

# Rapid

## RoboFlail

Safe working on challenging terrain. The radio-controlled tracked vehicles from Rapid.



# RoboFlail

## Radio-controlled tracked vehicles for professionals Made in Germany

The radio-controlled RoboFlail tracked walk-behind tractor from Rapid offers reliable, comfortable and safe working under difficult conditions and challenging terrain.

The tracked vehicles are extremely robust, powerful and can be conveniently operated by radio remote control. The tracked vehicles are developed and built at the German Rapid site in Mennwangen in Deggensehauertal. In addition to the professional single-axle walk-behind tractors, Rapid offers, with the RoboFlail tracked walk-behind tractors, a suitable machine type for every application. Whether it is the mulching and mowing specialists from the ONE series or the versatile and powerful VARIO models. With the RoboFlail, it is possible to work efficiently in almost any terrain with minimal damage to the soil. Rapid offers five different models to choose from.

**One P252**

**One D252**

**Vario D251**



**One P252  
One D252  
Vario D251  
Vario D401  
Vario D501**

**No matter which RoboFlail model you choose, the same applies to all of them:**

- Maximum efficiency thanks to mechanical drive of the attachments
- Low centre of gravity
- Pendulum roller drive for maximum contact surface
- Pendelrollenlaufwerk für maximale Kontaktfläche
- Stable and robust design, durable
- Low-maintenance and time-saving cleaning thanks to spiral fan CleanFix® system (valid for the Vario series)
- Safe and convenient remote operation via radio remote control

**Vario D401**



**Vario D501**



# RoboFlail One P252 One D252

Solid performance and sophisticated technology, specialised for one application

The One P and One D models are absolute specialists. Designed and developed for **mulching and mowing on extremely steep slopes** (maximum slope of up to 55°, even steeper depending on the subsoil). Without any compromise.

The cutting height of the mowing or mulching deck can be adjusted conveniently and continuously using the radio remote control. The working width for the RoboFlail One P is 1.20 m, and for the RoboFlail One D, it is 1.10 m. The major advantage of this design is the ability to mow or mulch both forwards and in reverse when working. Thus, unnecessary turning manoeuvres are eliminated and the turf is preserved as much as possible. With an infinitely variable travelling speed of up to 7 km/h, the machine offers an extremely high area performance of up to 5,000 m<sup>2</sup>/h at low operating and maintenance costs.

The most efficient method for mulching large slopes. Thanks to its low centre of gravity and the pendulum roller drive, the ONE is predestined for steep and very difficult to reach terrain and is unrivalled on the market.





# RoboFlail One P252 One D252

The Goldisthal pumped storage plant is located in Thuringia on the Rennsteig. It is the largest pumped storage plant (PSW) in Germany and the crest of the upper reservoir wall measures almost four kilometres.

Each year more than 50 hectares of steep slopes have to be mowed and mulched here. Even though the growth is not really massive, the work is always very demanding. In some places, the slope of the inclination reaches above 60°, and the turf is easily damaged.



**Michael Nelkert, Fa. Köhler**

There must be no damage to the turf, as this can lead to erosion and washing out of the slope.

This is exactly the right place for the RoboFlail One. No unnecessary turning manoeuvres, extremely compact and lightweight design with a low centre of gravity, perfect soil protection and sufficient power. The absolute specialist in this field of application.

The service company Köhler Landschaftspflege & Service of Unterwellenborn maintains the Goldisthal pumped storage plant (PSW) in Thuringia, among other things, using the RoboFlail One and says about the machine:

*“The RoboFlail One with the new mowing deck works wonderfully in both directions. The machine, I have to admit, is extremely reliable. We’ve got other pumped storage plants and dams that we look after with this machine, and it definitely makes our job easier. Considering the machine will be working about 300 to 400 metres away, we need to be sure that it won’t break down.”*



## SUCCESS FACTORS



The tank can be actively swivelled so that it maintains a horizontal position at all times.

# RoboFlail One P252

# RoboFlail One D252



## COMFORT

- The simple design of the machine makes it easy to clean
- Fully drainable, electrically swivelled tank

One D252



One P252



## CHASSIS AND MOWING UNIT

- A wide track and low centre of gravity make it possible to work on the steepest slopes
- Fully hydrostatic, continuously variable travel drive with two axial piston pumps and radial piston motors
- Active chain drive with movable pendulum rollers
- Mowing deck fully attached between the drive chains
- The weight distribution makes child's play of operating the machine



## RADIO REMOTE CONTROL

- Easy and safe working from a distance with a radio remote control
- Electric, continuously adjustable cutting height



# RoboFlail Vario D251

The Rapid RoboFlail Vario D251 is the compact and flexible walk-behind tractor in the RoboFlail series.

Thanks to a unique lifting function, the attachment and basic appliance always remain in the same position relative to each other, and the PTO shaft always remains extended. With an engine power of 25 HP, there is no need for exhaust gas aftertreatment, the PTO shaft guarantees optimum power transmission without any power loss for the attachment.

The standard CAT1 three-point linkage offers maximum flexibility with a wide range of attachments. **The majority of Rapid attachments** from the single-axle segment can also be attached via an implement adapter and operated with the PTO shaft. This makes the machine to be ideally suited for changing requirements. This way the tracked vehicle can be used both in advance to **prepare the mowing area** for **mulching work** as well as for **mowing** and **clearing** difficult to reach areas. This means that complete process chains can be covered all year round with just one basic appliance.

The chassis' **side-independent track widening** from 138 cm to 177 cm guarantees even better traction, enabling optimum stability on slopes.





# RoboFlail Vario D251

The Kaiser family from Gerstetten-Gussenstadt, district of Heidenheim, has petrol in their blood and one big passion in common. The tractor pulling scene has been an important part of this family's life since 1993.

The head of the family, Thomas, "slipped into" this sport more than 30 years ago and has been firmly rooted in it ever since. His wife Margret was always by his side, and of course, his three sons Marcus, Stephan, and Christoph are also passionate about their "TEAM KAISER".

This affinity for powerful, innovative and robust technology also characterises Thomas and Margret Kaiser's daily work. With much experience, expertise and passion, they have been running Zerko GmbH, a municipal machinery service company, since 1996. Prior to this, Thomas Kaiser had been working independently in landscape maintenance since 1988.



**Thomas and Margret Kaiser,  
Zerko GmbH, Gerstetten-Gussenstadt**

Their primary focus is on professional landscape maintenance, heavy forestry work, forest clearing and woodchip management.

After the operation became extremely labour-intensive in its peak phase, with several employees and a large fleet of vehicles, Team Kaiser now focuses on special orders and places emphasis on a small number of absolutely professional specialist machines.

*"We have long and heavy-duty applications that push the machines to the limit and sometimes even beyond. For us, it is extremely important that the machines are not only powerful but also robust and durable, that they are stable, and that they run reliably. The cost/benefit factor simply has to be right. And if something breaks or doesn't work, a quick and easy solution is needed. That is the case with Rapid."*



## SUCCESS FACTORS



### COMFORT

- No need for exhaust gas aftertreatment
- Solid, robust and tried-and-tested engines
- Low-maintenance and time-saving cleaning thanks to spiral fan CleanFix® system
- Various assignments of the radio remote control can be selected directly on the radio remote control --> Joystick movement works based on the application



### CHASSIS AND ENGINE

- Rear-mounted engine --> Engine weight is used as a counterweight to the attachment; perfectly balanced
- Pendulum roller drive for maximum soil protection and maximum contact surface with the ground
- Side and position-independent hydraulic track width adjustment 138 cm --> 177 cm
- The chassis' track widening guarantees even better traction, enabling optimum stability on slopes

### ATTACHMENTS



- Rigid connection between the attachment and basic appliance --> The attachment and basic appliance always remain in the same position relative to each other, and the PTO shaft always remains extended
- Mechanical device drive with optimum efficiency and maximum performance
- Stepless lower link release for optimum ground adjustment of the attachment
- The Cat 1 linkage also allows Rapid attachments to be attached to the PTO shaft using an adapter socket. Thus the machine is ideally suited for changing requirements

# RoboFlail Vario D401

The wolf in sheep's clothing.  
As manoeuvrable and flexible as  
the D251, yet almost as powerful  
as a D501.



The flexible D401 can handle any  
terrain profile with ease.

Grass or forestry mulching, steep terrain profile or work easily on the plain. The Rapid RoboFlail Vario D401 combines the compact design and easy handling of the Vario D251 with the performance and versatility of the Vario D501.

If you are looking for a walk-behind tractor that can handle a wide variety of demanding tasks with ease, you will find the D401 to be an excellent choice. Like its little brother, the Vario D401 is equipped with a standard Cat 1 three-point linkage. This means that a wide range of attachments can be quickly and easily attached to the machine.

Just like with every other Vario model, drive is provided mechanically via a drive shaft. This allows for efficient power transmission, making the D401 easily compete with many market players that supposedly have more engine power.

The well-known pendulum roller drive ensures comfortable rolling over uneven surfaces. Maximum contact area is guaranteed in every situation. The chassis tracks of the tracked vehicle can be extended to the left/right individually and independently of each other.





# RoboFlail Vario D401



**Patrick Rolle,  
Product Manager RoboFlail  
and Nils Reise,  
Gruber Landschaftspflege**

*“My name is Nils Reise. We are a building and landscape maintenance company with forestry part. We have been using the Vario D401 as a prototype for a year and have already been able to test it for more than 400 hours. We employed them on steep slopes in areas where we could not walk. We have been able to mulch tall brambles, which was not possible before. We have also used them in wet areas and on stony terrain. The machine has many technical features that offer ingenious solutions. For example, you can adjust the chassis track of the tracked vehicle as needed. If we drive into a slope, we can extend the track hydraulically, allowing us to drive even steeper. I honestly have to say that I have never driven such a good machine before. We have already tested a number of tracked vehicles, but the Vario D401 is the best choice. The same size as a Vario 25 but offers a lot more power. And compared to the Vario D501, it is significantly lighter, more all-terrain and closes an absolute gap.”*

*“I am Martin Niedermeier and I run a specialist landscape maintenance company between Munich and Rosenheim. We have been maintaining difficult special areas that are extremely wet and steep for 13 years. We had a Vario D401 as a test machine operating it for 250 hours. The machine is very flexible and powerful and we were particularly impressed by the mechanical drive. The working width is perfectly suited for our areas of application. The adjustable track width makes it very stable, which convinced us just as much as the balanced weight distribution, which is particularly important on slopes.*

*I was a little bit sceptical at first, but we were impressed by the technical advantages, such as lifting via the central pendulum and attaching a forestry winch. And the service is also perfect. You have one contact person. There's no big fuss here. Sometimes they also come to your company premises.”*



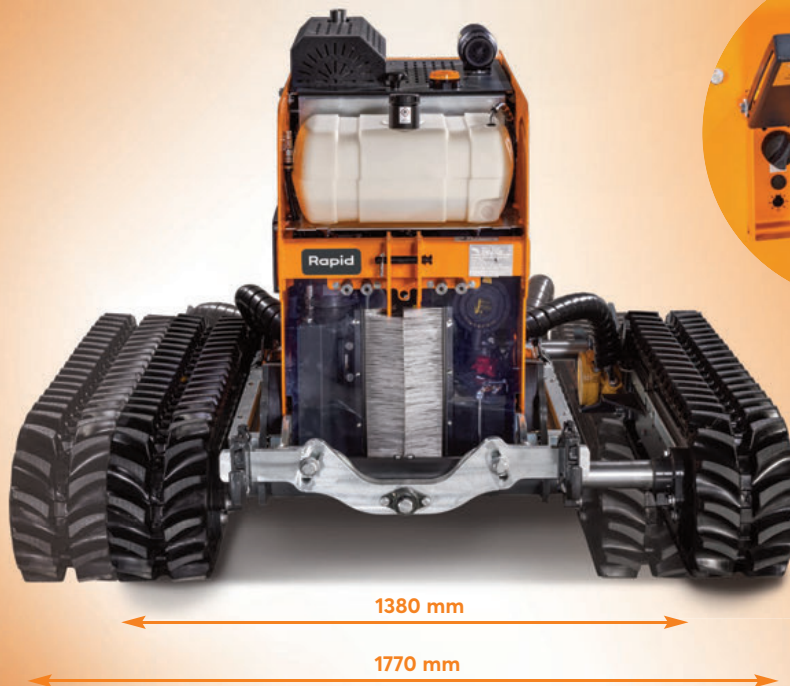
The Vario D401  
live in action

## SUCCESS FACTORS



### COMFORT

- The patented CleanFix® system minimises the number of manual cleanings
- Various radio remote control assignments can be selected



### CHASSIS AND ENGINE

- Side and position-independent hydraulic track widening from 138 to 177cm
- Pendulum roller drive for maximum ground surface contact, ensuring maximum traction



### ATTACHMENTS

- Unique attachment lifting function. The attachment and basic appliance always remain in the same position relative to each other for optimum power transmission and working position
- Standard CAT 1 three-point linkage with quick couplers for use with existing attachments
- Mechanical PTO. 1000 rpm, anti-clockwise

# RoboFlail Vario D501

The Rapid RoboFlail Vario D501 is the most powerful walk-behind tractor in the RoboFlail series.



**The powerful D501 shaping a mountain bike trail.**





# RoboFlail Vario D501

The bike park in Saalbach-Hinterklemm is one of the largest in Austria. A network of more than 90 kilometres of lines and trails offers mountain bikers of all performance classes the ideal playing field for their sport. For years, the number of sports enthusiasts on two-wheelers has been increasing in summer, making the slopes very busy.

Maintaining the trails and jumps is a mammoth task and can only be done by absolute professionals. In Saalbach, these are the guys from Shape Syndicate led by their boss Roland Hofer. They've entirely mastered their craft and feel every trail they create, as they all enjoy riding bikes themselves and know every bend and every jump on their mountain.



**Roland Hofer,**  
CEO Shape Syndicate

The large amount of manual labour in the sometimes very steep and impassable passages is very physically demanding, and it often goes only very slowly.

Since 2023, the Rapid Vario D501 with the PTH Micro Crusher has now been on the trails as support and the team is delighted with the machine's performance and quality of work!

The ground is crushed with the mulcher, levelled and then directly compacted without having to laboriously drive new material into the trail.

*"It is far more efficient; it can cover three times as much distance every day, and it produces much finer material. The machine has incredible gradeability. You can adjust the width. You can follow the terrain or adjust the cut to let you create downhill curves beautifully. It is truly a brilliant machine. What impresses me particularly is how well the machine performs in combination with the attachment. We even use it for mulching work here as well. Exploring all the potential ranges of applications."*



## SUCCESS FACTORS



### COMFORT

- The CleanFix® system minimises the number of manual cleanings
- Various radio remote control assignments can be selected



### CHASSIS AND ENGINE

- Side and position-independent hydraulic track widening from 129 to 171 cm
- Side-independent, hydraulically height-adjustable chassis from 14 to 29 cm for improved ground clearance
- Pendulum roller drive for maximum ground surface contact, ensuring maximum traction



### ATTACHMENTS

- Hydraulic side-shift with 320 mm for mowing close to edges
- Standard CAT 1 three-point linkage with quick couplers for use with existing attachments
- Mechanical PTO. 1000 rpm, anti-clockwise

# RoboFlail

## Attachments ex factory

		cm	Vario D251	Vario D401	Vario D501
<b>Mulcher</b>					
Rapid Flail Mower 130	Specially designed for lawns, grassland and municipal tasks, only in combination with Rapid attachment flange.	130	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flail Mower SMK 125   145, Humus	Site maintenance, grassland, municipal tasks, woody plants and thorny shrubs up to 3 cm Ø.	125 145	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Safety Mulcher SM 125   145, Humus	Particularly suitable for municipalities, road maintenance depots, for scrub up to 3 cm Ø, prevents foreign objects from being flung away.	125 145	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Brush Mulcher PS 125   145, Humus	Site maintenance, grassland, municipal tasks, for thorny growth, scrub and woody plants up to 10 cm Ø.	125 145	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Stone Crusher / Forestry Tiller PTH Microcrusher MC1150	Municipal tasks, landscape maintenance, scrub, bushes and woody plants up to 10 cm Ø, light forestry work, road building and maintenance.		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PTH Microcrusher Trail	Combination unit consisting of stone crusher and forestry tiller, especially for track building on rough terrain, e.g. bike trails.				<input checked="" type="checkbox"/>
<b>Tilling</b>					
Stump Grinder WG24, Woodland Mills	For clearing rootstocks up to 100 mm Ø.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stump Grinder WSF400, PTH	Swivelling range up to 80 cm, cutting depth up to 200 mm.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Mowing units</b>					
Wide track 160   200, Rapid	Dual cutter technology, no clogging, long service life thanks to patented ESM Carbolux mower blades, only in combination with Rapid attachment flange.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front Mower MUNICIPAL FK 170, KEMA	Own oil supply, mowing height adjustment, large passage.		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Multi-Twister 190 cm, Rapid	For swathing and collecting mulch/mown product, only in combination with attachment flange.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Vario series universally offers the Cat 1 three-point linkage with a mechanical drive. This means that all attachments equipped with this linkage can be operated. A Rapid adapter is also available for the Vario D251, allowing all standard Rapid attachments with attachment flange to be operated.



# RoboFlail

One P252

One D252

Vario D251

Vario D401

Vario D501

## OVERVIEW OF PERFORMANCE FEATURES



<b>ENGINE</b>	Kawasaki four-stroke petrol engine FX730V, 25 HP with oil and petrol pump for slopes up to 55 degrees. Fully drainable, 2 axes gimbal-mounted, electrically swivelled tank. Spiral fan, CleanFix® system.	Water-cooled Yanmar 3-cylinder diesel engine, 25 HP. Complies with StageV emissions directive. Fully drainable, 2 axes gimbal-mounted, electrically swivelled tank.	Water-cooled Yanmar 3-cylinder diesel engine, 25 HP. Complies with StageV emissions directive. Spiral fan, CleanFix® system.	Water-cooled Yanmar 3-cylinder diesel engine, 37.4 HP. Complies with StageV emissions directive. Spiral fan, CleanFix® system.	Water-cooled Yanmar 4-cylinder diesel engine, 48.3 HP. Complies with StageV emissions directive. Spiral fan, CleanFix® system.
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<b>TRAVEL DRIVE/ CHASSIS</b>	Active chain drive with movable pendulum rollers, length: 100 cm. Two external rubber tracks 200 mm wide. Passive oil cooling.	Fully hydrostatic, continuously variable travel drive with two axial piston pumps and radial piston motors. Safety brake in the event of a pressure drop. Active chain drive with movable pendulum rollers, doubled, length: 150 cm. Two external rubber tracks 230 mm wide.	Active chain drive with pendulum rollers. Side and position-independent hydraulic track width adjustment 138cm -> 177cm. Two external rubber tracks 230 mm wide.	Active chain drive with pendulum rollers. Side and position-independent hydraulic track width adjustment 138cm -> 177cm. Two external rubber tracks 230 mm wide.	Active chain drive (track width 250 mm) with pendulum rollers. Side and position-independent hydraulic track width adjustment 129cm -> 171cm. Side-independent, hydraulically height-adjustable chassis 14cm -> 29cm.
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<b>ATTACHMENT/MOWER SUSPENSION for ONE P and ONE D</b>	Mowing deck fully attached between the drive chains, front and rear inlet. Electric, remote-controlled cutting height adjustment approx. 6 - 16 cm. Float position function.	Mulcher deck fully attached between the drive chains, front and rear inlet. Electric, remote-controlled cutting height adjustment approx. 5 - 13 cm. Free-hanging mounted.	CAT 1 three-point linkage with quick couplers. Rigid connection between attachment and basic appliance. The attachment is lifted by tilting the upper carriage. Swivelling carrier plate of the quick couplers. Stepless lower link relief.	CAT 1 three-point linkage with quick couplers. Rigid connection between attachment and basic appliance. The attachment is lifted by tilting the upper carriage. Swivelling carrier plate of the quick couplers. Stepless lower link relief.	Category 1 three-point linkage with quick couplers. Hydraulic side-shift with 320 mm. Swivelling carrier plate of the quick couplers. Alignment of the machine weight to the rear of the machine.
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<b>GENERAL</b>	<b>STM ROUGH CUT</b> Three knife spindles fitted with cross blades for excellent cutting quality for year-round growth.  <b>KNIFE SPINDLES WITH TAPERED ROLLER BEARINGS</b> Axial forces are better supported, making them durable.	<b>RADIO REMOTE CONTROL</b> Dead man's system; safety switch-off integrated in the transmitter in the event of strong movements by the operator (e.g. operator falls)	<b>RADIO REMOTE CONTROL</b> CleanFix triggers cleaning. Radiator can be cleaned during operation, as needed, manually.  Various assignments of the radio remote control can be selected directly on the radio remote control.  Machine made from S700 fine-grained steel	<b>RADIO REMOTE CONTROL</b> CleanFix triggers cleaning. Radiator can be cleaned during operation, as needed, manually.  Various assignments of the radio remote control can be selected directly on the radio remote control.  Machine made from S700 fine-grained steel	<b>RADIO REMOTE CONTROL</b> CleanFix triggers cleaning. Radiator can be cleaned during operation, as needed, manually.  Various assignments of the radio remote control can be selected directly on the radio remote control.  Machine made from S700 fine-grained steel
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AT HOME ON ANY TERRAIN



# Rapid

Our video shows  
you all the machines  
presented in action



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