

# Moritz mini forestry and felling tractors



### Moritz Fr50 | The mini felling tractor

At the KWF meeting in 2016, Pfanzelt presented the professional mini felling and forwarding tractor Moritz Fr50. With its compact dimensions, low weight with a low centre of gravity and adaptable drive width, the mini felling tractor is very flexible and can be used in different conditions. Wherever a cable winch is needed for accident prevention, the new mini felling tractor is the ideal working tool.

- 35 hp Diesel engine
- Low ground pressure of only 0.30 kg/cm<sup>2</sup>
- Forest cable winches up to 5 t pulling power
- Compact dimensions

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### Moritz Fr70/75 | The mini forestry tractor

Under the motto The concept remains, but everything is new, Pfanzelt presented the two new Moritz models in spring 2020.

- Engine power 50 or 75 hpSeparate traction, on-board, and power hydraulics (96I and 300 bar)
- Mechanical power take-off shaft
- Two three-point mounting spaces cat. 1
- Complete control of vehicle and attachments via professional radio control
- Forestry cable winches up to 7.2 t pulling force

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# Moritz Fr50 mini felling tractor



#### **Moritz Fr50**

At the KWF meeting in 2016, Pfanzelt presented a new, professional felling and forwarding tractor. The concept of the new machine is designed for flexible use in different work requirements. Anywhere a cable winch is required to ensure safe working, e.g. for safety fellings, the new mini felling tractor is the perfect machine for safer forestry operations. And not only there - the mini felling tractor also increases safety and working ergonomics when felling problematic trees in cities and private gardens.

Another field of application of the mini felling tractor is pre-delivery work. Here, the caterpillar tractor can convince when working on demanding terrain, slopes, and in standing timber on fragile soil structures.

For optimum stability during winching and forwarding, the chassis can be hydraulically extended after it has been transported to the work location.

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#### **Technical details that impress:**

- Proportional drive with a maximum speed of 6.5 km/h
- Large ground clearance of 300 mm
- Optimum climbing ability due to 45° slope angle at front and rear
- Variable chassis for easy transport and perfect stability
- Low ground pressure of only 0.30 kg/cm<sup>2</sup>
- Professional forestry cable winch with 4.0 or 5.0 t pulling force and 120 m cable capacity (10.5 mm dia.)
- Variable rope infeed height due to height-adjustable forwarding shield and different insertion positions
- · Complete control of vehicle and cable winch via radio
- Toolboxes and additional holders for fuel canister and chainsaw





#### Independently tested.

The forestry training centre Ort/Gmunden in Austria has tested the Moritz in the forest.

"Working in the forest is dangerous! Unfortunately, this has been repeatedly confirmed by fatal accidents in recent months. For safety reasons, a cable winch is therefore increasingly recommended - and sometimes even prescribed - for woodwork operations, especially in hardwoods. Using a tractor with a three-point cable winch is often not possible. This was the initiation for the Bavarian forestry specialist Pfanzelt to develop a small, mobile, and light vehicle with a cable winch. The result is a remote-controlled crawler vehicle with a net weight of only 1.4 tons. It's name is Moritz."

The complete driving report and a video of the test can be found at www.pfanzelt.com.



Moritz driving report. youtube.com/pfanzeltTV

# Moritz Fr50 mini felling tractor Technical details that will convince you

#### The chassis

In order to achieve an optimum chassis width for both transport and terrain, the chassis width of the Moritz Fr50 can be modified. The chassis can be widened hydraulically by 400 mm. The mini felling tractor can therefore also be used safely on slopes.

The largely dimensioned chassis and the low dead weight of the mini tractor enable a minimum ground pressure of only  $0.30 \text{ kg/cm}^2$ .

Soil-saving driving and working is therefore unproblematic even on wet surfaces.

A slope angle of 45° at the front and rear allows a high gradeability and uncomplicated accessing the forest from the forest trail. The large ground clearance of 300 mm allows driving over rootstocks as well as manoeuvring in forwarding lanes.

In addition to the standard chassis with a length of 1,500 mm, a long version of 1,700 mm is also available for special applications.



#### **Chassis (transport position)**



1,100 mm

**Chassis (working position)** 



#### The traction drive

The proportional drive is equipped with two speed levels for accessing the area of application in the forest or for forwarding. The maximum speed of the mini felling tractor is 6.5 km/h.





### **Radio control**

The complete felling tractor can be radio-controlled by an ergonomic control panel. In addition to the traction and winch drive, this also allows the adjustment of the cable speed or motor speed. If the vehicle is not needed for a short time, the engine can also be stopped or started using the radio control.



### Light and easy to transport

The dimensions and the weight of the machine allow an uncomplicated transport with a car trailer or on the loading surface of a van.

### Strong pull

The professional gear cable winch has a pulling power of 4 t or 5 t and a cable capacity of max. 110 m. The cable speed, which is variable in several steps, allows the adaptation to different working situations.

It can be equipped with a rope infeed brake for proper cable winding.

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#### Secure stand

The forwarding shield is the basis for roping. It is equipped with double-acting hydraulic cylinders. If the tractor's own weight is not sufficient for roping work, it can be additionally secured to another object (for example a tree) within a very short time.

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The rope entry height of the felling tractor is variable. In order to be able to vary the height of the rope infeed during use, it is integrated into the height-adjustable forwarding shield.

#### **Stowage space**

Moritz offers large storage compartments and a holder for a chainsaw. Fuel canisters and other accessories can be stored here and are cleared up.

There is even more storage space in the optionally available folding front box.





# More safety in forestry work.



The entire felling process including the access to the zone is possible with the personal protection screen for forestry tractors. The protective screen is built up by the radio control before entering the danger zone.

#### Protection from dead wood

There is a high risk of accidents for the forestry worker when felling trees by hand. Vibrations (for example from hitting the wedge) or wind can cause dead wood to come loose and fall down. This can cause injuries that may even be fatal. The personal protection screen against deadwood for the Moritz forestry caterpillar offers the greatest possible protection for the forestry worker during the entire felling process.











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# Multifunctional use.



In addition to a permanently installed cable winch, Moritz can be used multifunctionally as an off-road carrier vehicle. The cable winch, which is mounted using a quick-change system, can be dismantled in just a few steps. After that, implements can be attached to the vehicle via the three-point linkage (Cat. 1).

## Pfanzelt implements for the Moritz mini forestry tractor

- Forestry mulcher with swinging Y flails (optionally with hydraulic front flap and hydraulic side shifting)
- Forestry mulcher with standing tools, hydraulic front flap and hold-down device (optionally with hydraulic side shift)
- Sowing strip cutter

Via the three-point linkage cat. 1, other standard devices can be attached to the Moritz.





### Young stock maintenance

In recent years, large areas have been replanted after storms. Caring for these areas represents a great challenge. Pfanzelt's forestry cutter in combination with the Moritz forestry tractor is used to efficiently care for young trees with high performance.

The facts of the operation. Area efficiency: 4 hours per hectare Fuel consumption: only 18l diesel







# Accessories for professionals.

#### **Multifunctional tractor**

Unique on the market in the field of forestry and mulching tractors is Moritz's mechanical PTO. It is directly driven with almost no loss of power, thus enabling high efficiency in use. In combination with the universally usable three-point hydraulic system cat. 1, Moritz becomes a multi-functional tractor.



#### **Hydraulics**

Depending on the requirements, the vehicle can be equipped with up to 3 double-acting hydraulic control units.

An optional pressureless return is also separately available.





#### Front mounting space

Our extensive range of accessories offers the right equipment for the Moritz in every area of application.

An extendable, three-part front weight of 110 kg is available for pre-delivery work on slopes or for roping without an anchor point.





#### Safety and lighting

To optimally illuminate the working environment, Moritz can be equipped with additional headlights on two positions.

An auxiliary headlight can be mounted on the foldable roll bar, which can be switched on and off via radio control.









#### Auxiliary cable winch

For use on steep slopes, the Moritz forestry caterpillar can be equipped with an auxiliary winch which can be used 360°.

Depending on the application, the auxiliary cable winch can be used in two positions. Tool-free conversion in the shortest possible time. In the upper position, the winch can be used in any direction. If only securing or travel support in one direction is required, the lower mounting positions can also be used.



