

## MAGIRUS AIRPORT FIRE-FIGHTING VEHICLES



SERVING HEROES. SINCE 1864.

 **MAGIRUS**



## 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 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 simultaneously also their comrades.

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 BLAZE A NEW TRAIL, 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 comrades 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 the following decades, Magirus developed one ground-breaking innovation after another. From the elevator patent ladder, the petroleum-motorised sprayer, the first automotive electric turntable ladder, the first light pumper with a 1.5 ton chassis, the first forerunner of the tank pumper, the so-called water truck, to the first car tank sprayer with large water and foam capacities, a Magirus pump built into the front and two fast attack installations that Magirus supplied to an airfield in southern Germany in 1930. With this, a new vehicle category was born: the airport fire-fighting vehicle.

Of course, much has happened since the early days. The brand of the founder became a global brand. A global brand that is still driven by the joy of innovation and comradeship.

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.



/ The first Magirus airport fire-fighting vehicle from 1930.

Over 40 years of experience with the big four-axle trucks: In 1972, Magirus delivered airport fire-fighting vehicles on 8x8 chassis with 2-motor technology to the Munich airport, which hosted the Summer Olympics that year.

*“Only he who knows fire  
can deal with it successfully.”*





## EXTREME PERFORMANCE AND RELIABILITY FOR EMERGENCIES.

Because a split second can decide between life and death on the runway.

Ensuring airport security is a task that is constantly growing – at almost the same rate as the number of take-offs and landings, aircraft size and thus, the increasing number of passengers. Airport fire brigades face more challenges than ever and require an equally innovative as reliable equipment. The Magirus DRAGON, IMPACT and IMPACT SUPER series represent a complete range of highly specialized vehicles that have proven themselves well at airports of different sizes and categories around the globe.

The DRAGON series is the safe choice for large airports. Its performance is absolutely impressive. DRAGON is an integrated overall concept with all components coming from a single source: the special chassis, the drive system, the extinguishing technology and control to the design – which ensures that everything is completely coordinated.

A modular system allows implementation of different configurations with the drive variants 4x4 on two-axle chassis, 6x6 on three-axle chassis and 8x8 on four-axle chassis.

IMPACT is the powerful, reliable, compact class for lower categories of airports. Since the IMPACT airport fire-fighting vehicles are based on modified but well-proven large truck series components, they are more flexible in terms of configuration and ease of service. Here, too, a modular concept allows implementation of various configurations with 4x4 and 6x6 chassis.

The Magirus portfolio is rounded out by SUPERIMPACT X6, which features even more performance than the IMPACT X6 due to its NFPA-oriented design.

IMPACT X6 et SUPERDRAGON X8



“Anyone who hasn’t experienced kerosene on the tarmac doesn’t know how valuable seconds can be.”



## EXTREMELY COMPACT, AGILE PERFORMANCE: DRAGON X4.

The DRAGON X4 is a powerhouse with breathtaking speed and manoeuvrability.

The DRAGON X4 offers all the benefits of a special ARFFV (Air-crash Rescue and Fire Fighting Vehicle) and combines them with the manoeuvrability of a compact tank pumper.

Thus, depending on the tactical requirement, it can be converted into an incredibly fast intervention vehicle or one that delivers dry powder at large airports. For smaller airports, it is the ideal all-rounder for fire protection on the runway. The spacious DRAGON cab with its low and ergonomic entry-point allows the fastest response times. The low window areas provide the best all-round visibility.

The short wheelbase and extremely low centre of gravity provide excellent cornering ability even during the fastest deployment rides. Its low-set equipment storage compartments enable the loading of extensive fire-fighting equipment as well as its ergonomic and quick removal.

All of this makes the DRAGON one of the best vehicles for fire-fighting and rescue at airports.





## EXCELLENCE IN ITS COMPACT FORM: DRAGON X6.

The DRAGON X6 TEP convinces with its engine power, acceleration and extinguishing power, which are unique for its category throughout the world.

The DRAGON X6 has the benefits of the DRAGON concept, but on an agile, all-terrain three-axle chassis.

In this vehicle category, the performance values of the DRAGON X6 – e.g. engine power, acceleration and extinguishing power – are found nowhere else in the world.

TEP stands for Twin Engine Power Pack. The vehicle has a drive unit with two 540 HP (Euro 3) or 560 HP (Euro 5) IVECO Cursor I3 motors, which drive both the vehicle as well as the high-performance pump (up to 9,400 l/min). An intermediate transmission in the drive line allows operation when driving, when pumping and in the pump & roll mode.

The DRAGON X6 TEP accelerates its circa 40 t mass from 0 to 80 km/h in about 21 seconds; its top speed is around 135 km/h (electronically governed) and its excellent braking performance is just as impressive.





# GIGANTIC PERFORMANCE AND FLEXIBILITY IN ONE: SUPERDRAGON X8.

The SUPERDRAGON X8 perfectly illustrates the outstanding strengths of the DRAGON concept and the power of a giant payload.

Extinguishing major fires, saving lives, protecting material goods, preserving infrastructure: For complex tasks at large modern airports, the SUPERDRAGON X8 is always the first choice due to its outstanding capabilities. With a permissible gross weight of 52 tons, it carries a giant payload.

Depending on requirements, it is available with wheelbases from 4050 and 5050 mm. Its extensive reserves can be used for larger extinguishing agent capacities, for more fire-fighting equipment or to set up the Magirus HRET Spiker extinguishing arm.

The SUPERDRAGON X8 can be precisely adapted to local requirements as regards its extinguishing technology and the cab design. Crews of 3, 4 or 6 fire-fighters are possible as well as placement of the driver's seat on the left, right or centre.

Uniform parts and components are used for all vehicles in the DRAGON series. This standardisation makes production significantly more efficient, replacement parts more easily available and also facilitates the training of crews.





## THE ALLROUNDER IN THE COMPACT CLASS: IMPACT X4.

The IMPACT X4 combines proven solutions with innovative technologies, resulting in an all-rounder with highly specialised skills.

The IMPACT X4 is specially designed for fire-fighters at low-category airports. It combines a compact size with a wide range of applications. The series is based on large-scale truck series components that have proven themselves thousands of times over in service and which have been modified to meet the requirements of this specific application:

- / Motors in the power range of up to 560 HP for the fastest operational readiness
- / EURO 3 and EURO 5 emission technologiesAllison
- / Automatic transmission or ZF EuroTronic automated manual transmission for comfortable and distraction-free driving
- / Single tyres for optimal off-road capability

Construction technology, extinguishing technology and control electronics are perfectly matched to the chassis and part of the vehicle's comprehensive design.





# SUPREMACY AND STRENGTH IN COMPACT FORM: IMPACT X6.

The IMPACT X6 plays in the next higher league and provides absolute top performance.

The IMPACT X6 combines the best of two worlds: With a three-axle chassis, it offers all the benefits of the compact 4x4 but with an enhanced engine and greater extinguishing capacities.

As the IMPACT X6, it achieves almost as much as the DRAGON class and is a highly efficient alternative for fire departments with large missions.

All IMPACT models can be adapted to local missions. It can be equipped with many possible combinations, including

- / Pumps with or without a high-pressure system for maximum flexibility
- / CAFS compressed air foam systems that ensure preparedness for special applications
- / Roof and front monitors for maximum safety
- / Self-protection sprayers
- / The contemporary Magirus HMI (Human Machine Interface) pump control unit for intuitive and fast operation
- / Integration of fast attack reels, powder and CO<sub>2</sub> extinguishing systems based on customer needs
- / Completely flexible accommodation of fire-fighting equipment Loading





## THE ALTERNATIVE FOR HIGH-PERFORMANCE AIRFIELD FIRE PROTECTION: SUPERIMPACT X6.

The SUPERIMPACT X6 is specially designed for the most demanding and extreme performance.

SUPERIMPACT X6 is a completely new Aircraft Rescue and Fire Fighting Vehicle (ARFFV) based on large truck series with reinforced components and especially broad axes.

This new series, based on IVECO chassis, is the result of a close collaboration between chassis engineers and fire protection specialists – for maximum performance from a single mould. The powerful CFR chassis has a total weight of 33 tons with a width of 2,900 mm and a 560 HP (412 kw) engine. Its maximum speed is 113 km/h; it accelerates from 0-80 km/h in less than 33 seconds.

The SUPERIMPACT X6 features extreme handling stability. Due to the extremely wide wheel track and low centre of gravity, its cornering performance is optimal. The SUPERIMPACT X6 passes the tilt test on a 30 degree slope and meets many international standards.

The crew compartment is specifically designed to meet airfield fire-fighting requirements and can be equipped with up to four seats.





## MUCH MORE THAN JUST THE SUM OF ITS PARTS: DRAGON X6 AND SUPERDRAGON X8

In addition to the hard facts, handling, mission ergonomics and safety play a crucial role – especially when it comes to such large vehicles as the DRAGON.



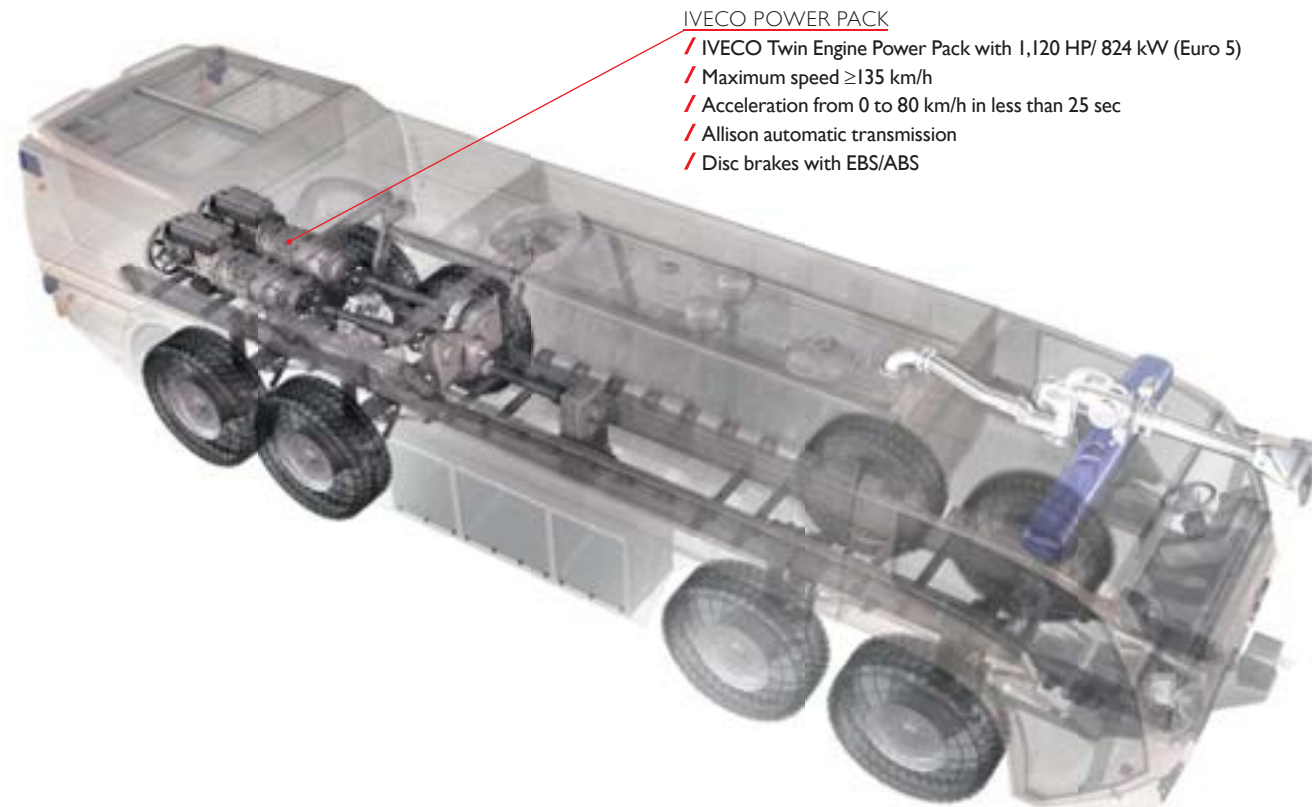
/ The cab perfectly fulfils the need for maximum impact with a small crew. The cockpit is clear and allows much light in.



/ The cab allows up to four seats with BA storage.



/ The vehicle entrance is ergonomically optimised. Large, low window surfaces enable an all-round view.



### IVECO POWER PACK

- / IVECO Twin Engine Power Pack with 1,120 HP/ 824 kW (Euro 5)
- / Maximum speed  $\geq 135$  km/h
- / Acceleration from 0 to 80 km/h in less than 25 sec
- / Allison automatic transmission
- / Disc brakes with EBS/ABS

### NEW CHASSIS

- / Magirus's newly developed ARFFV (Aircraft Rescue and Fire Fighting Vehicle) with a rear Twin Engine Power Pack, width 3.0 m
- / Rigid axle with coil springs

## THE BEST EQUIPMENT FOR EVERY CHALLENGE: DRAGON, SUPERIMPACT AND IMPACT.

Modern passenger and freight aircraft are a considerable challenge for fire brigades. Our airport fire-fighting vehicles are optimised to handle these, down to the last detail.



/ The roof monitor is available for the DRAGON, SUPERIMPACT and IMPACT as a water/foam or water/foam/powder monitor. It can extinguish with 3000-8000 l/min, depending on the requirements. Headlights or cameras can be mounted separately on request.



/ The monitors can be configured according to customer requirements.



/ The front monitor (option) is available either as water/foam or water/foam/powder monitor with a performance of 1000-2500 l/min; powder 7-10 kg/sec. An optional winch expands the range of possibilities to include salvage and rescue work.



## BECAUSE RESPONSIBILITY DOESN'T END AFTER 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 secure.

### 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 long-term 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 must always be available. Our service partners as well.”*







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