



Felix special forestry tractor

The Pfanzelt special forestry tractor Felix can be assembled according to a modular system and adapted to the respective applications. The front end is the same for all vehicles. The engine used leaves nothing to be desired in terms of durability, torque, and smoothness of running, thanks to the latest common rail technology. The new hydra2POWER drive is downstream. The resulting unit optimally combines the two main applications - road travel and timber forwarding - and can therefore be flexibly used.

For good reasons, the Felix special forestry tractor is subdivided differently. The cab is located very far forward, the winch and crane in the middle of the vehicle, and the clamping bench or stanchion basket is mounted directly on the rear axle.

Felix 4-wheel special forestry tractor

The Pfanzelt Felix 208.5 4-WD forestry tractor is the world champion in maneuverability thanks to its clever combination of articulated and Ackerman steering.

► Page 152

Felix 6-wheel special forestry tractor

Pfanzelt's special forestry tractor Felix 214.5 6-WD can be ideally adapted to all operating conditions as a combination machine.

► Page 158



3 vehicle models

Depending on the area of application, three models of the Felix special forestry tractor Felix are available as 4- and 6-wheel machines.

- **Model K** | With a short wheelbase, this Felix model is agile and is ideal as a skidder. The Felix in this configuration also impresses as a forwarder for tight stocks.
- **Model F (4WD only)** | If you need a longer loading area or transport a lot of short wood, the Felix model with long wheelbase fits the concept.
- **Model V** | If the conditions of use change frequently, you need a combination machine. In this configuration, the Felix can hydraulically extend the wheelbase by 1,200 mm. This creates a large loading area or a very compact machine - depending on the application.



hydra2POWER - The drive concept

The Felix special forestry tractor has a completely new, modern, and efficient drive train.

The hydra2POWER concept combines the following aspects:

- Powerful drive thanks to largely dimensioned components
- Best traction due to permanent all-wheel drive and hydraulic longitudinal differential
- Low fuel consumption thanks to state-of-the-art wide-angle hydraulic motors
- High safety thanks to active standstill control
- Low maintenance costs

The continuously variable hydra2POWER drive - a Pfanzen in-house development - for the new series of Felix special forestry tractors consists of two powerful and largely dimensioned hydraulic pumps and motors. Therefore, every axle has its own unit. Mechanical components, which often require more maintenance, are not installed in this system. The large design of the hydraulic components allows low engine speeds even when driving on roads. The transport speed of 40 km/h is thus reached at 1,600 rpm.

The permanent four-wheel drive and the hydraulic longitudinal differential offer optimum traction and great flexibility. Therefore, the driver can always rely on full traction. When driving with chains or belts on only one axle, the front part of the vehicle does not twist towards the rear. The result is less wear of the tyres and vehicle and lower fuel consumption.

The two 45° swivel-angle hydraulic motors enable high efficiency and consequently low operating costs.

The electronic control of the traction drive enables the programming of application-specific driving characteristics. Depending on whether the vehicle is off-road or on the road, acceleration, coasting behaviour during deceleration, and active standstill control are adapted. This allows the driver to manoeuvre precisely even on steep terrain simply by using the accelerator pedal.



Pfanzelt XXL cabin

The pneumatically sprung cabin developed by Pfanzelt enables a quiet and low-vibration work.

With more than 7 m² of glass, the view of the working environment has been further enhanced. The driver has an even better view of his working area, which facilitates work and increases work safety. The driver finds a relaxed and ergonomic seat and working position on the operator's platform which can now be rotated electrically by 340°.

The intelligent machine control system which is operated by a monitor on the seat also allows presettings to be saved for different drivers.

The Pfanzelt XXL cabin was designed especially for the demands of our customers. Few vibrations when working in standing timber and still maximum driving comfort when driving on the road.

When working in the forest, the steering column is quickly and easily folded towards the side.

All operating and monitoring functions are mounted on the seat and are therefore always in the operator's field of vision.

An additional operating terminal for road travel is located next to the steering wheel. All important parameters are displayed there in the driver's best possible view.

Unique in the forestry industry and essential for use in municipal applications, there is an option of installing a passenger seat in the cab.





Felix 6-WD special forestry tractor

In contrast to the previous model, the rear end of the Felix 214.5 6-WD has been completely revised. However, the basic concept of the combination machine has not changed. It is compact and manoeuvrable for use with long timber and, at the same time, offers a large loading area for short logs. This technical solution enables a high economic advantage over other solutions. In order to create ideal conditions for the work with long and short timber, the rear carriage was designed such that the wheelbase can be hydraulically telescoped by 1,200 mm.

The 6-wheel variant is used with a short chassis for the work with long timber, a combination chassis with telescopic rear end for the work with short and long timber, and with a long chassis for forwarding.

Technical details ► Page 163.

Convincing technical details:

- Hydraulically telescoping rear carriage
- Hydraulically height-adjustable roller block
- Pfanzelt quick change system for rear body
- Economical and gentle on trees, a unique concept
- Road travels at 40 km/h enable easy changes of the places of operation



Felix 6WD forestry tractor in operation
youtube.com/pfanzeltTV

Felix 6-WD special forestry tractor

Technical details that will convince you

The vehicle layout

To create ideal conditions for long and short logging operations, the wheelbase can be hydraulically telescoped by 1,200 mm. When handling long timber with a crane and clamping bench, the Felix 6-WD with short wheelbase is

compact and manoeuvrable. If the situation requires short timber to be loaded, the wheelbase can be extended hydraulically.

This forms a stanchion basket for transporting short timber. In contrast to other

combination machines, the stanchion basket is located on the vehicle with a favourable centre of gravity. If a clamping bench is installed instead of the stanchion basket, it is also optimally positioned above the axle bogie.



Roller block

In order to ensure optimal and safe work even on steep slopes, the roller block is hydraulically height-adjustable.

Guide tubes for the cable ropes ensure the necessary protection from the winch unit to the cable entry pulley. Damaging the cable with the gripper is therefore impossible.





The quick change system

Pfanztel's quick-change system allows a tool-free and time-optimised conversion from stake basket to clamping bench. When shifting the machine, the superstructures can be placed on the loading area at the same time.