



**MAGIRUS-DEUTZ  
BRANDSCHUTZTECHNIK**

## **Turntable Ladder DL 30**

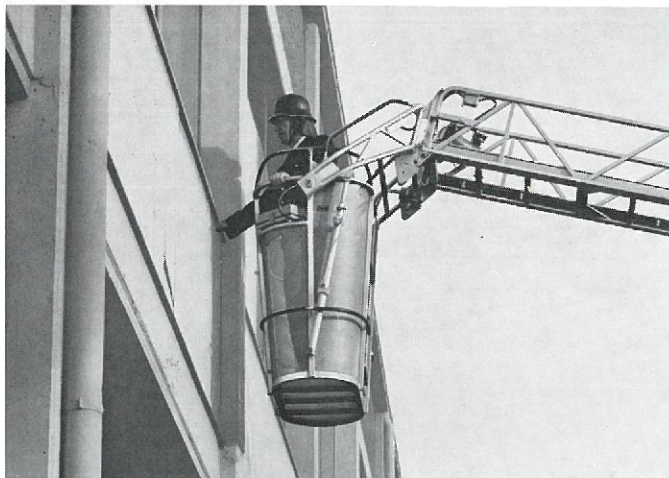


Magirus has always played a leading role in turntable ladder construction.

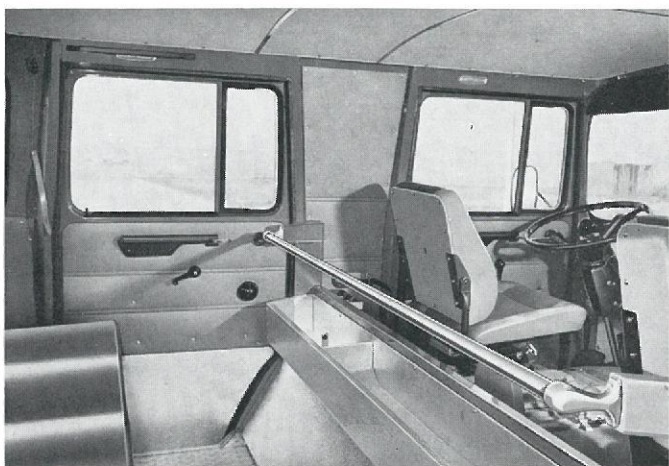
The new DL 30 Turntable Ladder is renewed proof of this. We used our previous turntable ladder, which had found universal acceptance, as the basis for further development.

The new turntable ladder is even better, more perfect, safer and more versatile.

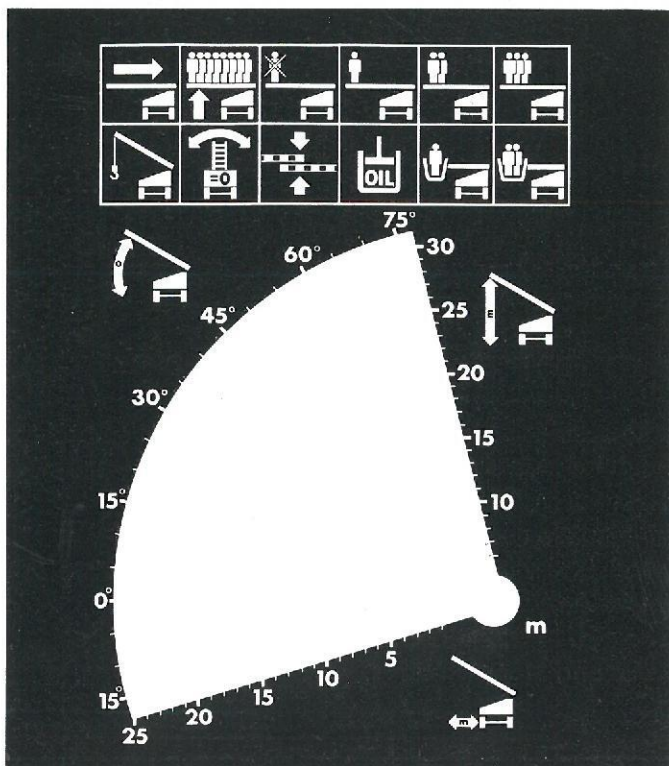




A safe, valuable aid on many occasions: The Magirus rescue cage. Holds two men. When attached to the top of the ladder, its low centre of gravity automatically maintains its vertical position, regardless of the ladder's angle of elevation. A dual-line damping cylinder provides controlled oscillation of the cage when the ladder is being operated.



Excellent vision to all sides. Ample space for driver and crew. Plenty of room for equipment and personal items.



All controls are marked with symbols. Easy recognition, fast orientation.

**We build fire engines of every type as perfect, complete units. All made under one roof.**

The new generation of Magirus fire engines is mainly built on **forward control chassis**. Including the newly developed

**Magirus DL 30 Turntable Ladder—according to DIN 14502 and 14701**

Magirus knows the problems you have to face. And developed this new forward-control fire engine to meet them—in City design. Its short wheelbase and wide angle of lock make it especially manoeuvrable. With a frame that's rugged, yet extremely elastic to torsion.

A reliable cold starter, thanks to our Super-B direct fuel injection system and our troublefree air cooling that functions reliably in any climate. The six-cylinder Deutz Longtime engine is ready to perform immediately.

With untiring continuous power, high speed reserves and hefty tractive power—peppy **and** long-winded. That means:

Easy passing, less shifting.

Excellent vision to all sides, accurate steering, smooth shifting, neatly grouped instruments and controls, located just where they should be, ensure a high degree of driving safety and maximum manoeuvrability.

**Safety, reliability and highest quality** for both vehicle and ladder body are what you need when seconds count.

Many improved details and new auxiliary equipment increase the operational value of this turntable ladder. With this perfect, world-famous ladder, Magirus offers fire brigades a modern, efficient, advanced vehicle to perform their mission with.

**The four-section ladder set:** Outstanding in its design. Of ample width without any obstructions, not limited by any drive elements. Fitted with a high railing. Protective covering on all rungs. Made of special rolled sections in lightweight steel construction with only a small surface exposed to the wind. Return cables permit the ladder to be retracted in any angle of elevation. Rollers ensure smooth travel. The ladder may be stopped at any position of extension or retraction. An automatic control system ensures uniform rung spacing.

**The rescue cage** is a self-controlled unit. Its design and construction are as perfect as they are simple. Attached to the top of the ladder, its low centre of gravity automatically maintains its vertical position. It is always able to function, even if the damping piston, which serves as an oscillation compensator, should fail. Independent of outside control: This means more safety when it counts. Its simple mechanical attachment is less subject to break-downs than a complicated control system.

**The Magirus hydraulic system** and the hydraulic ladder drive provide sensitivity, accuracy and smooth functioning of all ladder movements—even if performed simultaneously. Separate oil pumps for every ladder movement eliminate mutual interference during operation and avoid unnecessary oil heat-up, even if the supply is low. Automatic throttle control.

The hydraulic jacks provide a secure stance.

The central operating lever is sequenced to first lock the vehicle's springs (spring deactivation) and lower the jacks. The ladder cannot be moved until the jacks have been lowered, and the jacks cannot be retracted while the ladder is in operation.

**The central operating station.** Clearly arranged instruments and operating levers permit accurate, effortless control of all ladder movements. The horizontal projection, angle of elevation and working height of the ladder can be read quickly and simply from the operating range indicator at any time. The safe operation limits are clearly marked. The operator sees exactly which ladder manoeuvres are still possible or necessary.

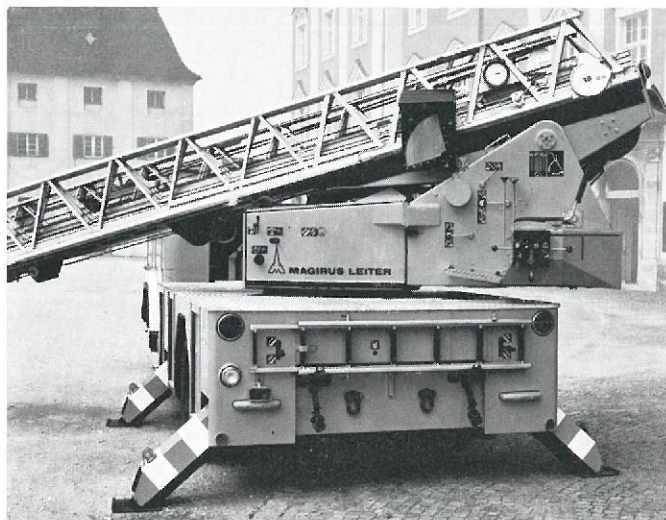


A control panel with seat for the operator is provided as standard equipment. A remote control system for operating the ladder from either the ground, the cage or in combination is available as an optional extra.

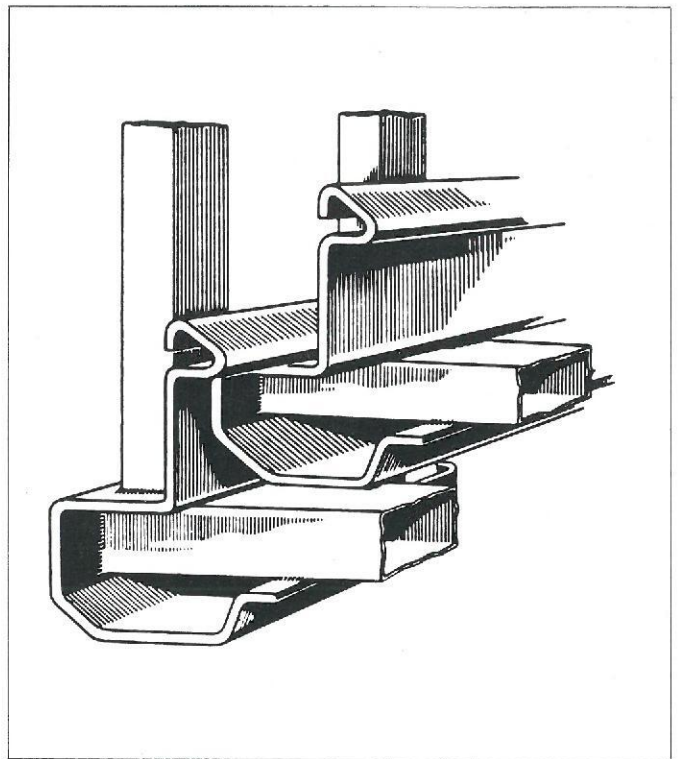
This remote control system also operates with a high degree of accuracy. All ladder movements, from lowest to maximum speed, can be performed steplessly.

**Safety first** during rescue operations. Not only for those in danger, but also for the rescue crew and operating personnel. This is guaranteed by the dependable Magirus safety system with electrical and mechanical hydraulic cut-outs.

- Incorrect ladder movements which would cause overloading and damage to the ladder are automatically interrupted.
- Multiple safety locks at the safe-operation limits.
- Safety features if the ladder strikes an obstacle while turning, elevating, depressing or extending.
- Load indicator with audible warning signal.
- Visual indication of the possible ladder load.
- Automatic levelling for working on uneven roads through a new bearing system inside the turntable.
- Self-locking gearing and hydraulic safety blocks.
- Automatic slow-down and final cut-out at the ladder movement limits.
- Oil pressure button for immediate interruption of all simultaneous ladder movements.
- Hydraulic return of control levers to neutral positions when oil pressure is cut off.
- Full manoeuvrability under emergency conditions.
- A manual hydraulic pump permits emergency operation of all ladder movements by only one operator in the event of engine failure.
- All drive elements, such as elevating rams, extension motors and cables, are duplicated, with each individual element capable of handling the operation individually.



Troublefree control of all ladder movements from a central operating station. Clearly arranged instruments and control levers. Secure stance thanks to the hydraulic inclined stabilizing jacks. The turntable allows the ladder set to be depressed to  $-15^{\circ}$ ,



Maximum safety. The Magirus ladder set of high-quality special steel sections. Extremely resistant to bending and twisting, with wide rungs and only a small surface exposed to the wind.



permitting the ladder to also be employed at lower points. The **new levelling feature**. Gimbal-mounted gearing provides perfect ladder set levelling at any elevation between  $-15^{\circ}$  and  $+75^{\circ}$ .



## Specifications:

**Chassis:** F Magirus 170 D 12 F, wheelbase 4,400 mm. Parallel frame with cross members. Semi-elliptic leaf springs. Shock absorbers on the front axle. Stabilizers on the front and rear axles. ZF Gemmer steering.

**Engine:** Air-cooled Deutz Longtime engine with Super-B direct fuel injection, Model F6L 413 V, V 6 engine, 176 DIN-HP at 2,650 rpm. Max. torque  $52 \pm 1$  m kgf at 1,300–1,600 rpm.

**Power train:** Single-plate, hydraulically actuated dry clutch. ZF synchronized five-speed gearbox. Power take-off for oil pump with locking device. Floor-mounted shift lever.

**Brakes:** Dual-circuit, four-wheel air-assisted hydraulic brakes. Hand brake acts mechanically on the rear wheels. Third brake: Compressed-air engine exhaust brake.

**Cab and crew compartment:** Steel construction, fully sound-proofed. Interior lining can be unscrewed. Heating and wind-screen defrosting by means of engine-heated fresh air and a separate heater unit, independent of the engine. Crew cab: Driver's seat / five additional men, four doors. Small cab: Driver's seat / two additional men.

**Speed:** 81 kmh standard.

**Climbing ability:** Up to 36.6 % in 1st gear.

**Tyres:** 9.00–20, 14 ply, front and rear.

**Turning circle diameter:** 17,700 mm.

**Permissible gross vehicle weight:** 13,000 kg.

**Electrical system:** 28 V, 27 A alternator. 24 V, 6 HP starter. Two 12 V, 110 Ah batteries.

### Additional details:

Fuel tank for an operating range of approx. 500 km in accordance with DIN 70020.

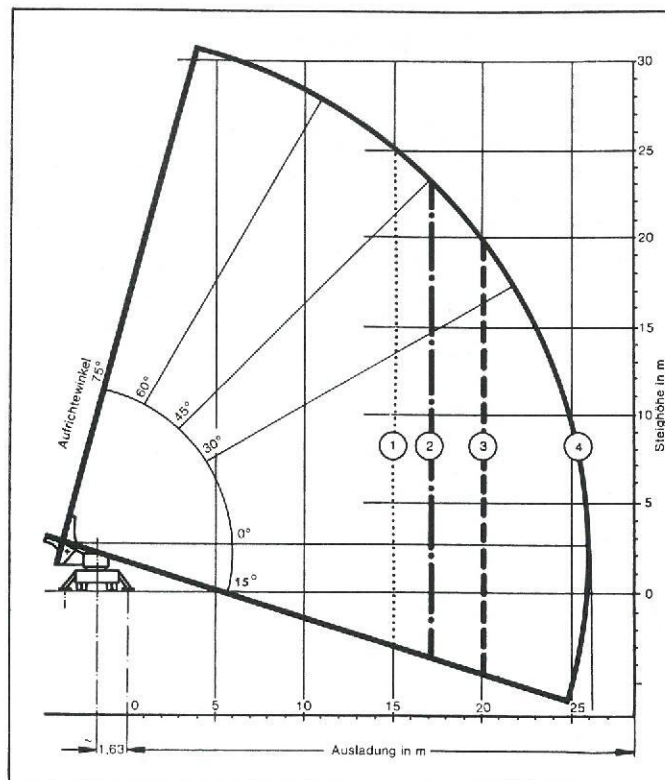
Floodlight. 2 revolving priority vehicle lights. Acoustical traffic warning unit. Flashing lights and 2 additional lights at the rear as warning blinkers. Reversing lamp. Equipment lockers inside the platform on both sides of the vehicle, with lighting and control lamp in the cab. Warning blinkers on the stabilizing jacks.

**You can rely on the safe system. Because who has more experience than Magirus' more than 100 years of fire protection experience.**

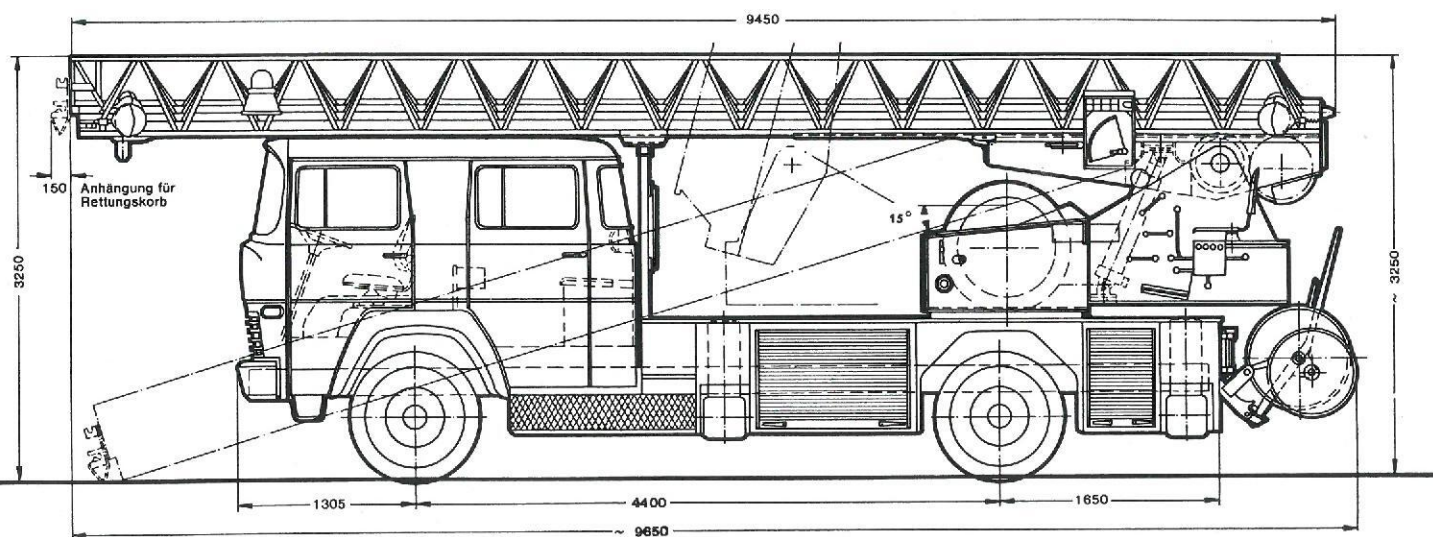
## Optional equipment at extra charge:

Tachograph.  
VHF radio-telephone system.  
Intercom system between the operator and the top of the ladder.  
Remote control of ladder movements from the ground, the rescue cage or combined, infinitely variable.  
Lifting device on the lower ladder section, maximum capacity 3,000 kg.  
Rescue cage for two men, to be attached to the top of the ladder.  
Two 24 V searchlights at the top of the bottom ladder section.  
Two 220 V, 1,000 W floodlights on the rescue cage.  
Monitor at the top of the ladder, ground controlled.

## Operating range:



①	Top of ladder	3 men (255 kg)
	Rescue cage	2 men (170 kg)
②	Top of ladder	2 men (170 kg)
	Rescue cage	1 man (100 kg)
③	Top of ladder	1 man (100 kg)
④	Top of ladder supported	8 men (bridge load)



Subject to change without notice in the interest of further improvement.

**Magirus-Deutz Brandschutz-Technik**  
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