone to interference and extremely long-lasting.

This high level of operational safety is no accident, but already an important specification during design, so that fire brigades save time later in the maintenance, calibration and repair of their Magirus turntable ladders.

- / For the ladder sets, we use high-strength, elastic fine-grain steels with specially rolled, laser-welded profiles.
- / Sustainable protection of surfaces is obtained by sandblasting, cathodic dip coating and electrostatic powder coating. All of this is costly, but there is nothing better.
- / We weld all ladder sets in-house by hand with professional welding equipment. From the very beginning, Magirus ladder sets are pre-loaded and designed for utmost durability.

- / All strain that comes from the ladder set is captured via a module frame. The jacking system is connected to the module frame as well. This ensures that the chassis is not subject to static load.
- / Strong forces such as those that occur during jacking are consciously guided to mechanical wearing parts, not the hydraulics system, for example. Logical: Mechanical parts subject to wear are much easier and cheaper to replace.
- / In addition, the extension and retraction of the ladder set is done mechanically by a single drum winch instead of via a long extension cylinder. This ensures that no oil loss occurs in leaky cylinders – maintenance and follow-up costs remain low.
- / Whenever hydraulic systems are used, they are set up so that only very low maintenance costs ensue. One example is the load-sensing system. We replace hydraulic hoses whenever possible with fixed hydraulic lines that do not have to be changed.

- / Parts subject to wear, such as special sliding blocks in the guides of the ladder set, prevent expensive parts from wear and can themselves be replaced cost-effectively. In addition, they effectuate self-cleaning of the ladder set.
- / The hydraulics for the cage-levelling are completely installed in the cage. This means that between the ladder set and cage, no oil lines must be coupled to or from the cage during its assembly or disassembly. And if no coupling is needed, no air bubbles can get into the hydraulic system. Magirus ladders thus have no problems with cage levelling.
- / Redundant control of the turntable ladder, for example, the mechanical-hydraulic backup controller, are designed for the easiest possible operation. The reason is simple: Magirus turntable ladders almost never require reserve controls.



 I. In many countries, hydraulic hoses must be replaced every 10 years. This is why Magirus turntable ladders have many pipes instead of hoses. We cut, burr, bend and crimp this piping ourselves in our factories.

/ 2. Extension and retraction of the ladder sets is done mechanically via a single-layer winch, not using high-maintenance hydraulic cylinders that are prone to malfunctions.

/ 3. The special yellow sliding blocks in the guides of the ladder sets are made to wear. They prevent expensive parts from wearing, can be economically replaced and effectuate the ladder set to self-clean.

4. The brass guide plates on the jacking supports are also designed to wear out and can be easily and economically exchanged. Strong forces are deliberately passed on to protect and spare the hydraulics.

### MAGIRUS MAKES THE PERFECT TURNTABLE LADDER FROM ANY CHASSIS.

Only the perfect combination of chassis and superstructure makes a fire engine usable in practice.

We ensure this. On chassis from well-known or exotic manufacturers.

We build our turntable ladders on any suitable chassis and ensure that it is optimally suited to the entire vehicle. No matter whether it is a two- or three-axle vehicle, whether it is constructed according to international standards, DIN or country-specific requirements.

And for special requirements, we develop the appropriate special concepts.

#### Low-level construction

Low-level Magirus turntable ladders have been around since 1980. Their development was a typical Magirus innovation – with great benefit for the practice.

#### FEATURES

- Available for standard and articulated arm turntable ladders up to the 32-m class
- / Flat module frame as base
- / Short wheelbase
- / Lower vehicle height and width (dimensions vary depending on chassis / superstructure combination)
- / Greater manoeuvrability
- / Low entry and exit height
- / Lower centre of gravity

#### YOUR ADVANTAGES

- / The most experience and system security worldwide
- / Ideal for old town areas, narrow and low historical passages, low tool sheds etc.
- / Very good manoeuvrability even on narrow roads
- / Safe cornering performance
- / Greater flexibility when driving and at the point of use
- / Great comfort
- / Complete scope of the turntable ladder functionality

### Rear auxiliary steering

It doesn't get any more practical: The rear auxiliary steering system was developed in collaboration with the Stuttgart Fire Department.

#### FEATURES

- / Self-steering rear axle for unprecedented vehicle manoeuvrability
   / Significant reduction of the turning radius of the turntable ladder up to 4 m depending on chassis
- / Lateral traversal of the turntable ladder ("crab")

#### YOUR ADVANTAGES

/ Excellent manoeuvrability in tight traffic areas

- / No tedious, long manoeuvring at point of use, fast, efficient response
- / Increased flexibility during the ride to and at the point of use



/ Low-level Magirus turntable ladders are available on various chassis.



/ Magirus turntable ladder on Hino chassis with 3 axles, / Magirus turntable ladders on MAN chassis three axles steering





/ Magirus turntable ladders on Scania chassis



/ Magirus turntable ladders on Volvo chassis

# BECAUSE RESPONSIBILITY DOESN'T END WITH PURCHASE: OUR CUSTOMER SERVICE.

With a variety of services, we ensure that fire brigades

get perfect service around the clock.

Permanent readiness is a fire brigade's most important task. Magirus customer service thus offers far more than just maintenance and spare parts.



### Maintenance contracts

From the annual inspection to a combined inspection and maintenance contract over a ten-year period, MAGIRUS offers products tailored to the individual requirements of specific fire brigades.



### 12-year warranty against rust through

In conjunction with a maintenance contract and yearly checks, we provide a 12-year warranty against rust through that minimises follow-up costs and provides a reliable basis for calculation.

### Remote diagnostics

The possibility of remote diagnostics to check the condition of vehicles and diagnose sources of malfunction, carry out inspections and correct faults increases availability and helps cut costs.

### Field service

More than 100 Magirus technicians provide on-site customer service. Four central workshops and more than 60 qualified service partners worldwide ensure that you feel looked after.

#### Service-Hotline

Under the hotline number **+49 (0) 731 408 4080**, we are available 24 hours a day, 7 days a week, 365 days a year.

#### Spare parts

More than 13,000 different original spare parts are available around the clock. Spare-part documentation ensures fast and secure longterm availability.

### Repairs/General overhauls

We assume comprehensive repairs to your vehicle, e.g. following an accident. And we always bring old vehicles up to the highest standards of today's technology.

### Used vehicles

We offer first-class reconditioned and renovated used vehicles that guarantee uncompromising quality, reliability and technology.



"In an emergency, we always have to be ready. Our service partners as well."

# PARTNERS SHARE EVERYTHING: INCLUDING KNOWLEDGE AND EXPERIENCE

The purpose of the Fire Fighter Academy is to ensure that fire-fighters get the most out of our vehicles and equipment.

It's one thing to own the latest equipment. Using it to the fullest extent as well as operating it reliably and safely is another. This is what the Fire Fighter Academy is there for. It is the meeting place for everyone who wants the maximum from their Magirus equipment and readiness for new technologies. In addition, the Magirus Fire Fighter Academy is the optimal platform for everyone who wants to expand their know-how and share with colleagues.

As the partners of our customers, we provide our extensive technical and tactical expertise in the Magirus Fire Fighter Academy. It covers operator and driving safety training all the way to courses on tactics and practice missions under real-life conditions. This also means that fire-fighters are trained on their own equipment, get to know it down to the smallest detail as well as master it perfectly. This is not only a valuable contribution to the preservation of value of vehicles and equipment, but also for the safety of each individual in an emergency. Our entire range of courses is structured to capture the enthusiasm of both fire brigade leadership and rank-and-file fire-fighters.







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### SERVING HEROES. SINCE 1864.

