

PRODUCT RANGE



Pm PFANZELT
MASCHINENBAU



We will be happy to advise you

Sales

Andreas Stöckle

Pfanzelt factory representative for Bavaria
Switzerland, Austria, Italy, Czech Republic, Slovakia and Great Britain

☎ +49 (0) 8860 9217 - 2929

☎ +49 (0) 170 3744025

✉ andreas.stoeckle@pfanzelt.com

Peter Assemann

Pfanzelt factory representative for Bavaria
Switzerland, Austria, Italy, Czech Republic, Slovakia

☎ +49 (0) 8860 9217 - 2962

☎ +49 (0) 170 3744021

✉ peter.assemann@pfanzelt.com

Hans-Jörg Damm

Pfanzelt factory representative for North Rhine-Westphalia, Hesse, Thuringia,
Schleswig-Holstein, Mecklenburg-Western Pomerania, Lower Saxony, Sax-
ony-Anhalt, Saxony, Brandenburg
Poland, Denmark, Norway, Sweden, Finland, Estonia, Latvia, Lithuania

☎ +49 (0) 172 8487083

✉ hans-joerg.damm@pfanzelt.com

Daniel Hertling

Pfanzelt factory representative for Rhineland-Palatinate, Saarland, Baden-Ba-
den Württemberg, Bavaria
Belgium, Luxembourg, Netherlands, Great Britain and Ireland

☎ +49 (0) 170 3744032

✉ daniel.hertling@pfanzelt.com

Stéphane Pruniaux

Pfanzelt factory representative for France

☎ +33 (0) 7 84 21 08 92

✉ pruniaux@pfanzelt.fr

Customer and spare parts service

☎ +49 (0) 8860 9217 - 2914

✉ service@pfanzelt.com

☎ +49 (0) 170 3744030

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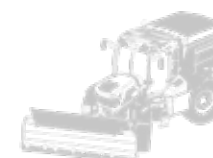
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Ecology and economy - both are possible in the forest

Considering only its area, the forest is on the one hand the most important terrestrial ecosystem in Germany, but on the other hand it is also a supplier of raw materials, and thus of essential importance for the German forestry and timber industry which is concerned with the provision and processing of raw wood. This balancing act is achieved by sustainability in forestry practice. In this way, the diverse economic and ecological benefits provided by the forest are ensured for today's and future generations.

Modern engine technology, powerful hydraulic systems, economical travel drives and low machine weights - this combination is the basis for the economic success of our customers and contributes significantly to soil-conserving and sustainable forestry.





Pfanzelt Maschinenbau GmbH was founded in 1991 by Paul Pfanzelt and initially dealt with the production and assembly of simple geared cable winches for three-point, plug-in, and fixed mounting on agricultural tractors. Over the years, the range has been further extended to become the widest of any European forestry machine manufacturer.

Over the years, Pfanzelt constantly presented new innovations and expanded its product range. In 2010, Pfanzelt laid the foundation for further growth in new markets by the introduction of the S-line series for gear cable winches and forwarding trailers, a new series adapted to the requirements of semi-professionals and forest owners.

Uncompromising performance, optimised for the heaviest applications, that's the promise of the logLINErange of forwarding trailers launched in 2015. The first crawler vehicle in

the product range was presented in 2017 - the Moritz mini forestry tractor. Now we have become a think tank for new ideas and put great value on close contact with our customers. We thank many of our innovations directly to their requirements and suggestions.

With our machines, we constantly pursue the goal of providing solutions that make everyday's work as simple and cost effective as possible.

"Close contact with our customers allows us to adapt our products directly to their requirements."

Pfanzelt technology is not only to be found in machines which are part of the Pfanzelt product range. With the presentation of its own wheel drive

called powerDRIVE, and the continuously variable power-split transmission variaDRIVE which was developed in-house, Pfanzelt successfully positioned themselves on the market of system suppliers for both series and individual products in 2019.

20,400 m² hall space

15 trainees

34 years

185 employees

18,000 spare parts in stock

15,000 m³ storage volume

more than **26,000** machines
produced since the company was founded

Philosophy



With a highly qualified workforce and its trusted partner companies, Pfanzelt Maschinenbau manufacture their products in Germany. Especially in today's time, *Made in Germany* is in a new focus. With 185 employees, Pfanzelt thus contributes to securing many jobs in the region in the long term. With 15 trainees in metal processing, mechatronics, and office communication, as well as several working students, Pfanzelt is exceptionally committed to training.

"As many parts are produced in-house, we can use our know-how and react quickly and flexibly to changes and product developments."

In contrast to today's standard production philosophy which is based on purchasing many supply parts, Pfanzelt prefers to maximise the percentage of parts manufactured in-house. Besides guaranteeing the reliability and quality of all components, this also ensures short delivery times. However, this also means that more effort must often be put into the production of the machines than many a competitor.

Accordingly, a part produced in-house must not cost more than a purchased part. Besides in-house production, the extensive in-house knowhow enables flexible reaction to changes and product developments.



Insights into the production at Pfanzelt
youtube.com/pfanzeltTV



Modern machinery with laser cutting and CNC machines as well as welding robots and much more.



Automated large warehouse with a storage volume of 1,650m³.



After sandblasting, we paint the parts in house.



Factory tours for groups

If you want to learn more about Pfanzelt, we would like to invite you to a factory tour. On such a tour, we would be proud to show you how Pfanzelt develop and produce all their products at their site in Rettenbach am Auerberg.

You will be guided through all departments from our machining through the welding shop to the final assembly and obtain lots of interesting information about Pfanzelt and its products.

You can find the registration form on our website: www.pfanzelt.com/en/factory-tours/

Company history

1991

Foundation of the company PM Pfanzelt Maschinenbau GmbH and start of production of geared winches for three-point, plug-in, and fixed attachment to the tractor

1996

Production start of the Pfanzelt forwarding trailers

2001

Presentation of the forwarder Felix

2005

Launch and production start of Pm Trac multipurpose tractor.

2008

Extension of the winch and forwarding trailer programme by the S-line series

2012

Awarded the forestry prize by the German Federal Ministry for Food, Agriculture and Consumer Protection (BMELV) for the Pfanzelt hydraulic overrun brake and PPS controller.

2014

Presentation of the Innovation Prize for innovative corporate management by the KWF at the Interforst fair

2016

Presentation of the Moritz Fr50 mini felling tractor at the KWF Conference.

2019

Presentation of Pfanzelt's own system components, the wheel drive powerDRIVE, and the continuously variable power split transmission variaDRIVE

Receipt of the DLG silver medal for the personal protection shield for the Moritz forestry tractor

2020

Online presentation of the new Moritz series as part of the forstARENA consultation weeks

Inauguration of the forstARENA test track and the exhibition hall

2022

Presentation of the K Trac municipal implement carrier at IFAT in Munich.

Start of construction of the new production hall and the second automated large warehouse

2024

Start of construction of the new exhibition and brand experience world



One of the first Xylon tractors converted by Pfanzelt for forestry use.



The cable winch programme from 2011.

Your advice is important to us



Exhibition hall & test track

You would like to see, test, or test drive Pfanzelt forestry equipment, and know how and where the products are manufactured? Then we invite you to a consultation in Rettenbach am Auerberg.

"Numbers and specifications are important to be able to classify a forestry machine; however, a test drive and experiencing the technology for yourself is crucial."

We now offer you the opportunity to test drive and extensively test selected trailers, cranes, and winches on the forstARENA test track. For testing, the most modern tractors of several manufacturers are available in addition to the forwarding trailers and forestry winches of different series. Gain experience in finding the right forestry trailer for you.

The test drive on the test site is part of the consultation and free of charge and non-binding for you.

Plan your visit to Pfanzelt now:

The forestry equipment exhibition hall and test site are open every Monday till Saturday (winter months only). A visit is only possible after prior online registration at www.pfanzelt.com.



forstARENA Consultation weeks

For five years now, Pfanzelt has been offering you the opportunity to obtain detailed information about Pfanzelt forestry technology online. During the forstARENA consultation weeks, practical reports and the topic evenings, we presented the individual products in detail.

You can view the consultation videos with interesting mission reports at www.forstarena.com.

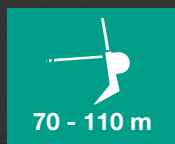
Cable winches



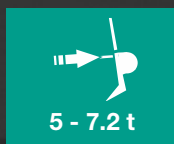
S-line geared cable winches

The forest farmer, just like the semi-professional business, has the requirement to use a professional geared cable winch. The S-line model enables this at the price level of a chain cable winch.

► Page 12



70 - 110 m

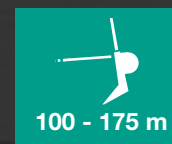


5 - 7.2 t

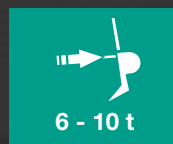
Profi geared cable winches

Heavy timber recovery in flat terrain or thinning in mountainous areas - the requirements for a professional geared cable winch differ according to its area of application. Pfanzelt Profi geared cable winches are assembled on the basis of a variable modular system and can thus be optimally adapted to the operating conditions.

► Page 22



100 - 175 m



6 - 10 t



Three-point geared cable winches were Pfanzelt's first product when the company was founded 33 years ago. Even today, the geared cable winches are still being constantly developed and adapted to new requirements.

The Pfanzelt product range includes a very wide selection of cable winches. The scope of products ranges from standard cable winches to customer-specific system solutions.

Pluggable and fixed winches

Pfanzelt's pluggable and fixed rope winches are suitable tools for commercial use. One reason for this is the installation of the winch and the mountain support on a console, which means that the tractor remains largely free of loads when roping.

► Page 36

Aggregates and vehicle winches

Pfanzelt's modular series for vehicle winch systems offer cable winches with lifting and pulling forces from 30 to 160 kN. Different winch drives are available for different applications.

► Page 42



S-line geared cable winches

Until a few years ago, geared cable winches were only affordable for professional users due to their low production volume and heavy construction. This has changed since the introduction of Pfanzelt's S-line cable winch. Today, Pfanzelt offers geared winches with an attractive price-performance ratio especially for semi-professional operations and forest farmers. The technology is the same as for the larger models; however, only the dimensions are adapted to the size of the tractors which are mostly smaller.

Types

Geared cable winch S150

An inexpensive start into the geared cable winch technology is the model S150 with its 5.0 t tractive force. With a rear blade width of 1,500 mm and a lower overall height, this three-point cable winch is adapted to smaller tractors.

Geared cable winch S160

The S160 model is suitable for larger tractors and the user who needs more pulling force. The powerful middle class of the S-line winch range.

Geared cable winch S172

The S172 gear cable winch is the optimal tool for big tasks in the farmer's forest. In this series, the cable winch already has a blade width of 1,800 mm.

Technical specs ► Page 20



Convincing technical details:

- Extremely light cable payout of only 30 N when the cable is pulled out due to the arrangement of the rope drum in the direction of travel
- Lowest tractive force drop of only 21 % (with standard equipment)
- Exact control of braking and clutch operations through multi-disc plate packs
- Pfanzelt precision control PPS for adjusting the cable winch to the forwarding situation in three steps
- Standard radio control with motor speed adjustment function
- Tailor-made accessories: Cable distribution with cable infeed brake, hydromechanical cable payout, PTB automated trailing drum brake, various shield widths, and much more.

Independently tested.

The forestry training centre Ort/Gmunden has tested the S-line S160 cable winch in practice.



"Until now, geared cable winches have been heavy and expensive. But the German forestry machine manufacturer Pfanzelt is convinced of this technology and exclusively produces cable winches with gears. The goal of the Allgäu-located company is to develop a lighter geared cable winch affordable for forest farmers."

Evaluation of the LANDWIRT magazine (excerpt)

- + low tractive effort loss
- + winding device
- + hydromechanical rope ejection
- + hitch geometry
- + rear shield
- + PPS controller...

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

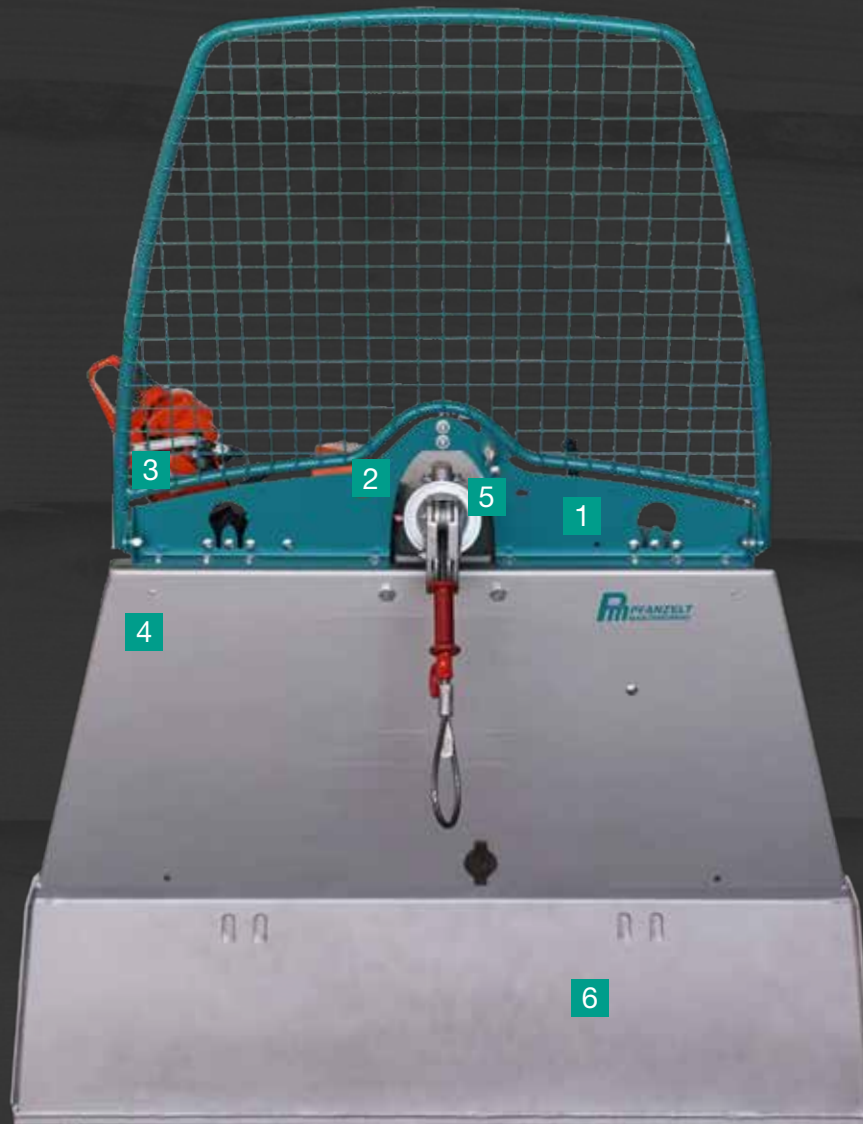


S-line cable winches live in action.

youtube.com/pfanzeltTV

S-line geared cable winches

Technical details at a glance



1

The adjustable and sturdy safety grille provides safety for the operator and protects the tractor from damage.

2

All Pfanzelt cable winches are equipped as standard with a **Forest radio system**.

3

Two **holders for fuel canister and chainsaw** are useful and keep order on the tractor.

4

Two **storage compartments** mounted on the side of the winch plate ensure order and are easy to reach.

5

The **cable infeed reel with ball bearings** guarantees cross pulls up to 90°. The low position saves a deflection roller.

6

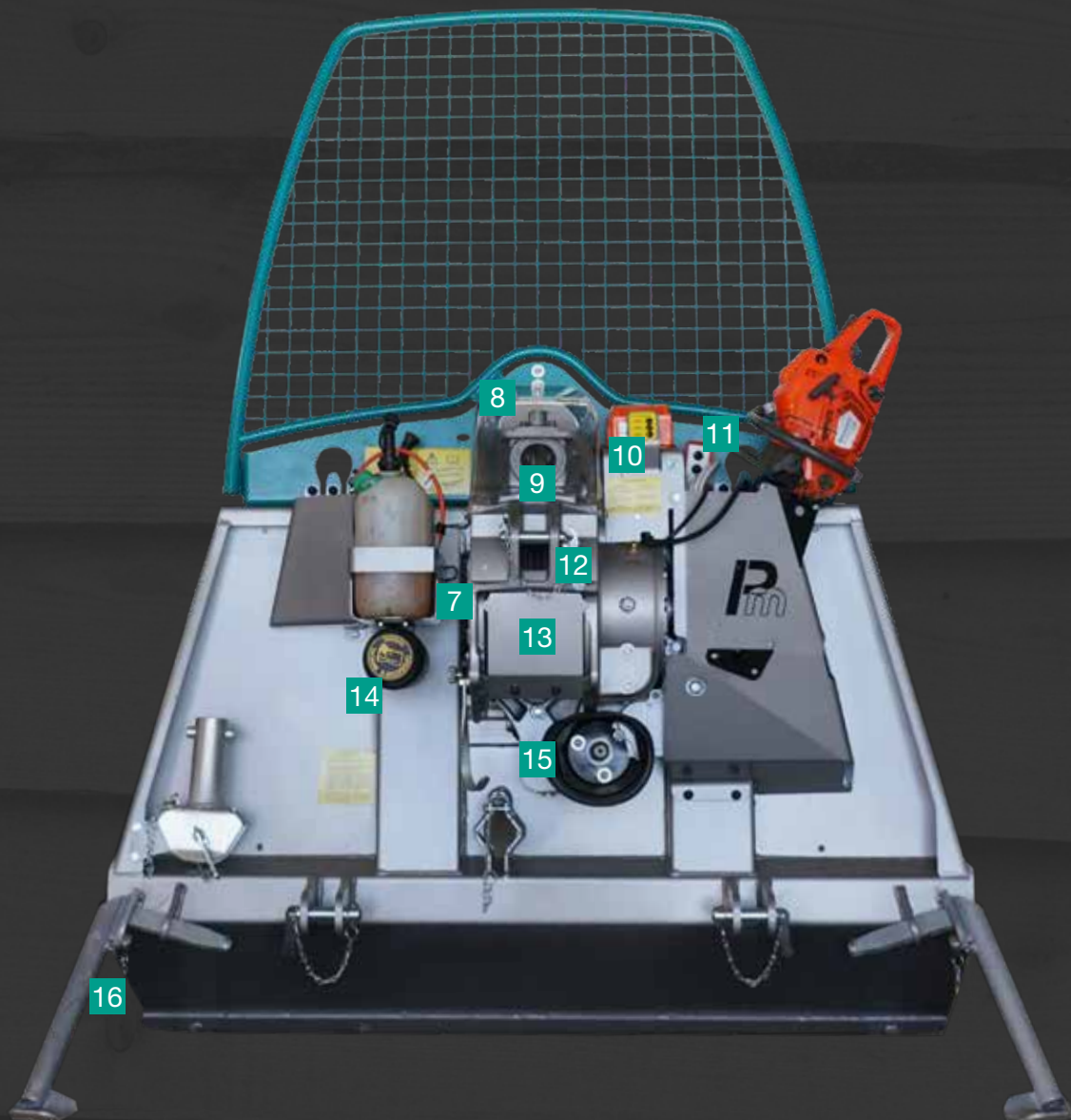
Made of fine grain steels, the **sturdy shield** is torsionally stiff and provides support when pulling sideways.

7

The optionally available **load lowering valve** allows the brake to be released in a controlled manner.

8

An optionally available **cable payout** facilitates the cable pullout and reduces cable wear.



9

The optional **cable distribution with cable inlet brake** ensures an optimised distribution of the cable and low wear.

10

The standard **PPS controller** allows easy adjustment of the overlap.

11

A standard **manual control** can be used in the event of problems with the **radio control**.

12

The automated **trailing drum brake PTB** automatically brakes the cable when the drum is opened.

13

The wide rope drum **minimises the loss of traction to a maximum of 21%**.

14

The hydraulic pressure can be checked quickly and easily on the standard pressure gauge.

15

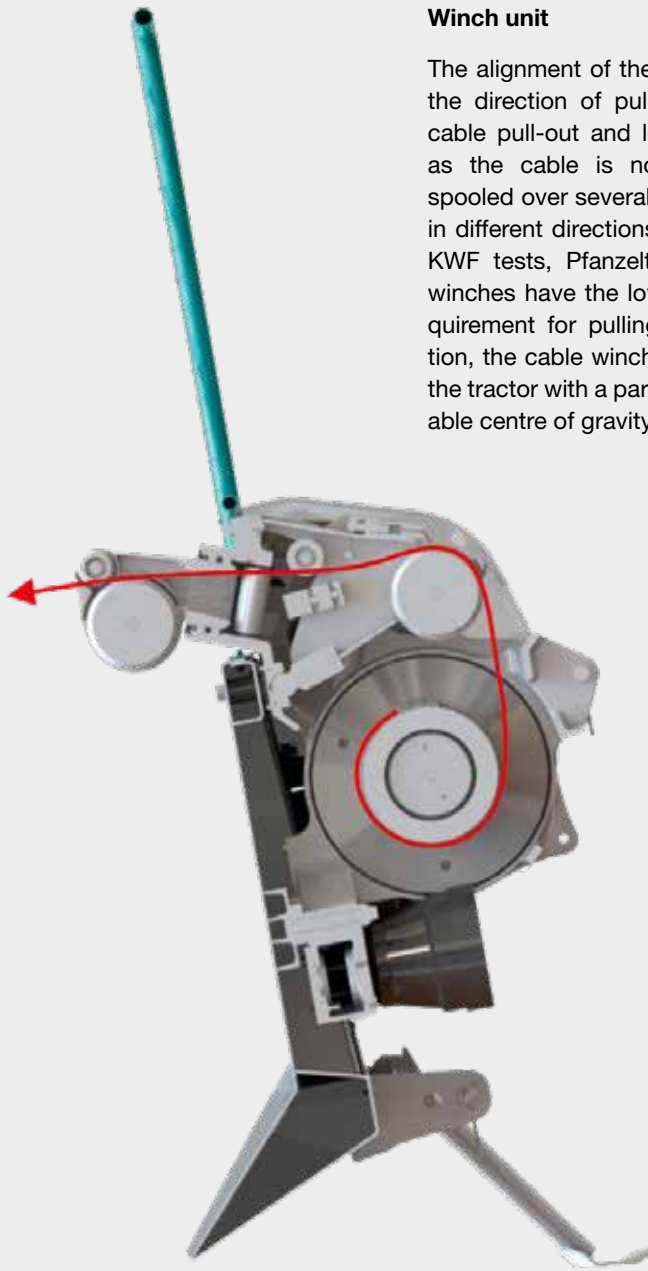
A reversing gear is optionally available for use at the front and rear of the tractor.

16

Lateral **stand legs** facilitate mounting and dismounting of the winch and secure the operator.

S-line geared cable winches

Technical details that will convince you



Winch unit

The alignment of the cable drum in the direction of pull enables easy cable pull-out and low cable wear as the cable is not wound and spooled over several cable sheaves in different directions. According to KWF tests, Pfanzelt geared cable winches have the lowest power requirement for pulling out. In addition, the cable winch is attached to the tractor with a particularly favourable centre of gravity.

Shield

Pfanzelt S-line geared cable winches have a particularly stable shield made of high-strength fine-grained steel, which is manufactured as a torsion box with high rigidity. Due to the wedge shape, lateral tensile forces can also be absorbed safely, stably, and durably. Side-operated parking supports ensure convenient attachment and detachment of the winch to the tractor and prevent accidents.

Transmission

The cable winch is driven via the tractor's power take-off shaft at a speed of 540, 750, or 1.000 rpm. From the cardan shaft, the driving force is transmitted via a spur gear to the precision worm gear in an oil bath. This ensures a very smooth operation and ensures long-term operational reliability.

Multi-disc sinter plate packs are used for the exact control of the braking and coupling process and for safe overlapping. The complete system is protected on the inside.





Lowest loss of tractive force

The use of a cable drum with a large drum core diameter guarantees a very low loss of tensile force from the lower to the upper cable layer. According to independent testing by KWF, the S-line cable winch has a maximum tractive force drop of 21% with a standard cable length. The low cable entry height allows easy and comfortable working without a deflection pulley.



Technology explained in detail.
www.pfanzelt.com

PPS controller

With the Pfanzelt precision control PPS which is unique on the market, the winch can be adapted to the respective forwarding situation. By preselection, the operator can quickly and easily adjust the overlap of clutch and brake. This offers maximum ease of use and maximum safety at work. The stage is preselected via the radio control.

Standard radio control

The S-line cable winches are equipped with a radio control system for safe, comfortable, and gentle working. The operator is thus not in the danger zone and can detect obstacles.

The safety update

The radio control decouples Pull and Release. The command Pull is now activated by a pushbutton.

In addition to the remote control, a ca-

ble controlled system with 5 m cable is included in the scope of delivery of the cable winch.

All functions at a glance

- Pull (via pushbutton)
- Release, short release (via rocker arm)
- stepless motor speed adjustment
- Motor start / stop
- Emergency OFF
- PPS - Changeover via radio



PTB - Automatic drum overrun brake (option)

When a tensioned cable is released, disorder on the drum is often the consequence. In such cases, the new automated trailing drum brake automatically brakes the drum and ensures proper cable winding. This guarantees easy, unproblematic pull-out of the cable.



Technology explained in detail.
www.pfanzelt.com



Cable infeed brake (option)

Always a tight rope when pulling in, even if the log starts to slip or the rope is pulled up loosely - this is possible with the Pfanzelt cable infeed brake. A cylinder presses the cable onto the brake block with a brake roller when it is pulled in. The cylinder force is dimensioned in such a way that the cable is only pressed onto the block when it is not subject to load. The brake opens completely when you pull it out.

Rope payout (option)

The Pfanzelt rope payout was developed to facilitate use. The decoiling device installed in the swivel arm of the cable distribution is mechanically driven and hydraulically switched. The cable is firmly pressed against the cable pulley over a large radius by several flexibly suspended pressure rollers. Due to the large contact surface, functionality is ensured despite contamination or cable damage.



Technology explained in detail.
www.pfanzelt.com



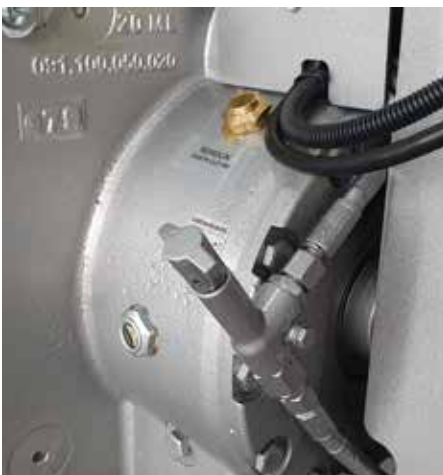
Stowage space

Specially adapted holders for chain-saw and fuel canister and two additional storage compartments, depending on the model, provide sufficient storage space for forestry work.



Active operator protection

The TUTUM anti-crushing device prevents hand crushing and injuries caused by cable damage. This protective mechanism is standard only with Pfanzelt products.



Load lowering valve

Pfanzelt S-line geared cable winches can be equipped with a load lowering valve. This enables a cable under tension to be released and lowered in a controlled manner. This is indispensable with felling for safety reasons. To avoid malfunctions, the winch operates with a separate oil circuit with filter unit, which is fed by a piston pump and controls all hydraulic functions.



Front attachment

Instead of the standard spur gear, this option is available as a spur gear with a second PTO stub for reversing the direction of rotation so that the winch can be attached at the front.



Pressure roller (option)

The spring-loaded pressure roller is recommended for long cable lengths. It helps to distribute the cable optimally across the entire cable drum width. If you choose the option cable distribution incl. infeed brake, it is supplied as standard equipment.

S-line geared cable winches

Technical specification

Model	S150	S160	S172
Pulling force of lower cable layer	50 kN	60 kN	72 kN
Pulling force of upper cable layer	40 kN	47 kN	56 kN
Standard cable length (highly compacted forestry cable with sliding hook)	10 mm dia. x 70 m	11 mm dia. x 70 m	12 mm dia. x 60 m
Profi forestry radio system	Radio system with toggle switch, pushbutton, and emergency stop button		
Pfanzelt precision control PPS	●	●	●
Shield width (Standard)	1,500 mm	1,500 mm	1,800 mm
Weight (without cable)	approx. 470 kg	approx. 490 kg	approx. 580 kg
Recommended tractor power	max. 40 kW	approx. 30 - 60 kW	approx. 40 - 90 kW

Range of accessories	S150	S160	S172
Cable distribution with cable infeed brake (incl. pressure roller)	○	○	○
Long cable package (incl. cable distribution with cable infeed brake)	○ 10 mm dia. x 110 m	○ 11 mm dia. x 100 m	○ 12 mm dia. x 90 m
Cable payout	○	○	○
PTB Automatic trailing drum brake	○	○	○
Load lowering valve	○	○	○
Spur gear for front attachment	○	○	○
Shield width 1,800 mm	–	○	●
Shield width 2,000 mm	–	○	○
Shield width 2,200 mm	–	○	○
Cable retrieval winch	○	○	○
Anti-tilt system	○	○	○

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

● Standard ○ Option – Not available

Start your configuration now.
configurator.pfanzelt.com

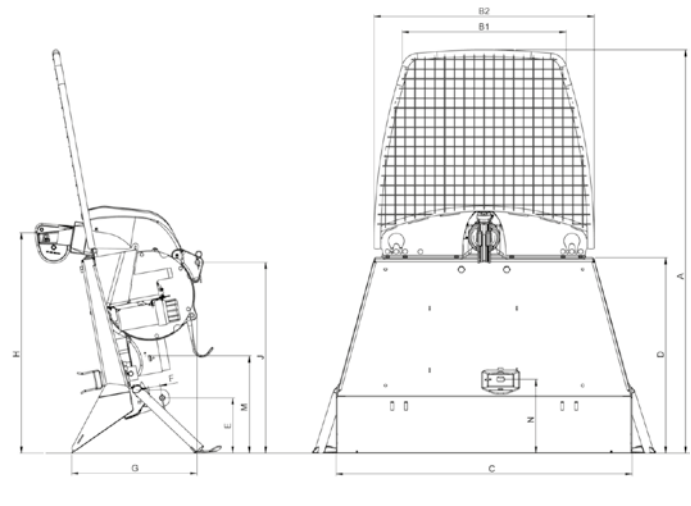


Dimensions (mm)	S150 ²	S160 (Shield 1,500 mm)	S160 (Shield from 1,800 mm)	S172
A	2,050 ²	2,050 ²	2,350	2,350
B1	830	830	950	950
B2	1,110	1,110	1,370	1,370
C	1,500 ²	1,500 ²	1,800 ¹	1,800 ¹
D	990	990	1,210	1,210
E	280	280	355	355
F	60	60	60	60
G	640	640	775	775
H	1,120	1,120	1,330	1,330
J	970	970	1,105	1,105
M	490	490	670	670
N	380	380	540	540

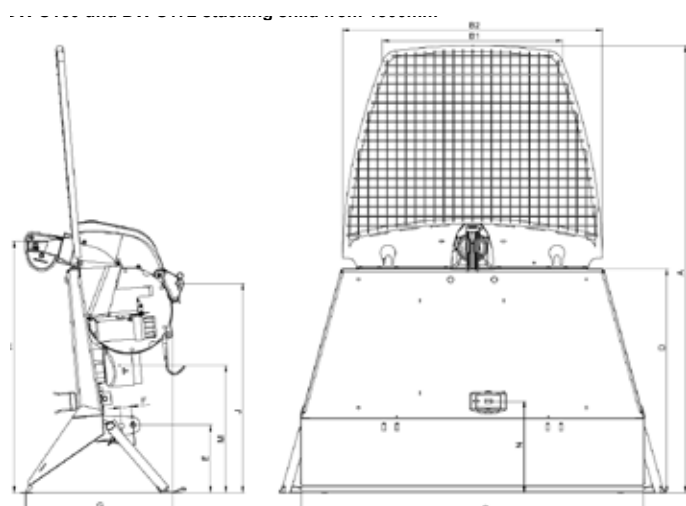
¹ Upon request: 2.000 mm, 2,200 mm, 2,400 mm

² The cable winches with a shield width of 1,500 mm are delivered with a protective grating of 2,050 mm height. Due to legal requirements, these winches are only permitted for tractors with a drive power of up to 40 kW.

S150 and S160 - Shield width 1,500 mm



S160 and S172 - Shield width from 1,800 mm





Profi geared cable winches

After more than 25 years on the market, the Pfanzenz Profi winch series has received a new design and new technology.

Ease of operation, ergonomics, and safety for user and vehicle were decisive factors in the further development of the successful series.

During the revision, great importance was attached to adopting features that have proven their worth over decades. Further developments were made, for example, in the optimisation of the hydraulic circuit for even more precise reaction times and more technical possibilities.

The external shape offers more protection for the tractor and greater working comfort. In addition to ergonomically arranged storage compartments, access for maintenance work has also been improved.

Heavy timber recovery in flat terrain or thinning in steep mountainous areas - the requirements for a professional geared cable winch differ depending on the area of application and the available technology.

Pfanzenz Profi geared cable winches consist of a variable modular system and can thus be optimally adapted to various operating conditions. The technology is the same for all Pfanzenz cable winches. The precision worm gear used in the winch unit and the multi-disc sinter plate packs guarantee maximum reliability and durability of the winch.

Technical specs ► Page 32



Convincing technical details:

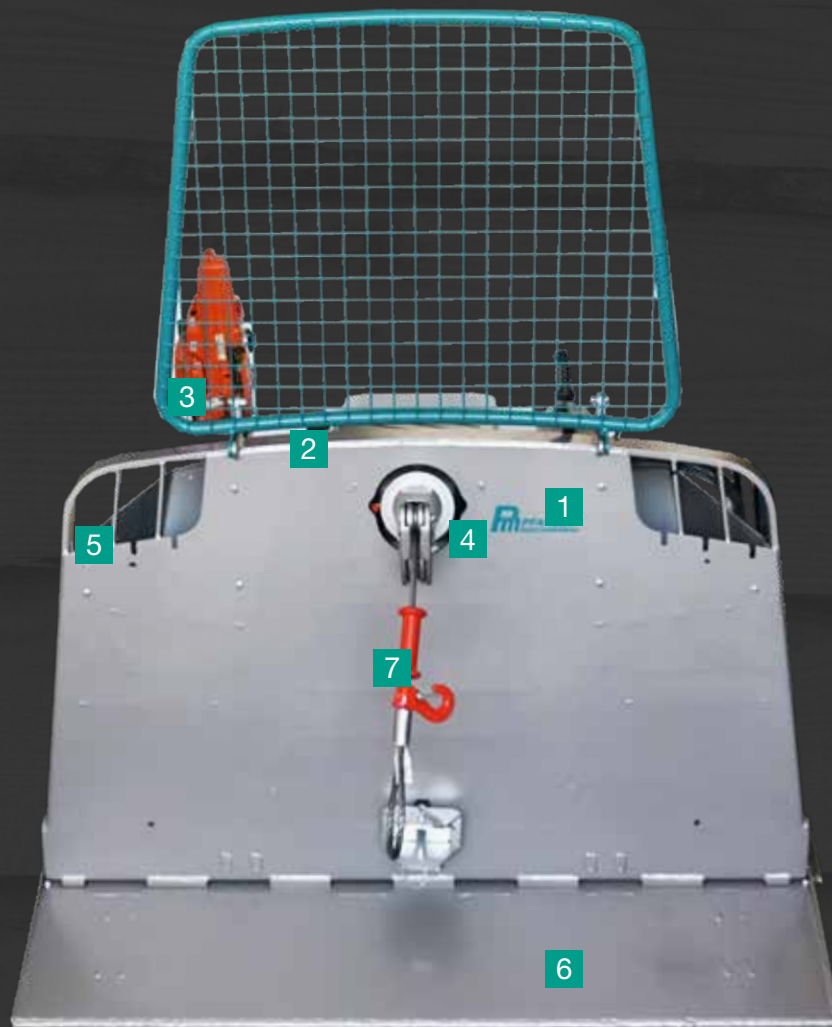
- Best tensile force ratios from the lower to the upper rope layer
- Constant pull winch models P163K, P173K, and 273K without loss of traction
- Wide rope drum for large rope capacity and low loss of traction
- Reliable power transmission via spur and worm gears running in an oil bath
- Exact control by a multiple disc brake, clutch, and PHS controller
- Hydraulic self-supply
- Standard equipment with cable distribution and cable in-feed brake
- Pfanzelt precision control PPS for adjusting the cable winch to the forwarding situation in three steps
- Large range of accessories: Rope distribution systems, folding shield



Profi cable winches live in action.
youtube.com/pfanzeltTV

Profi geared cable winches

Technical details at a glance:



1

The PHS system enables short reaction times and fast working due to a permanent hydraulic pressure.

2

All Pfanzelt cable winches are equipped as standard with a **Forestry radio system**.

3

Two **holders for fuel canister and chainsaw** are useful and keep order on the tractor.

4

The cable infeed reel with ball bearings guarantees cross pulls up to 90°. The low position saves a deflection roller.

5

Two **storage compartments** mounted on the side of the winch plate ensure order and are easy to reach.

6

Constructed of fine-grained steels, the **sturdy shield** is torsionally stiff and provides support if there is lateral pull.

7

Optimum protection against hand crushing in the event of operating errors is provided by the TUTUM crush protection pro.

8

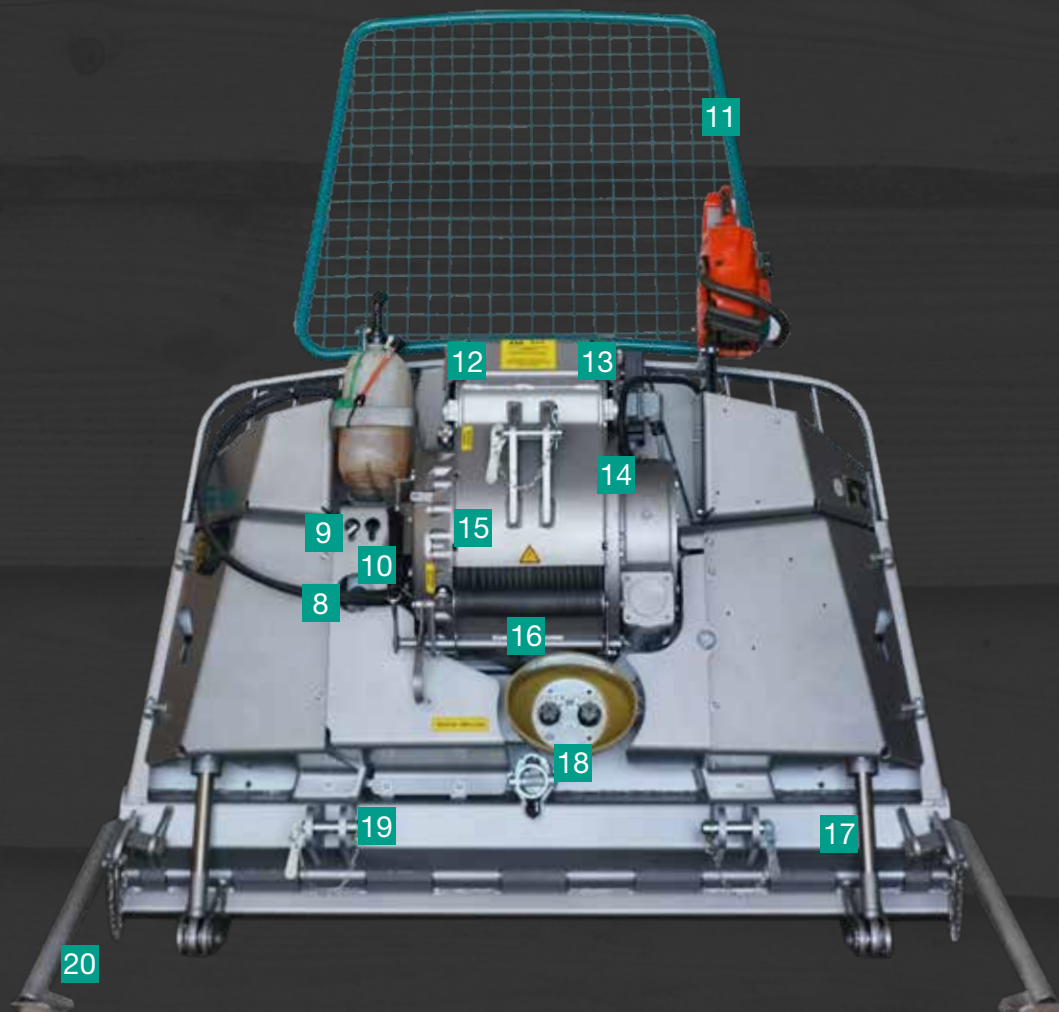
The hydraulic pressure can be checked quickly and easily on the standard pressure gauge.

9

The optionally available **Load lowering valve** allows the brake to be released in a controlled manner (optionally also by radio).

10

With the **Vario-Zug** option, the maximum pulling force can be adjusted to the given operating conditions.



11

The large and sturdy safety grille provides safety for the operator and protects the tractor from damage.

12

An optionally available cable payout facilitates the cable pullout and reduces cable wear.

13

Various cable distribution systems guarantee perfect cable distribution and low wear.

14

The standard PPS controller allows easy adjustment of the overlap of clutch and brake.

15

The wide cable drum creates space for long cable lengths and minimises the loss of traction to a maximum of 28 per cent.

16

The optionally available pressure roller improves cable distribution across the drum width on wide drums.

17

As an option, the forwarding shield can be supplied hydraulically foldable, which increases ground clearance.

18

A reversing gear is available as an option. With this the winch can also be mounted at the front.

19

Different mounting options for different categories of lower links allow an uncomplicated attachment.

20

Lateral **stand legs** facilitate mounting and dismounting of the winch and secure the operator.

Profi geared cable winches

Technical details that will convince you



Winch unit

When the cable drum is aligned in the direction of pull, the cable can be pulled out very easily with low cable wear as it is not spooled and wound over several rope sheaves to different directions. According to KWF tests, Pfanzelt geared cable winches have the lowest power requirement for pulling out. In addition, the cable winch is mounted on the tractor with a particularly favourable centre of gravity. The use of a cable drum with a large drum

core diameter guarantees a very low loss of tensile force from the lower to the upper cable layer. According to independent testing by the KWF, the Pfanzelt cable winch has a maximum drop in tractive force of only 28 percent with standard cable length.

The low cable infeed height allows easy and comfortable working without a deflection pulley.

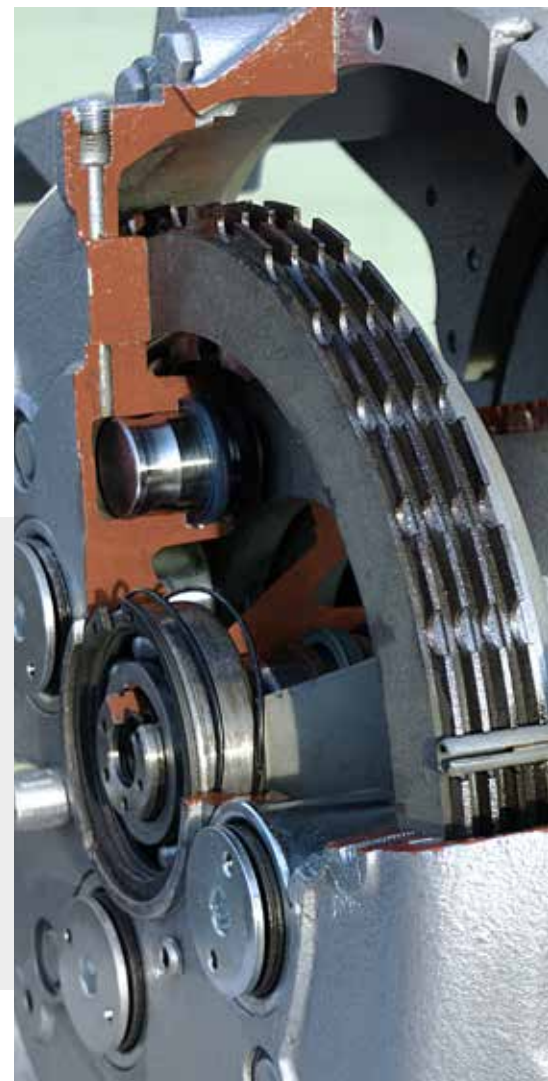
Drive

The cable winch is driven via the tractor's power take-off shaft at a speed of 540, 750, or 1.000 rpm. From the cardan shaft, the driving force is transmitted by a spur gear to the precision worm gear in an oil bath. This ensures very smooth operation and long-term operational reliability.

For precise control of the braking and clutching process and safe overlap,

disc packs with organic pads are used. The complete system is protected on the inside.

The PHS system of Pfanzelt Profi geared winches enables permanent hydraulic pressure in the system and thus short reaction times even after several switching operations.





Shield

Pfanzelt gear cable winches have a particularly stable shield made of high-strength fine-grained steel, which is manufactured as a torsion box with high torsional rigidity. Due to the wedge shape, lateral tensile forces can also be absorbed safely, stably, and permanently. Stand legs which can be extended towards the sides ensure easy mounting and dismounting and prevent accidents.

The shield can also be designed as a **hydraulically folding shield**. This provides greater ground clearance and space for carrying logs.



PPS controller

With the Pfanzelt precision control PPS which is unique on the market, the winch can be adapted to the respective forwarding situation. By pre-selection, the operator can quickly and easily adjust the overlap of clutch and brake. This offers maximum ease of use and maximum safety at work.

Technology explained in detail.
www.pfanzelt.com



Stowage space

Specially adapted holders for the chainsaw and fuel canister and two additional, large storage compartments provide sufficient storage space for forestry work.

Cable distribution with infeed brake

Always a tight rope when pulling in, even if the log starts to slip or the rope is pulled up loosely - this is made possible by the Pfanzelt rope pull-in brake. A cylinder presses the cable onto the brake block with a brake roller when it is pulled in. The force of the cylinder is dimensioned in such a way that the cable is only pressed onto the block when unloaded. The brake opens completely when you pull it out.

Position 1

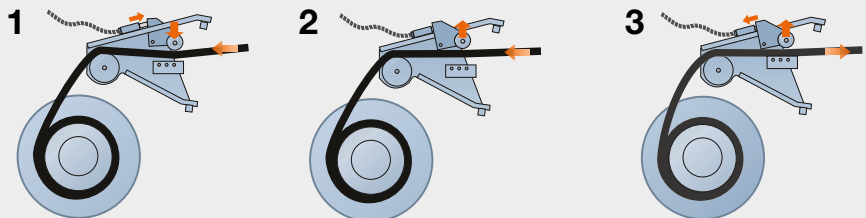
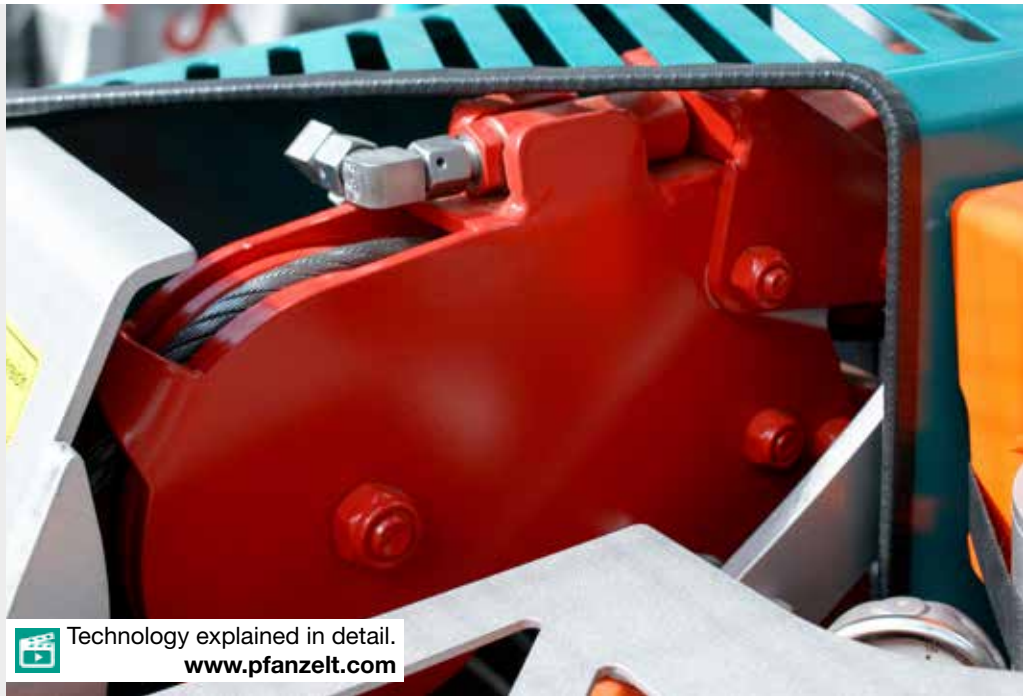
By activating the function *Pulling*, the rope infeed brake is also activated.

Position 2

As soon as the rope is fed in under load, the cable infeed brake opens.

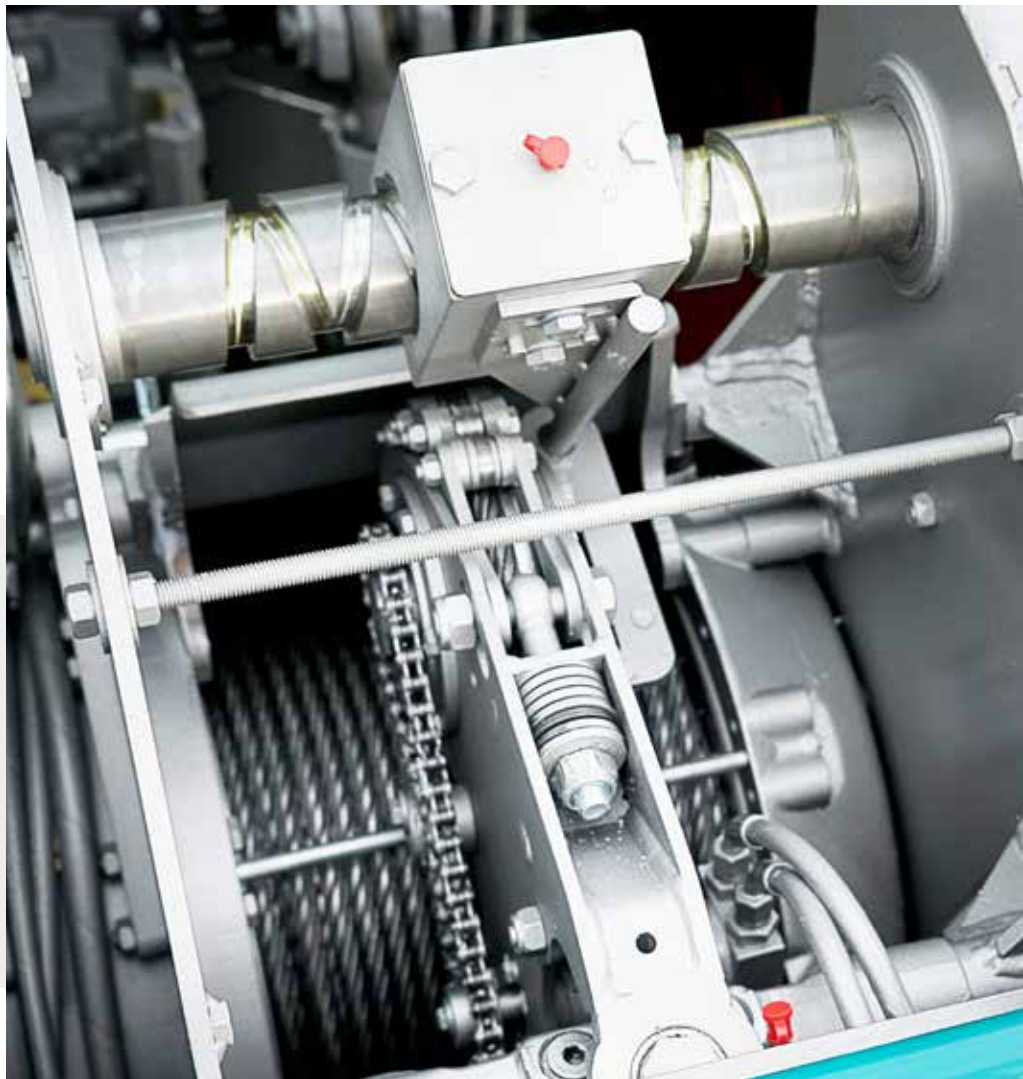
Position 3

When the cable is pulled out, the cable infeed brake opens completely and thus does not obstruct the cable pull-out.



Cable distribution via cross spindle

The positively guided cable distribution via a cross spindle offers an optimum winding result even with wide drums and long cable lengths. The positive guide enables trouble-free cable winding even on slopes.





Technology explained in detail.
www.pfanzelt.com

Cable payout

The Pfanzelt cable payout was developed to increase the ease of use and improve the cable wrapping quality. The unwinding device built into the swivel arm of the cable distribution is hydraulically driven and electrically switched. As soon as rope ejection is activated, the rope is pressed firmly against the rope pulley over a large radius by several flexibly suspended pressure rollers. Due to the special design with a large contact surface of the pressure rollers on the cable, the functionality is ensured despite impurities or cable damage.



Offset gear

Pfanzelt cable winches with a wide cable drum can be equipped with an offset gear for a central drive (standard equipment on some models). This is also recommended for tractors with off-centre PTO shaft union. An offset gearbox with reversal of the direction of rotation for front and rear mounting is also possible.



Constant tractive force (P163K, P173K, and P273K)

The Pfanzelt winch models P163K, P173K and P273K have a constant pulling force. This means that the winch always operates with the same force when pulling in. The usual loss of tractive force is excluded.

maximum pulling force.

This offers a higher safety level and greater ease of use, as thinner forest cables can be used, for example. The operator can thus always work with the

Radio control

In addition to the usual functions (pull, short release, release, continuous release, stepless engine throttle adjustment), the standard modern radio system also supports engine start/stop and an emergency call system on request.

The cable winch is equipped with HBC radio control as standard.



Active operator protection

The TUTUM anti-crushing device prevents hand crushing and injuries caused by cable damage. This protective mechanism is standard only with Pfanzelt products.





Technology explained in detail.
www.pfanzelt.com

Retrieval winch for use on steep slopes

The auxiliary winch for Pfanzelt forestry winches facilitates roping in challenging terrain. The procedure is simple and effective. It is controlled via the winch radio or a stand-alone radio system.

That is convincing:

- Pulling force: 400 kg
- Cable length: 240 m, plastic rope
- Freewheel for fast rope payout during the arrangement
- Automatic unwinding when retracting the forwarding cable
- Rope infeed brake
- Removable rope drum for easy removal of the material in between
- Incl. deflection pulley, tree strap

Quickly assembled and ready for use

1. Connect the end of the very light auxiliary rope to the pull rope.
2. Activate the freewheel for easy pull-out of the auxiliary rope.
3. Attach the deflection pulley at the end of the ropeway to a tree.
4. Hook the auxiliary rope and allow the pull cable to extend.

Retrofitting is possible.



Profi geared cable winches

Technical specification

Single drum cable winches	P163K	P172 SPECIAL OFFER	P173K	P186 SPECIAL OFFER	P1102
Pulling force of lower cable layer	61 kN	72 kN	72 kN	86 kN	102 kN
Pulling force of upper cable layer	61 kN	56 kN	72 kN	62 kN	78 kN
Constant tension	•	–	•	–	–
Medium cable speed at 540 rpm	0.43 m/s	0.57 m/s	0.43 m/s	0.43 m/s	0.43 m/s
at 750 rpm	0.60 m/s	0.80 m/s	0.60 m/s	0.60 m/s	0.60 m/s
at 1,000 rpm	0.80 m/s	1.05 m/s	0.80 m/s	0.80 m/s	0.80 m/s
Maximum cable capacity	11 mm dia./174 m	12 mm dia./138 m	12 mm dia./138 m	13 mm dia./158 m	14 mm dia./121 m
Shield width (Standard)	1,800 mm	1,800 mm	2,000 mm	1,800 mm	1,800 mm
Three-point category	1 and 2	1 and 2	2 and 3	2 and 3	2 and 3
Control	Electrical pushbutton control with wet armature solenoid valve				
Drive	Mechanically via spur gear in oil bath				
Clutch	Multi-disc sinter plate clutch, self-adjusting				
Brake	Multi-disc lamella coverings				
Radio system	HBC Patrol T	HBC Patrol T	HBC Patrol T	HBC Patrol T	HBC Patrol T
mech. cable distribution	•	•	•	•	•
Rope infeed brake	•	•	•	•	•
PHS control	•	•	•	•	•
Pfanzelt precision control PPS	•	•	•	•	•
Cable payout	○	•	○	•	○
Safety guard (per German UVV.)	•	•	•	•	•
Cardan shaft	•	•	•	•	•
Drive centered	•	•	•	•	•
Weight (approx., without cable)	616 kg	625 kg	650 kg	645 kg	650 kg
Recommended tractor power	approx. 40-90 kW	approx. 40-90 kW	approx. 70 - 120 kW	approx. 55 - 100 kW	approx. 70 - 120 kW

Range of accessories	P163K	P172 SPECIAL OFFER	P173K	P186 SPECIAL OFFER	P1102
Shield widths	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm
Hydraulic folding shield	○	○	○	○	○
Proportional brake control	○	○	○	○	○
Vario-Zug: Adjustable pulling force	–	○	–	○	○
Force-guided rope winding via cross spindle	–	–	–	○	○
Cable payout	○	•	○	•	○
Reversing gear for front mounting	○	○	○	○	○
Cable retrieval winch	○	○	○	○	○
Anti-tilt system	○	○	○	○	○

• Standard ○ Option – Not available

Start your configuration now.
configurator.pfanzelt.com



Double drum winches	P260 SPECIAL OFFER	P272 Special offer	P273K	P285	P2102
Pulling force of lower cable layer	2 x 60 kN	2 x 72 kN	2 x 72 kN	2 x 85 kN	2 x 102 kN
Pulling force of upper cable layer	2 x 42 kN	2 x 58 kN	2 x 72 kN	2 x 61 kN	2 x 78 kN
Constant tension	–	–	•	–	–
Medium cable speed at 540 rpm	0.43 m/s	0.43 m/s	0.43 m/s	0.43 m/s	0.43 m/s
at 750 rpm	0.60 m/s	0.60 m/s	0.60 m/s	0.60 m/s	0.60 m/s
at 1,000 rpm	0.80 m/s	0.80 m/s	0.80 m/s	0.80 m/s	0.80 m/s
Maximum cable capacity	2 x Ø 11 mm/ 88 m	2 x Ø 12 mm/ 102 m	2 x Ø 12 mm/ 138 m	2 x Ø 13 mm/ 129 m	2 x Ø 14 mm/ 100 m
Shield width (Standard)	1,800 mm	2,000 mm	2,000 mm	2,000 mm	2,000 mm
Three-point category	1 and 2	2 and 3	2 and 3	2 and 3	2 and 3
Control	Electrical pushbutton control with wet armature solenoid valve				
Drive	Mechanically via spur gear in oil bath				
Clutch	Multi-disc sinter plate clutch, self-adjusting				
Brake	Multi-disc lamella coverings				
Radio equipment	HBC Patrol D	HBC Patrol D	HBC Patrol D	HBC Patrol D	HBC Patrol D
Mech. cable distribution	○	•	•	•	•
Rope infeed brake	○	•	•	•	•
PHS control	–	•	•	•	•
Pfanzelt precision control PPS	–	•	•	•	•
Safety guard (per German UVV.)	•	•	•	•	•
Cardan shaft	•	•	•	•	•
Drive centered	•	•	•	•	•
Weight (approx., without cable)	590 kg	795 kg	850 kg	850 kg	850 kg
Recommended tractor power	approx. 55 - 100 kW	approx. 70 - 120 kW	approx. 100 - 150 kW	approx. 100 - 150 kW	approx. 100 - 150 kW

Range of accessories	P260 SPECIAL OFFER	P272 SPECIAL OFFER	P273K	P285	P2102
Shield widths	up to 2,200 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm	up to 2,400 mm
Hydraulic folding shield	○	○	○	○	○
Proportional brake control	–	○	○	○	○
Vario-Zug: Adjustable pulling force	–	○	–	○	○
Cable payout	–	○	○	○	○
Reversing gear for front mounting	○	○	○	○	○
Cable retrieval winch	○	○	○	○	○
Anti-tilt system	○	○	○	○	○

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

Profi geared cable winches

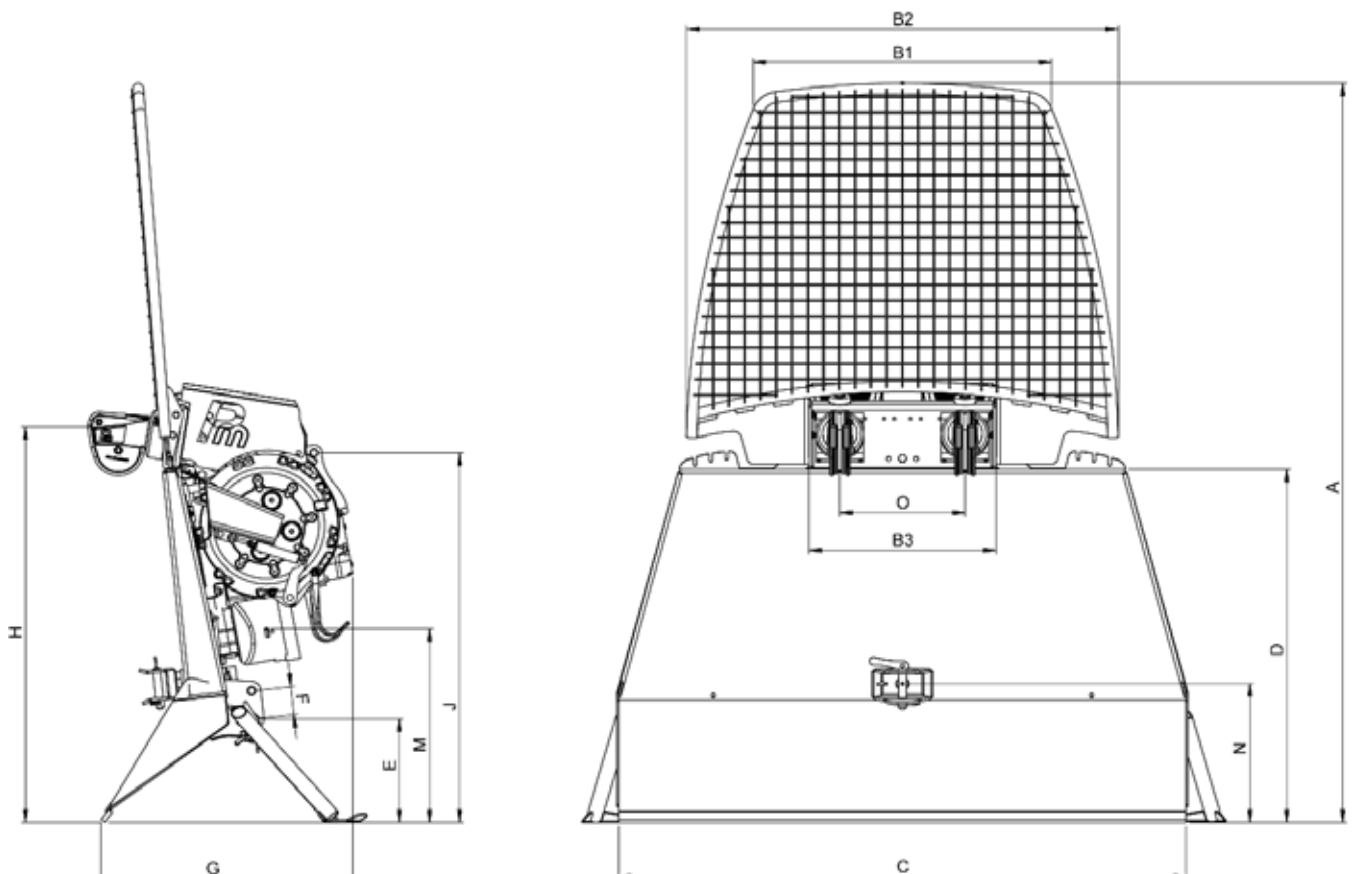
Dimensions

Model	P163K	P172	P173K	P186	P1102	P260	P272	P273K	P285	P2102
A (mm)	2,360	2,360	2,360	2,360	2,360	2,340	2,360	2,360	2,360	2,360
B1 (mm)	950	950	950	950	950	950	950	950	950	950
B2 (mm)	1,150	1,150	1,150	1,150	1,150	1,370	1,150	1,150	1,150	1,150
B3 (mm)	---	---	---	---	---	505	---	---	---	---
C ¹ (mm)	1,800	2,000	2,000	1,800	1,800	1,800	2,000	2,000	2,000	2,000
D (mm)	1,440	1,440	1,440	1,440	1,440	1,120	1,430	1,430	1,430	1,430
E (mm)	350	350	350	350	350	330	350	350	350	350
F (mm)	60	60	60	60	60	90	60	60	60	60
G (mm)	830	830	830	830	830	800	840	865	840	865
H (mm)	1,290	1,290	1,290	1,290	1,290	1,250	1,285	1,285	1,285	1,285
J (mm)	1,100	1,100	1,100	1,100	1,100	1,170	1,180	1,180	1,180	1,180
K (mm)	60	60	60	60	60	---	---	---	---	---
L (mm)	100	100	100	100	100	---	---	---	---	---
M (mm)	600 ²	600 ²	600 ²	600 ²	600 ²	610	600	600	600	600
N (mm)	455	455	455	455	455	440	450	450	450	450
O (mm)	---	---	---	---	---	310	370	435	435	435

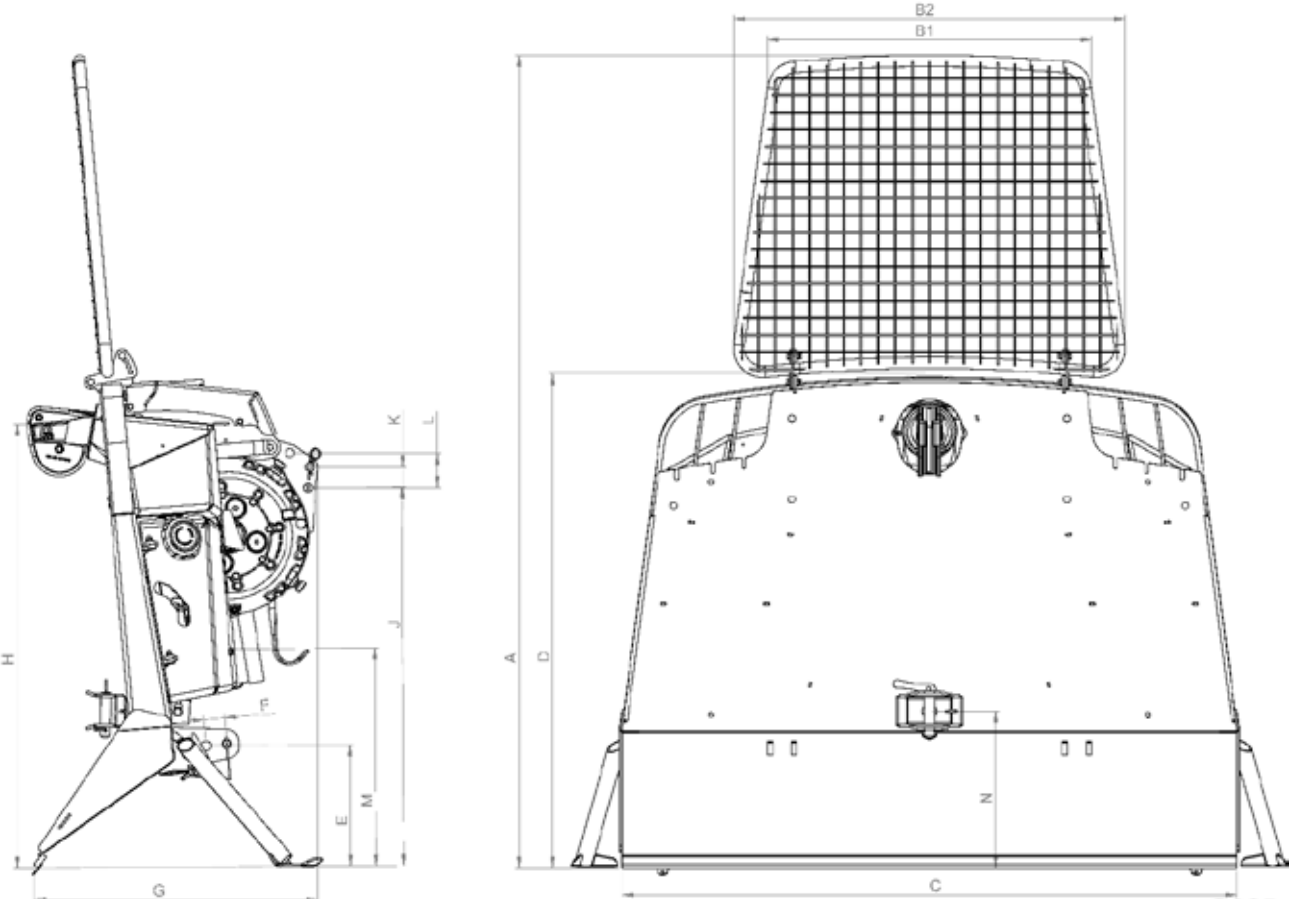
¹ for standard shield width

² with optionally available angled worm gear unit deviating dimensions

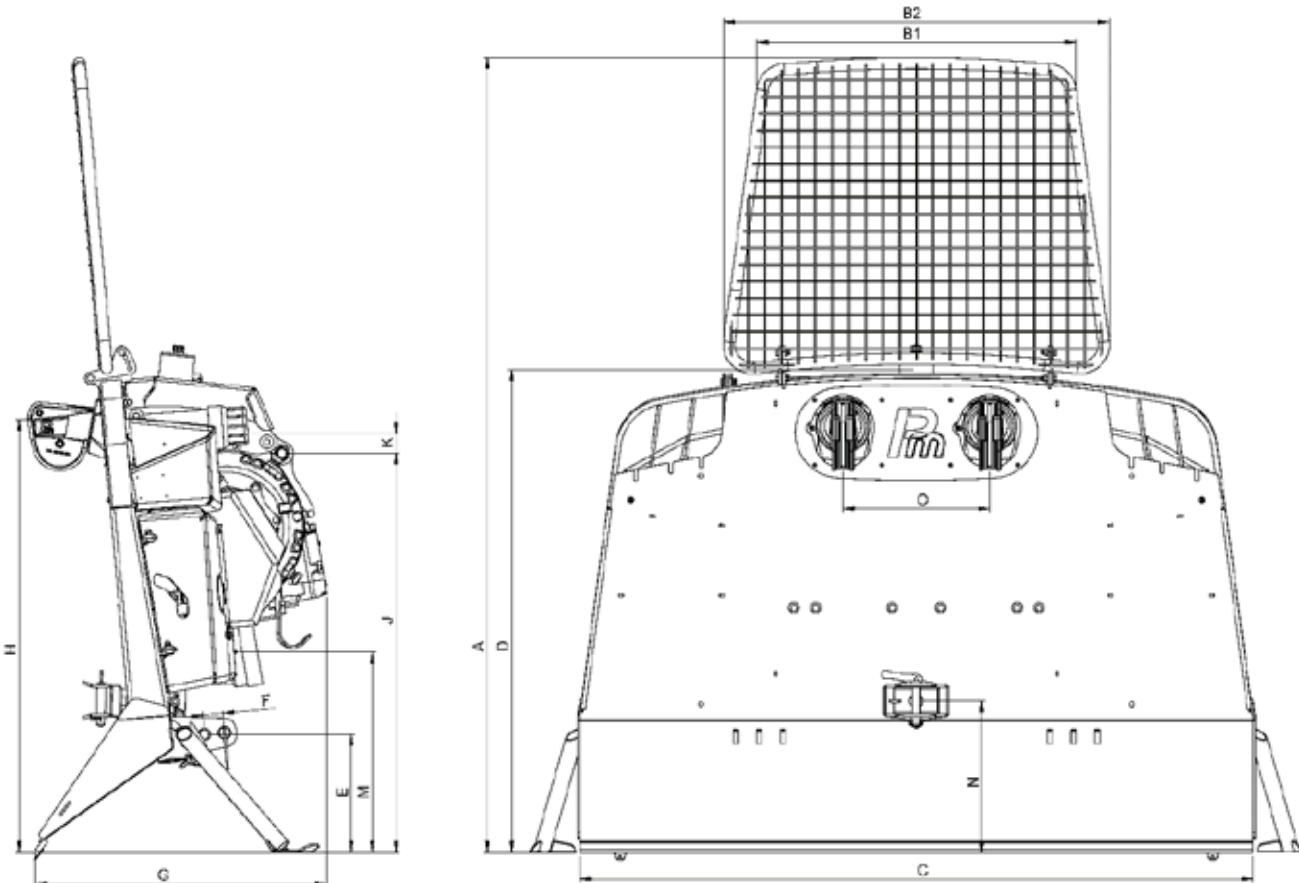
P260



P163K, P172, P173K, P186, P1102



P272, P273K, P285, P2102





Pluggable and fixed winches

Pfanzelt's pluggable and fixed rope winches are the proper tools for commercial forwarding companies. One reason for this is the installation of the winch and the mountain support on a console, which means that the tractor remains largely free of loads when roping.

Pfanzelt's pluggable cable winches consist of a variable modular system and can thus be optimally adapted to various common tractors. The technology is the same. Guarantees for maximum reliability and long service life of the winch are both the precision worm gear used in the winch unit and the multi-disc sinter plate packs.

Depending on the requirements of the operator, pluggable and fixed-mounted cable winches are available with different pulling forces, shield widths, and cable capacities.

Convincing technical details:

- Best tensile force ratios from the lower to the upper rope layer
- Best installation position despite mounted power lift
- Large lifting height of the support post (optionally with automatic trailer coupling)
- Safe power transmission via spur and worm gear units running in an oil bath
- Adjustable rope inlet (mechanical or hydraulic)

Technical specs ► Page 38



Pluggable and fixed winches

Technical specification

Pluggable attachment	SW0258	SW0306	SW0308
Pulling force of lower cable layer	80 kN	2x 60 kN	2x 80 kN
Pulling force of upper cable layer	56 kN	2x 42 kN	2x 56 kN
Cable capacity	13 mm dia. x 80 m	2 x 11 mm dia. x 100 m	2 x 13 mm dia. x 80 m
Shield width	1,800 mm	2,000 mm	2,100 mm
Own oil supply via radial piston pump with suction filter	•	•	•
Multi-disc lamella coupling Sintered metal, self-adjusting	•	•	•
Multi-disc lamella brake	•	•	•
Forestry radio system (HBC patrol)	•	•	•
Lift-out height	approx. 850 mm	approx. 850 mm	approx. 850 mm
Underreach	approx. 200 mm	approx. 200 mm	approx. 200 mm
Lifting capacity	approx. 3.5 t	approx. 3.5 t	approx. 3.5 t

• Standard ○ Option – Not available

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

Assembly and disassembly

Thanks to well thought-out technology, it only takes a few minutes to attach or remove the pluggable cable winch, or the combination of cable winch and loading crane. The tractor is therefore also available for other applications at short notice.



Start your configuration now.
configurator.pfanzelt.com





Large variety of types and wide range of accessories

Pfanzenelt's product range offers different solutions for every application and all common tractor types. In addition to the listed plug-in and fixed-mounted cable winches, other single and double-drum cable winches are available with various cable capacities and pulling forces.

Please contact our factory representatives for information on the types and the range of accessories.

Solution concepts for different applications







Aggregates and vehicle winches

Pfanzelt's modular series for vehicle winch systems offer cable winches with lifting and pulling forces between 30 and 160 kN. Different winch drives are available for different applications, all of which are largely maintenance and wear-free.

Both adaptable control and safety systems as well as different rope spooling systems can be combined for changing requirements in terms of operating comfort, safety in use, and the different carrier vehicles.

In addition, the cable winch can be equipped with useful accessories such as cable payout systems, electronic pulling force monitoring, or radio control systems.

The versatility of the product range extends from standard winches such as recovery cable winches for fire brigades and technical relief organisations, to customer-specific system solutions.

Modular system

Pfanzelt's cable winch units can be individually assembled using a modular system.

The high flexibility applies both to the unit itself and the design of the individual components - for example, the drive can be provided by a hydraulic motor or a mechanical connection.

In addition, various drum widths, adapted to the required rope length, are available. These can also be combined.





Typical areas of application:

- Rescue vehicles
- Fire-fighting, set-up, and equipment trolleys
- Military vehicles
- Trucks for construction, landscape and water management
- Oil field vehicles





Recovery winch MySelf

Both in agriculture and forestry, as well as in environmental care, a winch is often needed to recover vehicles or equipment. The front recovery winch MySelf was designed exactly for this purpose. A hydraulically controlled cable winch of a simple construction for the quick coupling triangle. This means that, in the event of a rescue operation, it is installed and removed in no time at all.



Front winch MySelf	BW 0105	BW 0105 for front panel shield
Pulling force of lower cable layer	50 kN	50 kN
Pulling force of upper cable layer	35 kN	35 kN
Worm gear unit in oil bath	●	●
Special forestry cable, highly compacted	12 mm dia. x 50 m	12 mm dia. x 50 m
Coupling for quick cable pull-out	Jaw clutch	Jaw clutch
Average rope speed at 80 l/min	10.1 m/ min	10.1 m/ min
Shield width	1,010 mm	1,600 mm
Weight (incl. rope)	approx. 200 kg	approx. 1.000 kg

● Standard ○ Option – Not available

To be observed:

To determine the optimum cable length, deduct 10 % from the maximum rope capacity.

Important:

Observe the legally prescribed breaking load for the cable equipment of the winch.

Forwarding trailers

There are three different product lines of Pfanzelt forwarding trailers - depending on the existing towing vehicle, the desired area of application, and the material to be loaded.



S-line forwarding trailers

The model S6 is the starting model into Pfanzelt's forwarding trailer programme. A compact forwarding trailer with considerable power.

The second model in the S-line series is compact but nevertheless a small power pack. It was designed for the use by private forest owners and semi-professional operations. The S-line forwarding trailers are agile and productive.

► Page 52



6 - 8 t



6.3 - 6.7 m

Profi forwarding trailers

With its Profi forwarding trailer series, Pfanzelt offers the most extensive forwarding trailer range on the market. With its special modular design, the user can put together the forwarding trailer according to his own requirements and choose between various weight classes, brake systems, loading cranes and an extensive range of accessories.

► Page 62



9 - 13 t



6.3 - 10 m



logLINE forwarding trailers

The logLINE range of forwarding trailers completes Pfanzenlogistik's higher range of forwarding trailers with three top models. Uncompromising and powerful professional technology characterise these models.

► Page 76



14 - 17 t



7.7 - 10 m

Forwarding trailers - areas of application

Forwarding in standing timber



Forwarding in standing timber

Forwarding in standing timber as well as the transport on the forestry road sets high demands on the forwarding trailer technology. User-friendly and safe work is guaranteed not only by the swivel drawbar with large steering angle and two powerful swivel cylinders, but also by the bogie axle with large climbing capacity.



Round bale loading body

For simple and secure transport of round bales, the Pfanzelt accessory range offers the round bale loading bridge.



On-road transport



On-road transport

Transports on the roads are also demanding for the technology and safety of the forwarding trailer. All Pfanzelt forwarding trailers are optionally available with a road licence. Depending on the equipment, a CoC document is available for 25 km/h.



Transport systems

Various floor pan systems enable the flexible use of ergonomically optimised forwarding trailers. The Pfanzelt transport systems thus enable easy transport of branches and brush material in forests and on the road. Especially for road transport, numerous safety measures can be omitted.

If this is permanently mounted on the vehicle, this protects the tyres from damage by the gripper.





Profi forwarding trailer P13

In a major comparison test, the "Landwirt" journal, together with BLT Wieselburg, FAST Traunkirchen at Waldcampus Austria, SVS (Social Insurance for the Self-Employed), and AUVA, have put 10 forwarding trailers under the microscope.

The test verdict of the independent inspectors

"The well thought-out - The Pfanzelt trailer is characterised by a well thought-out overall concept. It is the only test candidate without a negative evaluation."

- + Flexible stanchion positions
- + Parking position for the crane
- + Large bogie swing angle
- + Crane acceptance test is standard

The conclusion of the testers

"Pfanzelt's trailer was "not noticable" throughout the test. It passed all the tests assigned to it brilliantly. Our test candidate is also inconspicuous in terms of acquisition costs [...] Probably the Pfanzelt and the Schlang & Reichart, which comes from the same company, are among the trailers with the best price-performance ratio."

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





S-line forwarding trailers

The Pfanztel S-line forwarding trailers are especially designed for use by private forest owners and semi-professional operations. The reliability of the technology has the same priority as for professional. However, the job description is different.

The Pfanztel S-line forwarding trailer is especially designed for service with private wood owners and semiprofessional operations.

An important criterion when buying a forwarding trailer is the safety equipment. Pfanztel forwarding trailers offer all safety features required by KWF, FPA and the trade association.

Types

Forwarding trailer S6

The model S6 is the starting model into Pfanztel's forwarding trailer programme. A compact forwarding trailer with considerable power.

Forwarding trailer S8

For larger tasks in the farm forest, Pfanztel will present the S8 model in 2022. It has a longer crane with higher lifting capacity and an increased loading volume.

Technical details ► Page 60



Convincing technical details:

- Payload in forest 6 t
- Double frame made of special steel
- Modern and powerful forestry cranes
- Independent hydraulic oil supply with protected piston pump installed in the draw bar (optional)
- Accessories for forestry professionals: various braking systems, cuttings tray, crane cable winch



S-line forwarding trailers live in action.
youtube.com/pfanzeltTV

S-line forwarding trailers

Technical details at a glance:



1

Ergonomic operation via cross-lever control.

2

The **hydraulic hoses** are run in a **hose shaft** to protect the user at the operating console.

3

The cylinder is mounted on top to protect it from damage during loading.

4

A carefully conceived system of **concealed hoses** over the entire crane minimises downtime.

5

The **Power Link System** guarantees manoeuvrable crane work, more reach and lifting power.

6

The **telescopic cylinder** is internally mounted, protecting it from damage.

7

Folding lighting units protect lights against damage in standing timber.

8

The different braking systems offer safety when driving in the forest and on the road.

9

Screwed double frames prevent fatigue cracks which may occur in welded constructions.

10

Massive and robust **front grilles** for optimum safety during crane operation and when driving on public roads.

11

Space saving **A-column stabilisers** with concealed cylinders ensure a high degree of stability when parking.

12

Tidy and safe, the chainsaw can be stored in a holder. Canisters and small materials have their place in a storage compartment.

13

A **one-man system** for **mechanically locking** the steerable draw bar when driving on public roads.

14

Steering drawbar with protected axial piston pump.

15

Sturdy and powerful **Two-cylinder slewing gear** with high slewing torque.

16

Oil storage tank protected from damage and installed without restriction of visibility.

17

Operating console with non-slip standing plate, ladder and back support for optimum working safety.

S-line forwarding trailers

Technical details that will convince you

Double frame

The frame of the S-line forwarding trailer is constructed as a bolted double tube frame. In this way, the loading bed can be used flexibly for different trunk lengths. Metre wood can be loaded at right-angles without conversion.

As soon as the two additionally available stanchions are mounted in the rear, the forwarding trailer can also be loaded with metre-wood bundles, or loose metre wood diagonally to the direction of travel.



High-sided floor pan

Optionally, the forwarding trailer can also be equipped with a tray for cut material. It consists of two parts and can be mounted quickly and easily with the crane. The hot-dip galvanised high-sided floor pan is designed for transporting branch and cut material.



DUO tipper bed

The “DUO” equipment variant offers a hydraulically tilting dump box for the S-line forwarding trailer. This makes the S8 unique and an all-rounder on the yard, whether it's for bulk material, timber bundles or log transport.”





Steerable draw bar

The S-line forwarding trailers have a swivelling drawbar with high steering angle as standard. Two powerful hydraulic cylinders facilitate operation even when the laden forwarding trailer is turned against the slope. The steerable draw bar can be mechanically locked when driving on roads.



Brake system

The S-line forwarding trailers are equipped with a hydraulic 2-wheel braking system as standard.

Bogie axle

The bogie axle provides stability during crane operation and the greatest possible off-road mobility when driving, especially in forwarding tracks. The even distribution of the ground pressure is another big advantage.



Stowage space

Important work equipment such as petrol cans or tension belts are always at hand and can be transported safely. A chainsaw holder is also standard.



Stabilisers

Protected from damage when loading, the cylinders of the A-pillar support are installed inside. The telescopic structure of the stabilisers ensures secure support even in thick stands of timber and on slopes. It also makes it possible to drive close to the polter and thus utilise the full lifting power of the loader crane.

Hose routing

Protected routing of the hydraulic hoses from the control block to the tip of the crane ensures low down-times and maxises safety at work.

Pfanzelt's highest priority is to ensure that the hydraulic hoses are secured over the entire crane or installed internally.



Crane geometry

The toggle system on the crane – also known as the power link system – between the main boom and folding boom ensures optimum crane geometry for loading work. Ergonomic loading directly onto the front grille is also thus made possible. Protected from damage when loading the forwarding trailer, both hydraulic cylinders are located above the main arm. It also ensures constant force, greater reach and a higher working speed.

Ergonomic operation

The Pfanzelt operating station mounted as standard on the draw bar provides a well organised work station outside the hazard zone with an optimum view for safety purposes of the loading crane and the surrounding area. The crane control, which has two cross levers with an electric switch each, enables easy and comfortable crane operation.





Crane winch

The Pfanzelt crane cable winch for the S6 and S8 offers more comfort and safety in use.

- Tractive force 1.5 t, cable capacity 50 m
- Professional forestry radio system
- Mechanical trailing drum brake
- Freewheel for fast and easy cable pull-out



LED lighting with indicator monitoring

The lighting system using LED lights is integrated in the frame. To protect the lights when working in the forest, these can be folded in.

S-line forwarding trailers

Technical specification

Forwarding trailers	S6	S8
Frame structure	bolted double frame	
Bogie axle	•	•
Front grille area	1.40 m ²	1.79 m ²
Long flat bed	3,500 mm	3,710 mm
Hydraulic Pivoting drawbar with 2 cylinders	•	•
Stanchion pairs	3 + 1	3 + 1
Payload on private roads	6 t	6 t
Permissible gross weight on public roads	up to 6 t	up to 8 t
Empty weight with crane	approx. 1.7 t	approx. 2.2 t
Lighting	according to StVZO, integrated in frame, retractable	
Operating station on draw bar	•	•
Braking system	2-Wheel hydraulic brake	
Brake surface	300x60 mm, 6-hole rim	300x60 mm, 6-hole rim
Tyres	380/55-17" 14 PR, grooved profile	
Rim with valve protection	•	•
Loading crane	LK 2764	LK 3767
Reach	6,340 mm	6,700 mm
Lifting torque net	27 kNm	35 kNm
Pivoting torque	8.1 kNm	11.9 kNm
Crane control	8-fold mechanical, 2 cross levers with 2 electrical functions (rocker) for gripper and telescope	
Double clam shell gripper	• Pm 150	• Pm 230
Crane inspection and initial acceptance, incl. inspection logbook	•	•
Range of accessories	S6	S8
Hydraulics		
Own oil supply (axial piston pump)	○ (63 litres)	○ (63 litres)
Tyres		
480/45-17" groove profile with valve protection	–	○
Braking and drive systems		
4-wheel hydraulic brake	–	○
2-wheel overrun brake with 2-wheel hydraulic brake system	○	○
2-wheel air brake system with 2-wheel hydraulic brake system	–	○
Loading crane		
Pendulum with internal concealed hoses	–	○
Crane cable winch mounted on the front grille, pulling force 1.5 t	○	○
Crane operating hours counter	○	○
LED working lights in the crane arm	–	○
Frame and construction		
Stanchion pair insertion in the rear	○	○
High-sided floor pan	○	○
DUO variant (tipper bed)	○	○
Parking supports, 300 x 300 mm (pair)	–	○

• Standard ○ Option – Not available

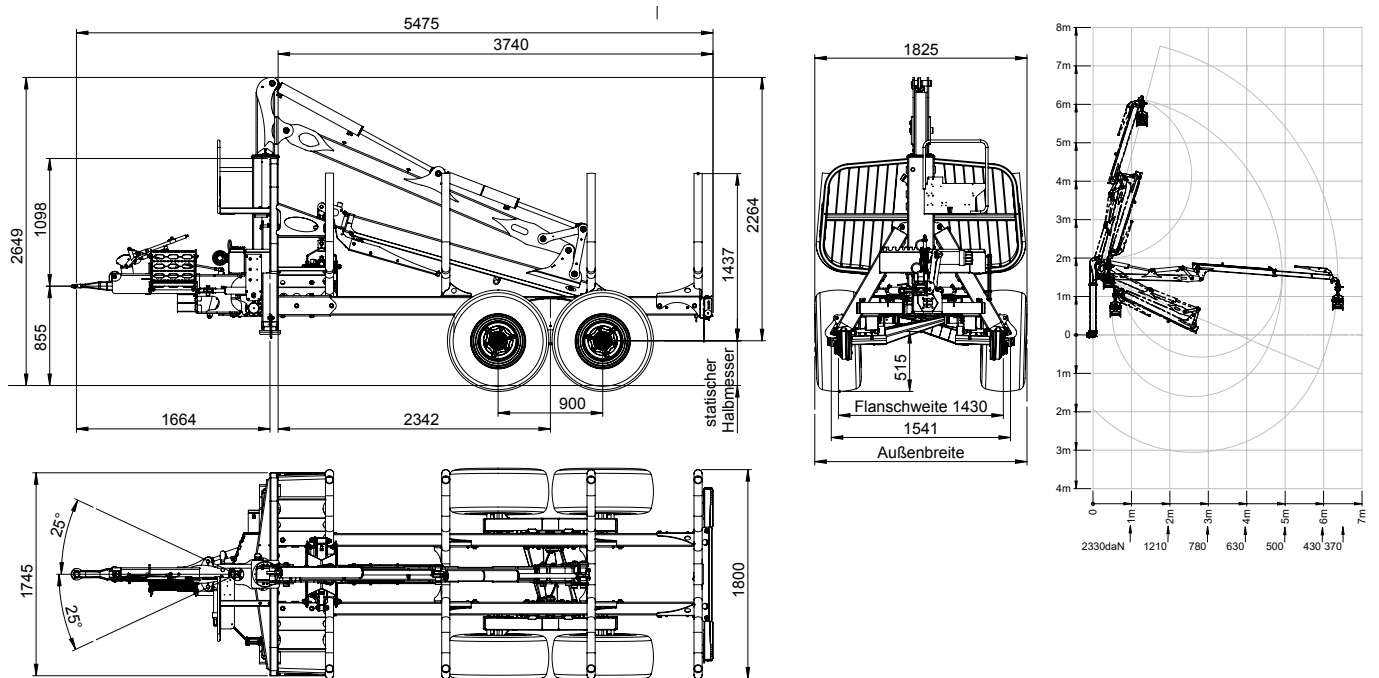
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configurator.pfanzelt.com



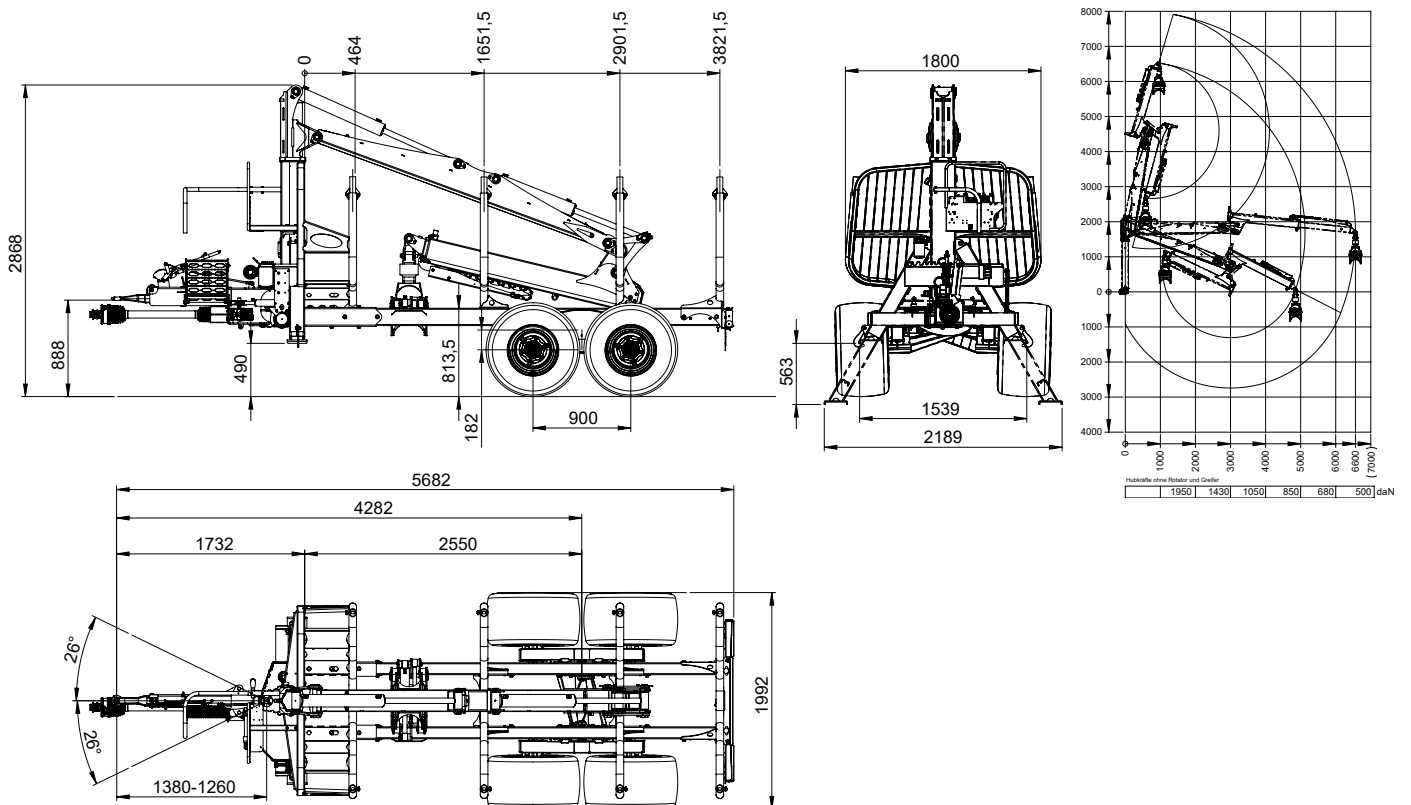
S-line forwarding trailers

Dimensions

S-line forwarding trailers S6



S-line forwarding trailers S8



Shown with tyres 480/45-17"



Profi forwarding trailers

Requirements for modern forwarding trailers vary greatly depending on their application. Pfanztel offers the most extensive range of forwarding trailers on the market. This offers every user the possibility to individually compose the Pfanztel Profi forwarding trailers for his requirements.

Technical specs ► Page 72

Convincing technical details:

- Central-spar frame for maximum stability
- Frame extension and sliding axles for optimum weight distribution combined with a high degree of load flexibility
- Licenced for public roads with CoC document (depends on the equipment)
- Powerful loading cranes made for professionals with a reach of up to 10 metres and a hoisting force of 7 m/t with a rapid traverse valve for even faster telescopic extension
- A-column or H-column stabilisers for optimum parking stability even in difficult terrain
- The operating console on the draw bar offers a well organised work station
- Large range of accessories for forestry professionals



Made in
Germany



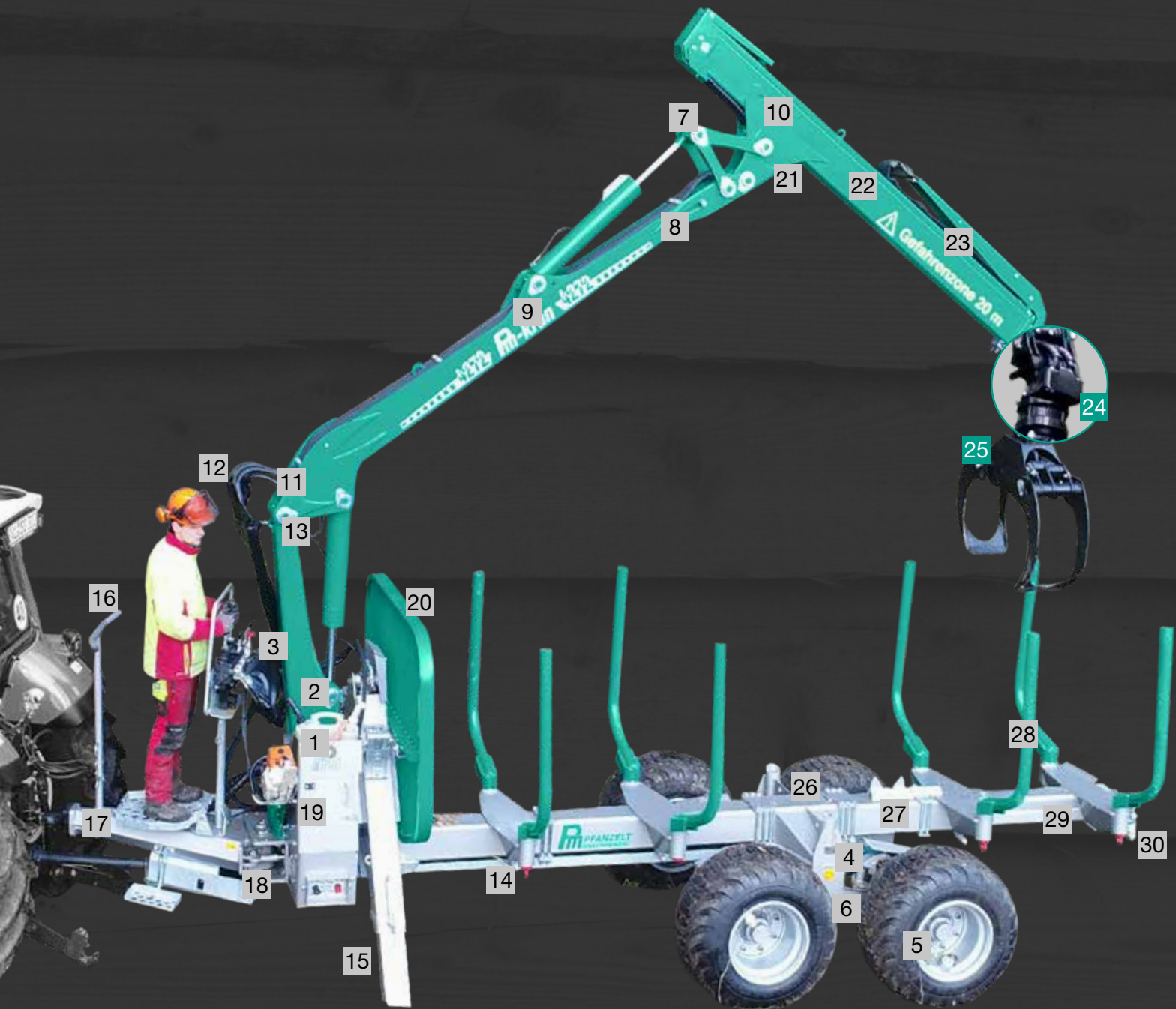
Professional forwarding trailers live in action.
youtube.com/pfanztelTV



Pflanzelt Profi forwarding trailer P13 with Z-crane 5388, high seat and radio control

Profi forwarding trailers

Technical details at a glance:



- 1 The large **oil storage tank** is installed in a way that it is protected from damage, and impairment of the field of vision is prevented.
- 2 Very sturdy and powerful **four-cylinder slewing gear** made of cast metal with a high swivel torque.
- 3 **Ergonomic operation** via two mechanical joysticks or control panel for cable and wireless control.
- 4 Optional **drive systems** enable optimum traction in difficult terrain.
- 5 Safety while driving is provided by the **4-wheel compressed air brake system** with spring mechanism.
- 6 **Lubricating, adjustable spherical plain bearings** guarantee a correct straight run of the axle.
- 7 The **Power Link System** guarantees agile crane work, more reach and lifting power.
- 8 A system of **protected hoses** on the complete crane guarantees minimum downtime.
- 9 The bearing arrangement of all locating pins in greasable **bronze bushings** ensures long service life and pressure stability.
- 10 The crane is designed according to the **Crane load class B4** for continuous dynamic load.
- 11 Protected from damage, the **cylinder** of the main arm can be **installed overhead**.
- 12 **The hydraulic hoses are run in a hose shaft** to protect the user at the operating console.
- 13 **Rotary transmissions** maximise the functional safety and service life of the hydraulic hoses.
- 14 **Lashing lugs** serve as attachments for securing loads during on-road transport.
- 15 Space saving **A-column stabilisers** with concealed cylinders ensure a high degree of stability when parking.
- 16 **Operating console** with non-slip standing plate, ladder, and back support for optimum working safety.
- 17 **Steerable draw bar** for top and bottom attachment with protected piston pump mounted on or under the draw bar.
- 18 **A one-man system** for **mechanically locking** the steerable draw bar when driving on public roads.
- 19 The chainsaw and canister are stored neatly and safely. Small items can be put into the tool box.
- 20 Massive and robust **front grilles** for optimum safety during crane operation and when driving on public roads.
- 21 Available **crane lights** turn night into day and always illuminate the work area.
- 22 The electrically actuated **quick-action valve**, supplied as standard, ensures rapid telescopic extension of simple telescopic booms.
- 23 Protected from damage, the **telescopic cylinder is installed inside**.
- 24 Equipped as standard with a powerful **flange rotor** and on request also with a **double pendulum brake**.
- 25 **Various grippers** for every application: Double clamshell bucket, 4-finger grab, earth grab
- 26 The **shiftable bogie axle** guarantees optimum weight distribution for every load.
- 27 The **torsion-resistant central spar** is rated for the highest loads. It ensures perfect off-road handling.
- 28 **Sliding stanchion arrays** ensure safety and easy crane operation with loads of different lengths.
- 29 The **frame pullout** allows the loading area to be extended by up to 2,000 mm in several steps.
- 30 The LED lighting can be folded in when working in standing timber. This ensures greater durability and reliability.

Profi forwarding trailers

Technical details that will convince you

Frame

The strong frame structure which is based on a torsion-resistant central spar is the basis for the excellent off-road handling properties of the Pfan-zelt forwarding trailer, even when loaded. The central spar is made of fine grain steels to cope with the highest loads. Besides maximum stability, this design offers maximum ground clearance. The frame is only welded to the crane support in the front area, meaning that the strength of the central spar is not compromised.

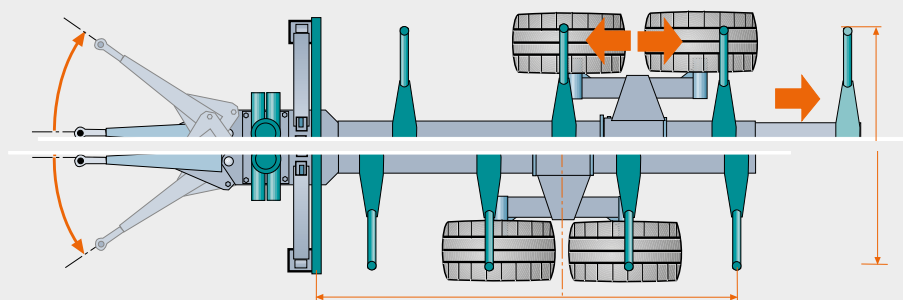
To stabilise the forwarding trailer for heavy crane superstructures, the central spar in the crane mounting plate area is double-walled (not for model P11+). A second pipe is welded into the central spar with a high technical effort.



Sliding axle

The flat bed can be extended by up to 2,000 mm for the transport of various timber lengths by means of an integrated, extensible frame.

The stanchion beams and the axle bogie, which can be moved individually on the central spar, also offer the greatest possible flexibility when loading the forwarding trailer. By shifting the axle bogie, the heavy loads can be precisely matched to the type of tractor, thus avoiding both an excess of the drawbar load and a negative drawbar load.



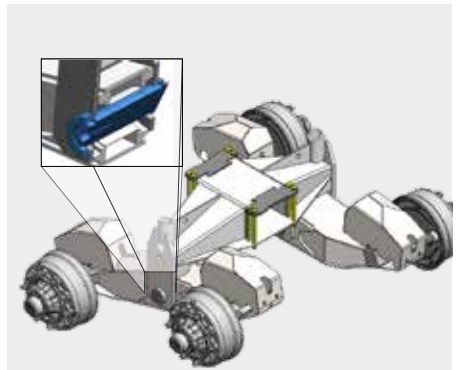


Technology explained in detail.
www.pfanzelt.com

Bogie axle

The bogie axle of Pfanzelt forwarding trailers offers stability during crane operation and the best possible drive characteristics. The large pendulum travel of the bogie axle has a range of up to 394 mm. This enables that the trailer can safely drive over branches and other obstacles.

The even distribution of the ground pressure is another big advantage.



Bearings

The bogie axle is mounted on lubricatable and adjustable spherical articulated bearings. This guarantees true running for many years.



Brake systems

Pfanzelt Profi forwarding trailers are equipped with a brake system as standard. Depending on the trailer size, the braking system is available as a hydraulic or pneumatic system. The compact diaphragm brake cylinders are completely encapsulated with a protective hood. This means that the brake system is protected from damage by branches or the gripper.

Road approval

Travel on public roads is no problem for Pfanzelt machines, even when loaded. Depending on the equipment, a CoC document is available for 25 km/h.



Technology explained in detail.
www.pfanzelt.com

Steerable draw bar

Pfanzelt forwarding trailers are equipped as standard with a pivoting draw bar with a large steering angle. The maximum excursion from the centre is ± 750 mm. Two powerful hydraulic cylinders ensure safe steering of the laden forwarding trailer, even when it is turned against the slope. The pivoting torque is thus 23.6 kNm (at an oil pressure of 200 bar). The steerable draw bar can be mechanically locked when driving on roads.

The draw bar is locked by means of a one-man system with two protective flaps.

Hitch

The drawbar is available for both top and bottom hitching. Lubrication and adjustment of the spherical plain bearings used to support the swivel drawbar ensure many years of operational reliability for this highly stressed component. With a hydraulic self-oil supply, the powerful piston pump is, protected from damage, installed either above or below the drawbar in an encapsulated manner.

Transport systems

The high-side pan (on the left in the picture) is suitable for transporting light shrub and tree top material, while the bottom pan (on the right in the picture) is ideal for combined transport of branch and trunk material. If this is permanently mounted on the vehicle, this protects the tyres from damage by the gripper.





Tool box and holder

The chainsaw and fuel canister are stored neatly and tidily on the forwarding trailer. An additional storage bin is ideally suited for lashing belts, tools and other small items.



LED lighting with indicator monitoring

The lighting system using LED lights is integrated in the frame. To protect the lights when working in the forest, these can be folded in.



Crane

Pfanzelt forestry cranes are designed for professional service. The Pfanzelt crane range offers loading cranes in different lifting classes. All Pfanzelt cranes have an impressive lifting force and a high pivoting torque to enable powerful pivoting of the crane – even uphill.

Technical details ► from page 92

Drive systems on Profi forwarding trailers

uniDRIVE (P11, P13, and P15)

Pfanzelt's hydraulic wheel drive uniDRIVE sets new standards in the price-performance ratio and is available for Pfanzelt Profi forwarding trailers.

- Maximum thrust per wheel up to 2 t
- Hydraulic supply by own oil supply or tractor hydraulics
- No wear during road travel by disconnecting the drive

(Illustration without protective covers)



Technology explained in detail.
www.pfanzelt.com





powerDRIVE

The hydraulic wheel drive powerDRIVE made by Pfanzelt offers a new dimension in wheel drive. It is convincing in the forest and on the road.

- Maximum thrust 6.1 t
- Proportional drive for forward and reverse travel
- All brake systems available in combination with the wheel hub drive
- Automatic drive switch-off when braking
- Freewheel for wear-free road travel

The wheel hub drive is equipped with an electric control unit by which the driver can control the drive from the tractor's cab. This allows the operator to switch between simple drive for forward drive and reverse, and hill start assist.

Type	Thrust	Speed
2WD-I	2.4 t	max. 8.8 km/h
2WD-II	3.1 t	max. 8.2 km/h
4WD-I	4.8 t	max. 4.4 km/h
4WD-II	6.1 t	max. 4.1 km/h

Data dependent on hydraulic oil quantity and pressure.



Technology explained in detail.
www.pfanzelt.com



System supplier

In addition to the development and production of agricultural, forestry, municipal and special machinery, Pfanzelt Maschinenbau has also established a name for itself over the years as a supplier of system components in mechanical engineering. This means that the powerDRIVE drive can also be supplied as a unit other vehicles.

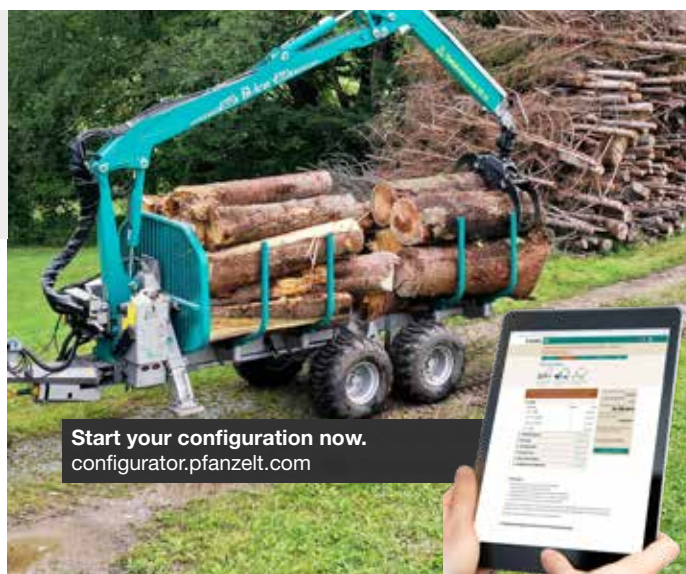
Profi forwarding trailers

Technical specification

Forwarding trailers	P11+	P13	P15	P17
Frame structure	Central spar frame			
Central spar dimensions (mm)	200 x 200 x 10	200 x 200 x 10	200 x 200 x 10	300 x 200 x 10
Bogie axle	•	•	•	•
Double-walled in the crane bracket area	–	•	•	•
Frame extension (mechanical) 2,000 mm	•	•	•	•
Fender grille under UVV	•	•	•	•
Front grille area	2.12 m ²	2.38 m ²	2.87 m ²	3.52 m ²
Hydraulic pivoting draw bar with 2 cylinders	•	•	•	•
Stanchion pairs	4	4	4	4
Load capacity in the forest	9 t	11 t	13 t	15 t
Permissible gross weight on public roads	11 t	13 t	15 t	17 t
Empty weight with crane	approx. 3.3 t	approx. 3.6 t	approx. 4.2 t	approx. 4.5 t
Lighting	according to StVZO, integrated in frame, retractable			
Road approval	25 km/h (CoC) ¹	25 km/h (CoC) ¹	25 km/h (CoC) ¹	25 km/h (CoC) ¹
Operating station on draw bar	•	•	•	•
Braking system	hydraulic 2-wheel braking system		4-wheel pneumatic brake system	
Brake surface	300 x 90 mm, 8-hole wheel		406 x 120 mm, 10-hole wheel	
Tyres	380/55-17" 14 PR groove tread	480/45-17" 14 PR groove tread	500/45-22.5" 12 PR stud tread	600/50-22.5" 12 PR stud treads
Rim with valve protection	•	•	–	–
Rim flange reinforcement, pipe socket protection	○	○	•	•
Loading crane	LK 4267	LK 4272	LK 5180	LK 51100
Crane length	6,340 mm	7,140 mm	8,000 mm	9,950 mm
Lifting torque net	40.5 kNm	40.5 kNm	51 kNm	51 kNm
Pivoting torque	15.2 kNm	15.2 kNm	21.5 kNm	21.5 kNm
Crane control	8-way mechanical, 2 control toggles, 2 electrical functions (rocker) for gripper and telescope			
Pm 230 - Double clam shell gripper	•	•	•	•
Crane inspection and initial acceptance, incl. inspection logbook	•	•	•	•

More loading volume for the P11+

The MAX equipment option increases the loading volume of the P11+ by 1.5 m³. The package includes an extended head-ache rack with an area of 2.38 m² as well as stanchion arrays with an adapted design.



Start your configuration now.
configurator.pfanzelt.com

• Series ○ Option – Not available

¹ CoC, EG: Road approval possible depending on the equipment

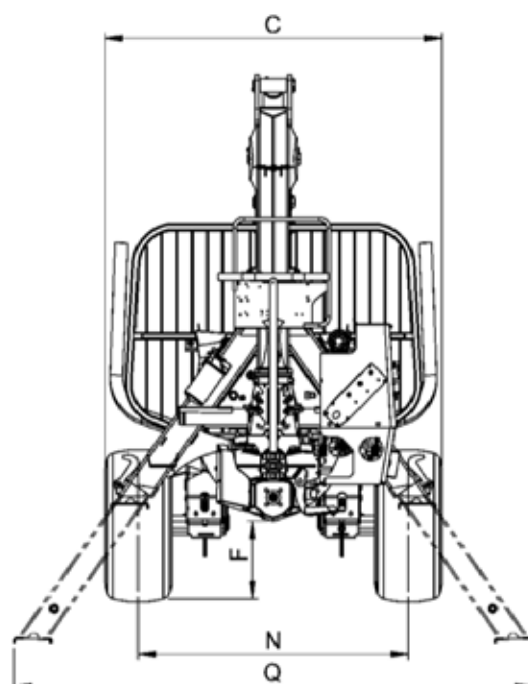
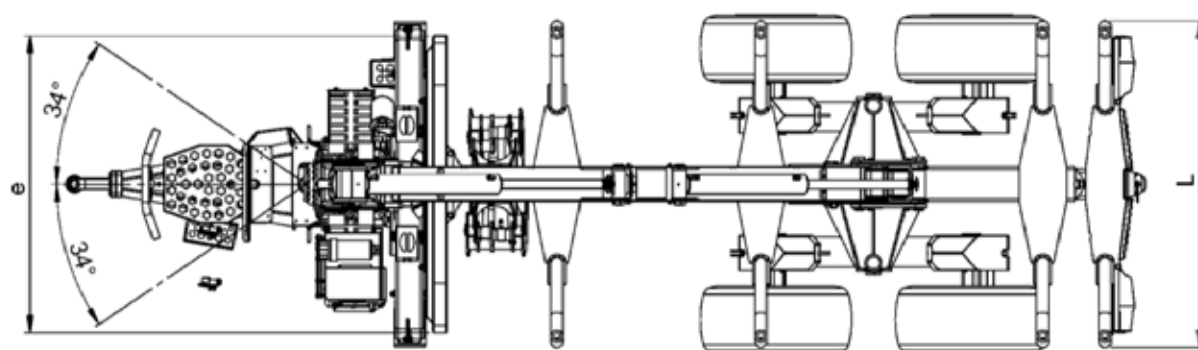
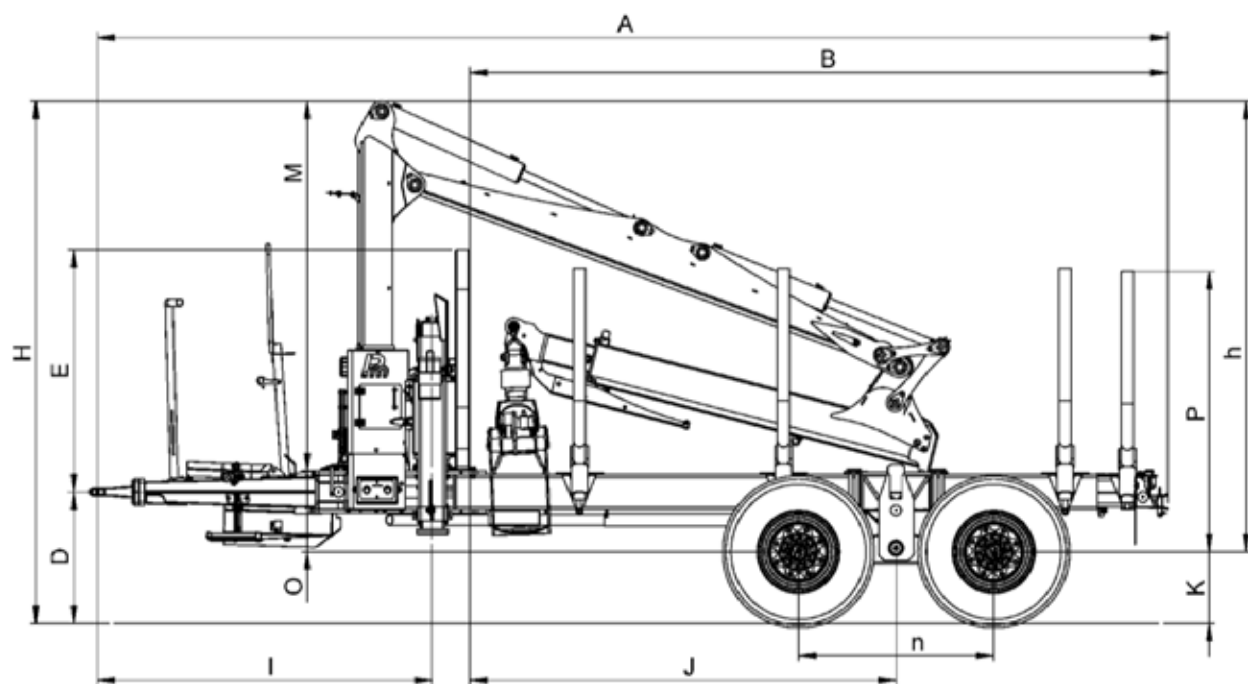
Range of accessories	P11+	P13	P15	P17
Tyres				
480/45-17" groove profile with valve protection	○	●	—	—
520/50-17" stud tread with valve protection	○	○	—	—
520/50-17" 159B, forestry wheel	—	○	—	—
560/45-22.5" Trelleborg T404	—	○	○	○
600/50-22.5" Stud tread, forestry rim	—	—	○	●
Brake systems				
4-wheel overrun brake Rückmatik (gross weight 8 t) with hydraulic auxiliary brake	○	—	—	—
4-wheel hydraulic brake	○	○	○	○
4-wheel pneumatic brake system	○	●	●	●
Combi brake (compressed air and hydraulic 4-wheel brake)	○	○	○	○
Loading crane				
Loading crane 4167 (6,620 mm, 41 kNm)	○	—	—	—
Loading crane 4272 (7,140 mm, 40.5 kNm)	○	●	—	—
Loading crane 4177 (7,550 mm, 41 kNm)	○	○	—	—
Loading crane 5180 (8,000 mm, 51 kNm)	○	○	—	—
Loading crane 5280 (7,800 mm, 50 kNm)	○	○	—	—
Loading crane 6180 (8,000 mm, 61 kNm)	○	○	○	○
Loading crane 6280 (7,800 mm, 61 kNm)	○	○	○	—
Loading crane 4282 (7,960 mm, 42 kNm)	○	○	—	—
Loading crane 5287 (8,730 mm, 52 kNm)	○	○	○	—
Loading crane 5186 (8,800 mm, 51 kNm)	○	○	○	○
Loading crane 5286 (8,600 mm, 50 kNm)	○	○	○	○
Loading crane 6186 (8,800 mm, 61 kNm)	○	○	○	—
Loading crane 6286 (8,600 mm, 62 kNm)	○	○	○	○
Loading crane 51100 (9,950 mm, 51 kNm)	—	—	○	●
Loading crane 61100 (9,950 mm, 61 kNm)	—	—	○	○
Z-crane Z4389 (5,700 mm, 40.5 kNm)	○	○	—	—
Z-crane Z5376 (7,600 mm, 51 kNm)	—	○	○	○
Z-crane Z5388 (8,800 mm, 51 kNm)	—	○	○	○
Separate oil supply with piston pump	○	○	○	○
Crane operation with EHC control with radio control unit	○	○	○	○
Crane cable winch extEND 2.0 with radio, pulling force 1.5 t	○	○	○	○
Pendulum with internal Concealed hoses	○	○	○	○
Crane operating hours counter	○	○	○	○
Crane floodlights	○	○	○	○
Frame and construction				
Cut material floor pan or ordinary floor pan	○	○	○	○
Draw bar, bottom hitch	○	○	○	●
Ball head hitch	○	○	○	●
Drive systems				
powerDRIVE wheel hub drive	○	○	○	○
uniDRIVE wheel drive	○	○	○	—

Profi forwarding trailers

Dimensions

Profi forwarding trailers		P11+	P13	P15	P17
A [mm] Total length	max.	8,060	8,060	8,060	8,650
	min.	6,140	6,140	6,140	6,730
B [mm] Loading length	max.	5,920	5,920	5,920	6,520
	min.	4,000	4,000	4,000	4,600
C [mm] External width	max. ¹	2,130	2,170	2,700	2,800
	min. ²	1,930	1,930	2,350	2,450
D [mm] Height of hitching eye	max. ¹	770	820	880	880
	min. ²	700	700	790	790
D [mm] Height of hitching eye (bottom hitch)	max. ¹	450	500	560	560
	min. ²	380	380	470	470
E [mm] Grille height above drawbar eye (in case of bottom hitch + 397 mm)		1,390	1,390	1,740	1,740
e [mm] Width protection grille		1,700	1,900	2,100	2,200
F [mm] Bodenfreiheit	max. ¹	460	570	690	690
	min. ²	390	480	610	600
h [mm] Height from centre of axles	max. ¹	2,585	2,950	2,945	2,945
	min. ²	2,185	2,185	2,535	2,420
H [mm] Total height	max. ¹	3,013	3,423	3,484	3,482
	min. ²	2,538	2,538	2,986	2,869
I [mm] Hitching eye to outrigger		1,920	1,920	1,920	1,920
J [mm] Centre of axle to protective grille		2,450	2,450	2,410	2,900
K [mm] Tyre height (static loaded radius)	max. ¹	430	475	538	538
	min. ²	355	355	450	450
L [mm] External width of stanchions		1,870	2,010	2,210	2,310
M [mm] Height crane column	max.	2,120	2,485	2,485	2,485
	min.	1,720	1,720	2,075	1,960
N [mm] Track gauge		1,550	1,550	1,850	1,950
n [mm] Wheelbase		1,120	1,120	1,210	1,300
O [mm] Centre of axle to flange surface		465	465	460	460
P [mm] Height stanchion to centre of axle		1,610	1,760	1,760	2,090
Q [mm] External width extended outriggers		2,970	2,970	3,200	3,200

¹ largest tyre variant² smallest tyre variant





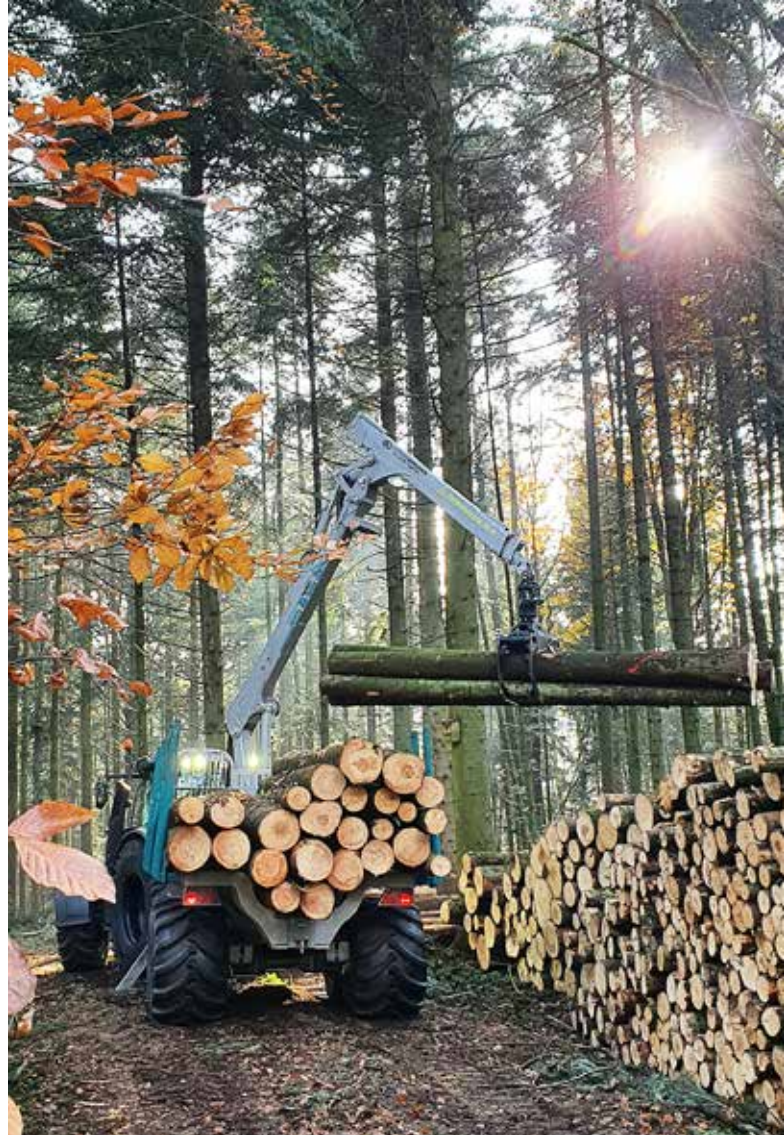
logLINE forwarding trailers

Powerful professional technology for the forestry contractor and forwarder is offered by the logLINE forwarding trailer series. The three models promise uncompromising performance and powerful economy both on forest trails and in standing timber. Optimised for powerful tractors, the forwarding trailers are equipped with a powerful crane in the 6 or 7 mt class.

Technical specs ► Page 86

Convincing technical details:

- Payload on private Roads from 13 to 17 t
- Reinforced central tubular frame with extension
- Type approval for public roads with CoC document (depending on equipment)
- Optional with sprung steering drawbar (model L16 and L19)
- Modern and powerful professional cranes with up to 10 m reach and 7 m lifting force
- Reinforced A-column stabilisers for better stability
- Two big storage boxes for lashing straps and tools
- Accessories for flexible use: Wheel hub drive, crane winch etc.



logLINE forwarding trailers live in action.
youtube.com/pfanzeltTV

logLINE forwarding trailers

Technical details at a glance:



- 1 **Power link system** – toggle lever control – guarantees manoeuvrable crane operation, greater reach and more lifting power.
- 2 A system of **protected hoses** on the complete crane guarantees minimum downtime.
- 3 The bearing arrangement of all locating pins in greasable **bronze bushings** ensures long service life and pressure stability.
- 4 The crane is designed for dynamic continuous load according to **Crane load class B4**.
- 5 Protected from damage during loading, the **cylinder** of the main arm is **twisted**.
- 6 **Rotary transmissions** maximise the functional safety and service life of the hydraulic hoses.
- 7 Massive and robust **front grilles** for optimum safety during crane operation and when driving on public roads.
- 8 **The hydraulic hoses are run in a hose shaft** to protect the user.
- 9 The large **oil storage tank** is installed in a way that it is protected from damage, and impairment of the field of vision is prevented.
- 10 Very sturdy and powerful **four-cylinder slewing gear** made of cast metal with a high swivel torque.
- 11 **Lubricating, adjustable plain bearings** guarantee a correct straight run of the axle.
- 12 **Sliding stanchion arrays** ensure safety and easy crane operation with loads of different lengths.
- 13 The **torsion-resistant central spar** is rated for the highest loads. It ensures perfect off-road handling.
- 14 Space saving **A-column stabilisers** with concealed cylinders ensure a high degree of stability when parking.
- 15 **A one-man system** for **mechanically locking** the steerable draw bar when driving on public roads.
- 16 Optionally available **crane floodlights** turn night to day and reliably illuminate the gripper zone.
- 17 The **frame extension** allows the loading area to be extended in several steps up to 1,500 mm.
- 18 Protected from damage, the **telescopic cylinder is installed inside**.
- 19 The **sliding bogie axle** guarantees optimum weight distribution for every load.
- 20 The electrically actuated **quick-action valve**, supplied as standard, ensures rapid telescopic extension of simple telescopic booms.
- 21 Equipped as standard with a powerful **flange rotator** and on request also with a **double pendulum brake**.
- 22 **Various grippers** for every application: Double clamshell bucket, 4-finger grab, earth grab
- 23 The **powerDRIVE system** enables optimum traction in difficult terrain conditions.
- 24 The **4-wheel pneumatic brake system** with accumulator offers safety under way in the forest or on the roads.

logLINE forwarding trailers

Technical details that will convince you

Frame

The strong frame construction, which is built on a torsion-resistant central spar, provides the Pfanzelt forwarding trailer with excellent off-road mobility, even when loaded. The central spar is made of fine grain steels to cope with the highest loads. Besides maximum stability, this design offers maximum ground clearance. This design offers maximum stability and ground clearance. The frame is only welded to the crane support in the front area, meaning that the strength of the central spar is not compromised. It has a double wall in the crane mounting plate area to provide the forwarding trailer with additional strength for heavy crane attachments.

For protection against damage due to driving over trunks and projecting

branches, the underside of the trailer is smooth. Cables and hoses are concealed for maximum protection.



Stanchion widening

All stanchions can be extended laterally. The stanchion cage extension is thus 300 mm. This increases the flat bed area by 0.5 m².

Frame extension

The flat bed can be extended by up to 1,500 mm for the transport of various timber lengths by means of an integrated, extensible frame extension.





Brake systems

Pfanzenlog logLINE forwarding trailers are equipped as standard with a braking system that acts on four wheels. This braking system is pneumatically actuated. The compact diaphragm brake cylinders are completely encapsulated with a protective hood. This means that the brake system is protected from damage by branches or the gripper.

Road approval

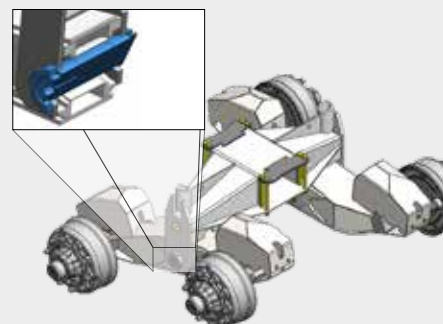
Travel on public roads is no problem for Pfanzenlog machines, even when loaded. Depending on the equipment, a CoC document is available for 25 km/h.



Bogie axle

The bogie axle on Pfanzenlog forwarding trailers provides stability and the greatest possible off-road mobility during travel. The large pendulum travel is 360 mm. This enables that the trailer can safely drive over branches.

The bogie axle is mounted on lubricatable and adjustable spherical articulated bearings. This guarantees true running for many years.





Hitch

The draw bar of the logLINE forwarding trailer is laid out in a bottom hitch version. Lubrication and adjustment of the spherical plain bearings used to support the swivel drawbar ensure many years of operational reliability for this highly stressed component. When the trailer is fitted with an independent oil supply, the powerful piston pump is installed above the drawbar to protect it from damage.



Draw bar suspension/tilt

The L16 and L19 models can be equipped with a tiller suspension/tilting system. The steering draw bar also become a tilting device by the provision of an additional cylinder. This feature enables the flat bed to be placed in a horizontal position and the crane column vertically on slopes.

During travel, this device acts as suspension, thus increasing driving safety and comfort.



Steerable draw bar

logLINE forwarding trailers have a swivelling drawbar with high steering angle. The maximum excursion from the centre is ± 860 mm. Two powerful hydraulic cylinders that can be operated from the tractor cab, even when the assembly is in motion, facilitate operation even when the laden forwarding trailer is turned against the slope. The pivoting torque is thus 35 kNm (at an oil pressure of 200 bar). The steerable

drawbar is mechanically locked when driving on roads.





High-sided floor pan

The pan for cut material makes it easy to transport branch or shrub material. Especially for road transport, numerous safety measures can be omitted.

The four-part pan is easily and quickly disassembled or assembled by crane and secured with tensioning straps.

It is also possible to mount the bottom plates without side walls. The pan adjusts to the stanchion width.



powerDRIVE

The hydraulic wheel drive powerDRIVE made by Pfanzelt offers a new dimension in wheel drive. It is convincing in the forest and on the road.

- Maximum thrust 6.1 t
- Proportional drive for forward and reverse travel
- All brake systems available in combination with the wheel hub drive
- Automatic drive switch-off when braking
- Freewheel for wear-free road travel

The wheel hub drive is equipped with an electric control unit by which the driver can control the drive from the tractor's cab. This allows the operator to switch between simple drive for forward drive and reverse, and hill start assist.

Type	Thrust	Speed
2WD-I	2.4 t	max. 8.8 km/h
2WD-II	3.1 t	max. 8.2 km/h
4WD-I	4.8 t	max. 4.4 km/h
4WD-II	6.1 t	max. 4.1 km/h

Data dependent on hydraulic oil quantity and pressure.



LED illumination with indicator monitoring

The lighting system using LED lights is integrated in the frame. To protect the lights when working in the forest, they are protected by a sturdy plexiglass pane.





Stowage space

On both sides of the trailer are located two bis and lockable stowing compartments. Chain saw, fuel canister and lashing strap can be stowed in these compartments.



Crane

Pfanzelt forestry cranes are designed for professional service. The Pfanzelt crane range offers loading cranes in different lifting classes. All Pfanzelt cranes have an impressive lifting force and a high pivoting torque to enable powerful pivoting of the crane – even uphill.

Technical details ► from page 92

logLINE forwarding trailers

Technical specification

logLINE	L14	L16	L19
Frame structure	Central spar	Central spar	Central spar
Central spar thickness	200 x 200 x 10 mm	250 x 250 x 8 mm	350 x 250 x 8 mm
Frame extension	1,500 mm	1,500 mm	1,500 mm
Stanchion pairs	4 pcs (extensible sideways by 300 mm)		
Hydr. pivoting draw bar with 2 cylinders	● +/- 790 mm; +/- 34°	● +/- 860 mm; +/- 37°	● +/- 860 mm; +/- 37°
Pivoting torque	22.5 kNm	35 kNm	35 kNm
Front grille area	2.98 - 3.37 m²	3.25 - 3.75 m²	3.5 - 4.00 m²
Bogie	1,210 mm wheelbase	1,300 mm wheelbase	1,300 mm wheelbase
Bogie pendulum travel	+/-17°; +/-180 mm	+/-17°; +/-180 mm	+/-17°; +/-180 mm
Track width	1,850 mm	1,800 mm	1,900 mm
Load capacity in the forest	13.0 t	15.0 t	17.0 t
Permissible gross weight on public roads	14.0 t	16.0 t	19.0 t
Empty weight with crane	approx. 4.5 t	approx. 5.5 t	approx. 6.0 t
Braking system	4-wheel pneumatic braking system with spring-loading		
Road approval	● 25 km/h (CoC) ¹	● 25 km/h (CoC) ¹	● 25 km/h (CoC) ¹
Tyres	560/45-22.5" 12 PR Stud tread	600/50-22.5" 12 PR Stud tread	600/50-22.5" 12 PR Stud tread
Rim flange reinforcement, pipe joint protection	●	●	●
Loading crane	LK 6280	LK 7185	LK 7185
Crane length	7,750 mm	8,300 mm	8,300 mm
Lifting torque net	61 kNm	70 kNm	70 kNm
Pivoting torque	25 kNm	27 kNm	27 kNm
Independent oil supply with fixed load-sensing pump	●	●	●
Double clam shell gripper	●	●	●
Crane control	EHC control with 2 Danfoss Profi1 joysticks		
Crane inspection and initial acceptance, incl. inspection logbook	●	●	●
Range of accessories (extract)	L14	L16	L19
Tyres	600/50-22.5" 12 PR	700/40-22.5"	700/40-22.5"
Drawbar tilt/suspension system	–	○	○
Combi brake (compressed air and hydraulic 4-wheel brake)	○	○	○
EHC control via radio control panel	○	○	○
Loading crane 62100 9,800 mm crane length	○	○	○
Loading crane 7185 8,300 mm crane length	○	●	●
Loading crane 71100 10,000 mm crane length	○	○	○
powerDRIVE wheel hub drive	○	○	○

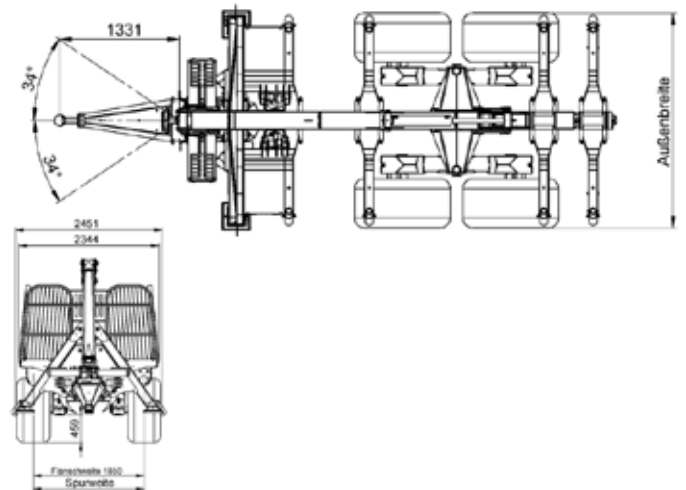
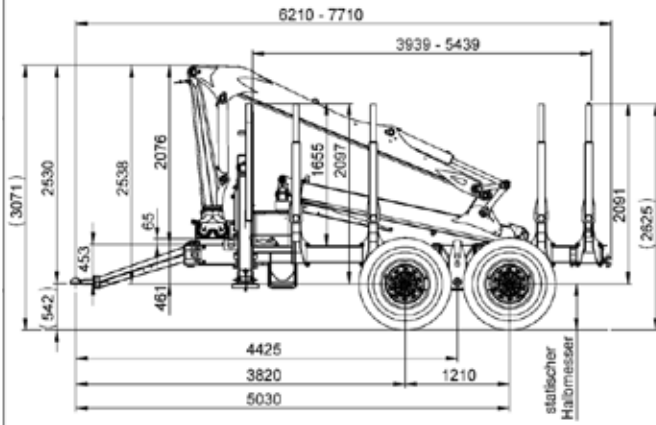
● Series ○ Option – Not available

¹ CoC, EG: Road approval possible depending on the equipment

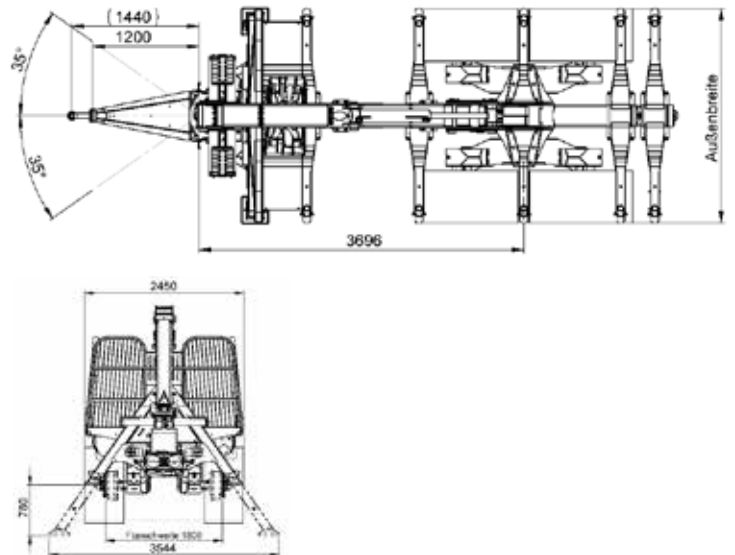
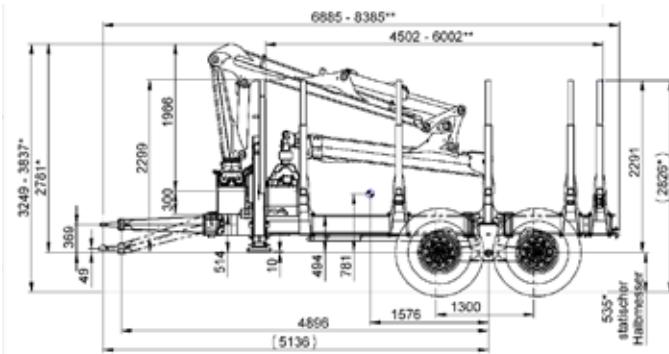
Start your configuration now.
configurator.pfanzelt.com



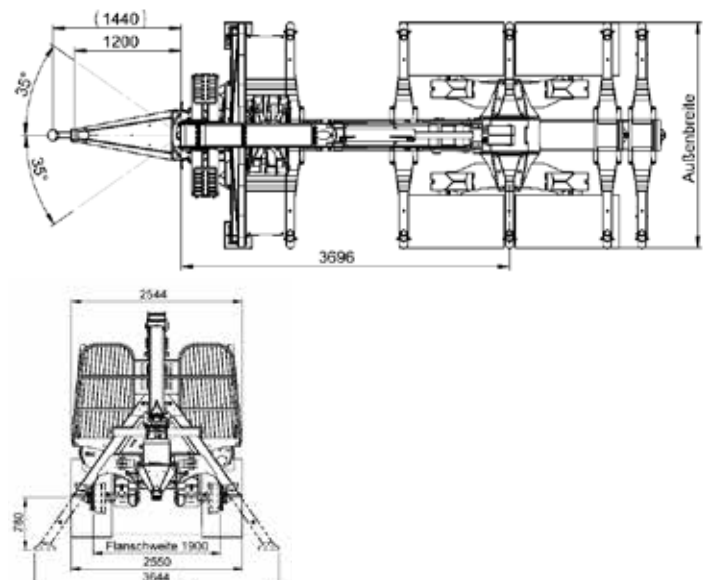
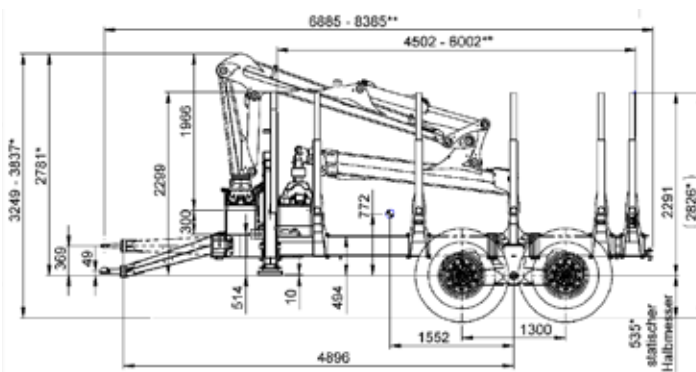
L14



L16



L19



Cranes

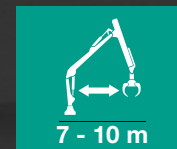


Forestry cranes

Pfanzelt forestry cranes are designed for professional service. Besides loading cranes, the Pfanzelt crane range also includes cranes for forwarding short and long time for attachment to tractors and specialised forestry tractor units. Usually, they have a larger lifting force and a higher pivoting torque to enable powerful pivoting of the crane – even uphill.

Off-road crane operations

The use of cranes outside paved roads places great demands on technology, material and safety. The Pfanzelt product range includes cranes for motorised vehicles and tractors as well as for mounting on trailers.



Add-on cranes for tractors

Pfanzelt offers cranes for three-point and plug-in attachment to tractors. The advantages of the two superstructure systems lie in the customer's operating conditions. If the tractor is to be used flexibly and in combination with trailers, it can be mounted using a three-point attachment system with integrated crane support. If, on the other hand, the crane is required for the forwarding of long timber, quick-fit attachment is the optimum solution. Plug-in attachment combinations of cable winch and forestry crane leave nothing to be desired when operated in conjunction with a tractor with reverse drive system. A modular plug-in attachment system allows the machine to be quickly converted.

Forestry cranes for wood chippers/ mounting on trailers

The powerful Pfanzelt forestry cranes with powerful slewing gear are also ideal for mounting on trailer chippers. Their modular design means that the crane can be ideally adapted to the vehicle – Pfanzelt's cranes are therefore available in different column heights.



Cranes | Examples of use

Convincing technical details:

- Modern and powerful professional cranes with reach up to 10 m and 12 m/t lifting force
- Crane tested according to load class B4 for durability
- Slewing gear housing made of cast metal provides even more strength.
- Concealed hoses up to the crane tip for protection against damage
- Crane pines with brass bushes for daily duty
- Rapid traverse valve for rapid telescopic extension with single telescope
- Various Gripper for each application: Log Gripper, 4-finger Gripper, earth Gripper

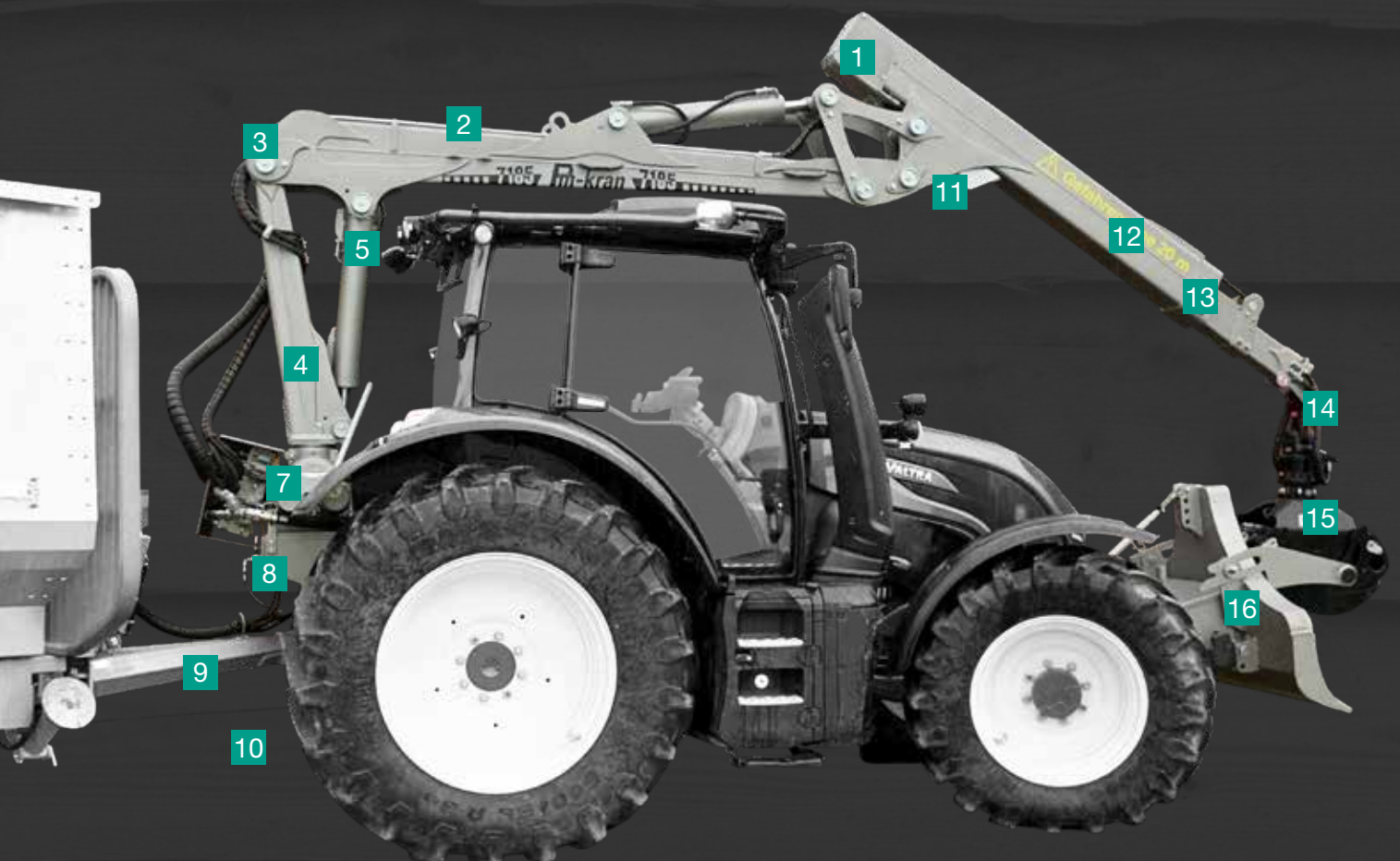
Technical specs ► Page 104



Pfanzelt cranes live in action.
[youtube.com/pfanzeltTV](https://www.youtube.com/pfanzeltTV)

Cranes

Technical details at a glance:



1

Power link system – toggle lever control – guarantees manoeuvrable crane operation, greater reach and more lifting power.

2

A system of **protected hoses** on the complete crane guarantees minimum downtime.

3

The mounting of all fitting bolts in lubricatable **bronze bushes** maximises service life and ensures stability under pressure.

4

The crane is designed for dynamic continuous load according to **Crane load class B4**.

5

Protected from damage during loading, the **cylinder** of the main arm is **twisted**.

6

Most Pfanztel cranes for superstructure are available with upright or overhead main boom cylinder.

7

Very sturdy and powerful **four-cylinder slewing gear** made of cast metal with a high swivel torque.

8

Different possibilities of mounting the crane on the carrier vehicle (quick-change console possible).

9

Depending on the console type, it is also possible to attach a three-point or four-point cable winch or a trailer.

10

If required, a crane support in the form of an A- or H-pillar support can be combined.

11

Optionally available **crane floodlights** turn night to day and reliably illuminate the gripper zone.

12

The **inside telescopic cylinder and the hose guide inside** are protected against damage

13

The electrically actuated **quick-action valve**, supplied as standard, ensures rapid telescopic extension of simple telescopic booms.

14

Equipped as standard with a powerful **flange rotor** and on request also with a **double pendulum brake**.

15

Various grippers for every application: Double clamshell bucket, 4-finger grab, earth grab

16

Safe crane storage in the Pfanztel front pallet blade with crane storage when driving on the road.

Cranes

Technical details that will convince you

Crane attachment

Pfanzelt loading cranes for mounting on forwarding trailers and other vehicles are available in two different versions. The distinction lies in the position of the main boom cylinder.

The overhead arrangement of the cylinder protects it from damage when handling wood. To protect the upright main boom cylinder from damage as well, it is mounted such that the piston rod is protected by the forwarding trailer's fender grille.



Crane loading class B4

Pfanzelt cranes are made of especially tough special steel. The crane is designed for continuous dynamic load according to the crane load class B4.



Bearings

The mounting of all positive locking bolts on the crane is executed in long-life, lubricatable hard bronze bushes. The axial play of the bolt bearings can be infinitely adjusted and readjusted.



Slewing gear

Pfanztel's cranes have a very robust and powerful four-cylinder slewing gear. The resulting high pivoting torque means that loading work can also be performed when working uphill.

Overview of the pivoting torques of Pfanztel's forestry cranes

Crane series	Net pivoting torque
41*, 42*, 43*	15.2 kNm
51*, 52*	21.5 kNm
61*, 62*	25.0 kNm
71*	27.0 kNm
91*	32.0 kNm
93*	36.0 kNm



The large distance between the bearings and the oil immersion bath ensure reliable operation. Shear forces that are generated when working with heavy trunks are safely absorbed.



Safety

At Pfanztel safe handling of forestry machines has the topmost priority. All cranes mounted in the Pfanztel factory come with a crane test log and initial acceptance by an independent crane expert in accordance with the regulations of the BG.

Power link system

The toggle system of Pfanzelt forestry cranes – also known as the power link system – between the main boom and folding boom ensures optimum crane geometry for loading work. Ergonomic loading directly onto the front grille is also thus made possible. It also ensures constant force, greater reach and a higher working speed.



Rapid traverse valve for single telescope

Pfanzelt's forestry cranes are equipped as standard with a rapid traverse valve. This enables the rapid telescopic extension even in the case of telescopic booms with only one extension.

The electrically control rapid traverse valve directs the hydraulic oil that flows from the cylinder straight back into the latter and thus

achieves an approx. 1.5 fold extension speed.



Hose routing

The hydraulic hoses are laid from the control block to the crane tip so as they are protected, ensuring low downtimes and the highest degree of safety when working with the forestry crane in sensitive applications. Pfanzelt therefore attaches the highest priority to ensuring that the hydraulic hoses are protected over the entire crane by being concealed (internal routing). At points of high physical loading, the hoses are laid in a hose shaft. Additional rotary

cutouts increase the service life of the hydraulic hoses.

To increase operator safety, the hoses are also routed through a hose shaft in the vicinity of the control stand.

The telescopic cylinder is also internally mounted, protecting it from damage during crane work.

Protection up to the crane tip is provided

by the optionally available pendulum with inside hydraulic hoses. This ensures ergonomic operation of the crane and long service life.



Stabilisers

Optimum stability when working with the crane is ensured by the supporting A-pillar. This ensures a safe working position in narrow tree stocks as well as on slopes. It is also possible to drive close to the polter.

In addition to the A-pillar support, Pfanztel offer an H-pillar support. The wider support surface ensures even greater stability.



Operating station

The operator's platform on the drawbar, fitted as standard, provides a clearly arranged workplace outside the danger zone with an optimum view of the crane and the safety-relevant environment. The back rest and the hand guard over the control toggles optimise safety and ensure that the operator adopts an ergonomic working stance.



Independent oil supply (option)

For carrier vehicles with low hydraulic power and when various tractors are pooled, Pfanzelt cranes can be equipped with an independent hydraulic system – safe and fuel-saving oil supply is thus assured. Without restricting the field of vision, the oil supply tank is neatly integrated in the A-column support.

A high-performance axial piston pump is used for a high crane speed.



Hydraulic oil cooler (option)

The forwarding trailer can optionally be equipped with a hydraulic oil cooler. This is especially useful for large cranes with a hydraulic drive system.



Trunk scraper (option)

A trunk scraper facilitates loading work with the forestry crane, especially with long sections or very long treetop material. The scraper is mounted on the main boom of the crane.

Crane floodlights (option)

On request, the crane can also be equipped with crane floodlights. You can choose between two spotlights (mounted on the side of the crane column) or one spotlight (mounted on the inside of the telescopic arm). The spotlight type is designed as a robust LED spotlight.



Operating hours counter (option)

The operating hours counter records the hours in which the loading crane is service. This is particularly useful if the forwarding trailer is used or lent in a community.



Crane control

The user achieves the highest performance when ergonomics and operation are in harmony. This is determined by the operating position and the crane controller.

All Pfanzt forestry cranes are fitted as standard with a mechanical control block, 2 control toggles and an electrical switch. This means that the individual boom movements can be easily and rapidly coordinated, without hav-

ing to reach for different control levers or turning.

In addition to a mechanical crane control, the crane can also be operated via an EHC controller with a cord or wireless control panel.

The crane can also be controlled by two individual joysticks which are mounted on a swivel seat in the tractor or on a control panel. Two Profi1 joysticks by Danfoss,

or mini joysticks can be installed. They enable very precise and ergonomic control.





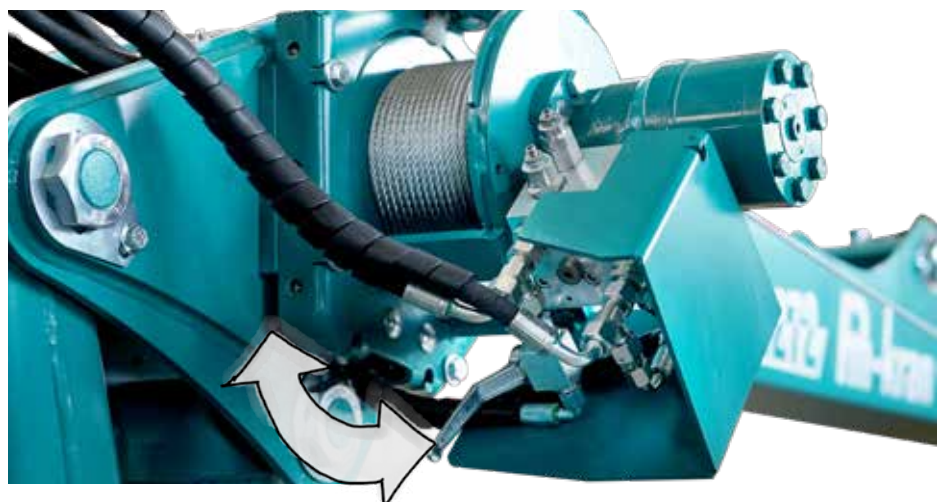
Technology explained in detail.
www.pfanzelt.com

Crane cable winch 2.0 exTEND (option)

The Pfanzelt crane cable winch exTEND offers more comfort and safety in use.

- Tractive force 1.5 t, cable capacity 50 m
- Professional forestry radio system
- Simple switching option between hydraulic freewheel and forward and return
- Mechanical trailing drum brake

Retrofitting is possible.



Grippers

Clam shell Gripper can be mounted on the regular Gripper for loading dry bulk. The range of accessories also includes special gripper attachments for loading round bales (only for Pm 230).

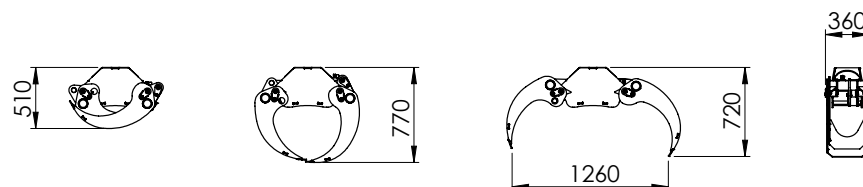
The 4-finger gripper ensures easy and ergonomic loading of branches and cut wood.

Pfanzelt grippers adapted to various crane sizes are available in various sizes.

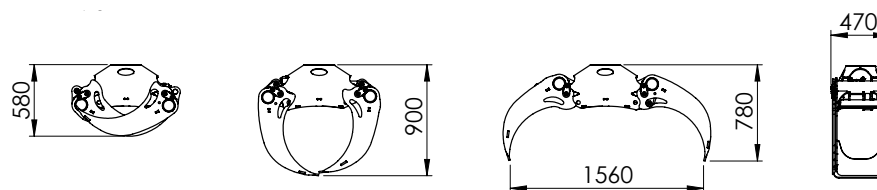


Gripper Pm 230

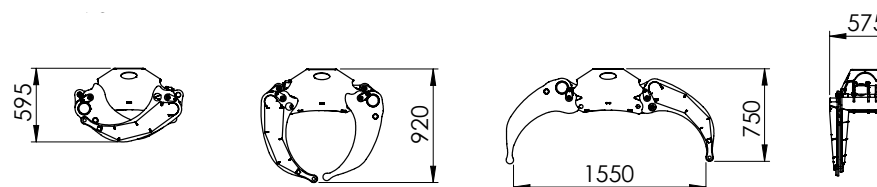
Gripper Pm 230 4-finger



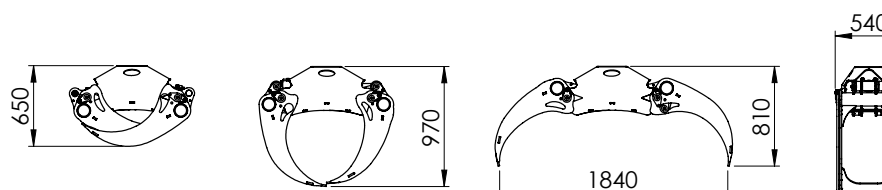
Gripper Pm 270



Gripper Pm 270 4-finger



Gripper Pm 360





Double telescopic cranes with the 4 and 5 mt series

- Protected telescopic cylinder
- Internal hose installation

Technical specs ► from page 106

Cranes with top-mounted main boom cylinder



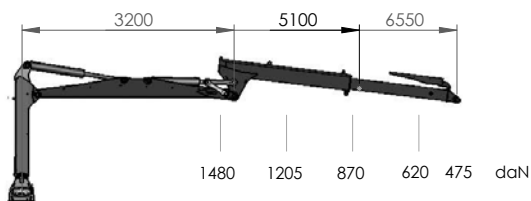
Loading crane	4167	4177	5169	5180	5186
Crane length	6,620 mm	7,550 mm	6,710 mm	8,000 mm	8,800 mm
Crane column	2,120 mm	2,120 mm	2,485 mm	2,485 mm	2,485 mm
Lifting torque gross/net	52 / 41 kNm	52 / 41 kNm	69 / 51 kNm	69 / 51 kNm	69 / 51 kNm
Telescope	simple	simple	simple	simple	double
Pivoting torque	15.2 kNm	15.2 kNm	21.5 kNm	21.5 kNm	21.5 kNm
Slewing range	370 °	370 °	370 °	370 °	370 °
Rotator, infinite	4.5 t	4.5 t	4.5 t	4.5 t	4.5 t
Grippers	Pm 230	Pm 230	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions				
Operating pressure	190 bar	190 bar	190 bar	190 bar	190 bar
Pump flow rate recommended	35-90 l/min	35-90 l/min	50-100 l/min	50-100 l/min	50-100 l/min
Weight (approx.)	1,050 kg	1,100 kg	1,150 kg	1,250 kg	1,300 kg



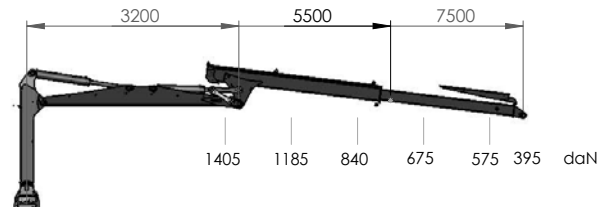
Loading crane	51100	6169	6180	6186	61100
Crane length	9,950 mm	6,710 mm	8,000 mm	8,800 mm	9,950 m
Crane column	2,485 mm	2,485 mm	2,485 mm	2,485 mm	2,485 mm
Lifting torque gross/ net	69 / 51 kNm	86 / 61 kNm	86 / 61 kNm	86 / 61 kNm	86 / 61 kNm
Telescope	double	simple	simple	double	double
Pivoting torque	21.5 kNm	25 kNm	25 kNm	25 kNm	25 kNm
Slewing range	370 °	370 °	370 °	370 °	370 °
Rotator, infinite	4.5 t	6.0 t	6.0 t	6.0 t	6.0 t
Grippers	Pm 230	Pm 230	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions				
Operating pressure	190 bar	215 bar	215 bar	215 bar	215 bar
Pump flow rate recommended	50-100 l/min	50-100 l/min	50-100 l/min	50-100 l/min	50-100 l/min
Weight (approx.)	1,450 kg	1,300 kg	1,250 kg	1,350 kg	1,450 kg



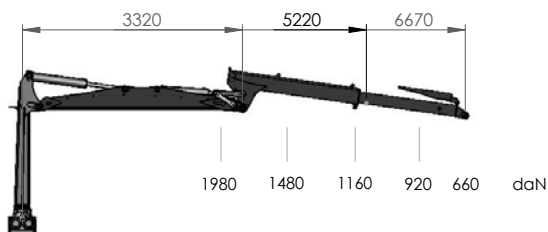
Crane 4167



Crane 4177

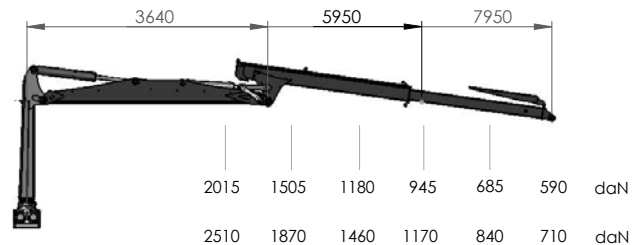


Crane 5169



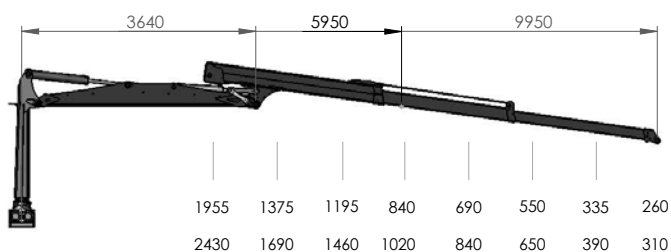
Crane 5180

Crane 6180



Crane 51100

Crane 61100



To be observed:

The stated lifting torques are maximum values and do not indicate the continuous lifting force. All figures are without gripper and rotator. The maximum lifting force can only be achieved when sufficient hydraulic pressure is provided by the tractor unit or the on-board hydraulics. The maximum system pressure must be adjusted so that the stability is assured.

Cranes with vertical main boom cylinder



Loading crane	4267	4272	4280	4282
Crane length	6,370 mm	7,140 mm	7,850 mm	7,960 mm
Crane column	2,000 mm	2,000 mm	2,000 mm	2,000 mm
Lifting torque gross/net	56 / 40.5 kNm	56 / 40.5 kNm	56 / 41 kNm	58 / 42 kNm
Telescope	simple	simple	simple	double
Pivoting torque	15.2 kNm	15.2 kNm	15.2 kNm	15.2 kNm
Slewing range	370 °	370 °	370 °	370 °
Rotator, infinite	4.5 t	4.5 t	4.5 t	4.5 t
Grippers	Pm 230	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions			
Operating pressure	190 bar	190 bar	190 bar	190 bar
Pump flow rate recommended	35-90 l/min	35-90 l/min	35-90 l/min	35 - 90 l/min
Weight (approx.)	1,050 kg	1,100 kg	1,150 kg	1,120 kg



Loading crane	5280	5287	5286	52100
Crane length	7,800 m	8,730 mm	8,600 mm	9,800 mm
Crane column	2,076 mm	2,076 mm	2,076 mm	2,076 mm
Lifting torque gross/net	70 / 50 kNm	69 / 52 kNm	70 / 50 kNm	70 / 51 kNm
Telescope	simple	double	double	double
Pivoting torque	21.5 kNm	21.5 kNm	21.5 kNm	21.5 kNm
Slewing range	370 °	370 °	370 °	370 °
Rotator, infinite	4.5 t	4.5 t	4.5 t	4.5 t
Grippers	Pm 230	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions			
Operating pressure	205 bar	190 bar	205 bar	210 bar
Pump flow rate recommended	50-100 l/min	50 - 120 l/min	50-120 l/min	50-120 l/min
Weight (approx.)	1,250 kg	1,270 kg	1,400 kg	1,400 kg

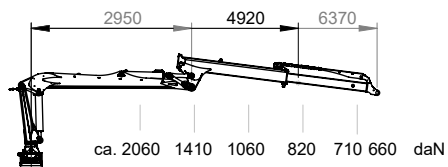
To be observed:

The stated lifting torques are maximum values and do not indicate the continuous lifting force. All figures are without gripper and rotator. The maximum lifting force can only be achieved when sufficient hydraulic pressure is provided by the tractor unit or the on-board hydraulics. The maximum system pressure must be adjusted so that the stability is assured.

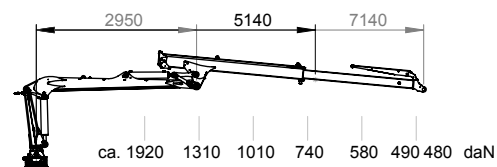


Loading crane	6280	6286	62100
Crane length	7,800 mm	8,600 mm	9,800 mm
Crane column	2,076 mm	2,076 mm	2,076 mm
Lifting torque gross/net	79 / 61 kNm	79 / 62 kNm	79 / 62 kNm
Telescope	simple	double	double
Pivoting torque	25 kNm	25 kNm	25 kNm
Slewing range	370 °	370 °	370 °
Rotator, infinite	6.0 t	6.0 t	6.0 t
Grippers	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions		
Operating pressure	220 bar	220 bar	220 bar
Pump flow rate recommended	50-120 l/min	50 - 120 l/min	50 - 120 l/min
Weight (approx.)	1,300 kg	1,450 kg	1,500 kg

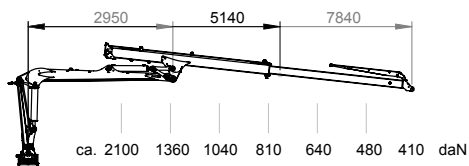
Crane 4267



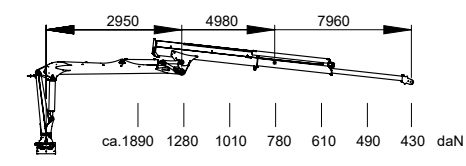
Crane 4272



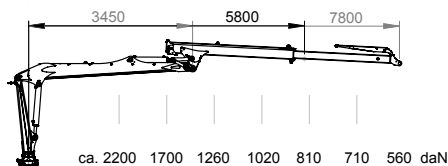
Crane 4280



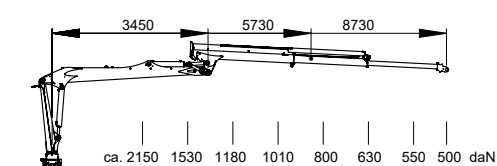
Crane 4282



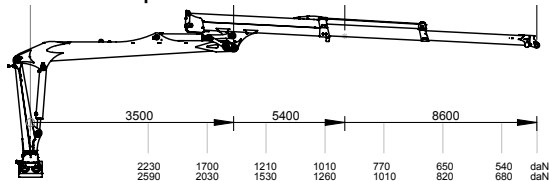
Crane 5280



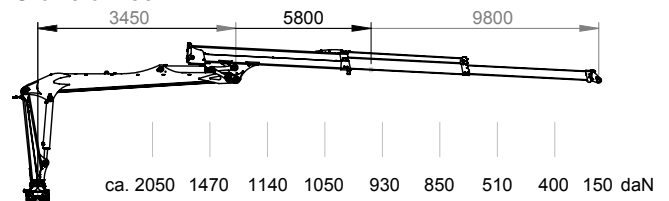
Crane 5287



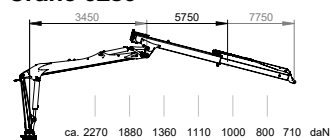
Crane 5286 | Crane 6286



Crane 52100



Crane 6280

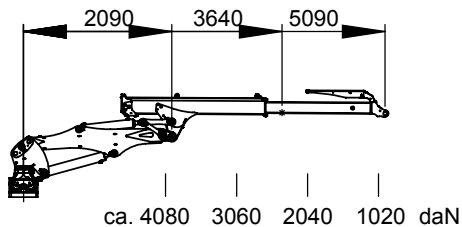


Lorry-mounted cranes for tractors

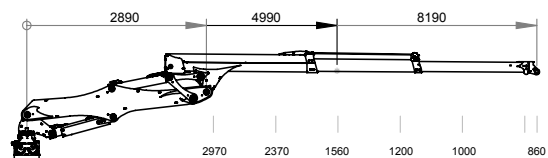


Logging crane	5153	5167	7169	7182	7185	71100
Reach	5,090 mm	6,830 mm	6,930 mm	8,190 mm	8,300 mm	10,000 mm
Crane column	---	---	---	---	1,960 mm	1,960 mm
Lifting torque gross/net	69 / 51 kNm	69 / 51 kNm	106 / 70 kNm	106 / 70 kNm	106 / 70 kNm	112 / 70 kNm
Telescope	simple	double	double	double	double	double
Pivoting torque	21.5 kNm	21.5 kNm	27 kNm	32 kNm	27 kNm	27 kNm
Slewing range	370 °	370 °	370 °	360°	360°	360°
Rotator, infinite	6.0 t	6.0 t	10.0 t	10.0 t	10.0 t	10.0 t
Grippers	Pm 270	Pm 270	Pm 360	Pm 360	Pm 360	Pm 360
Crane control	6-way EHC control with 2 joysticks					
Operating pressure	190 bar	190 bar	210 bar	210 bar	210 bar	210 bar
Pump flow rate recommended	35-90 l/min	35-90 l/min	50-100 l/min	50-100 l/min	50-100 l/min	50-100 l/min

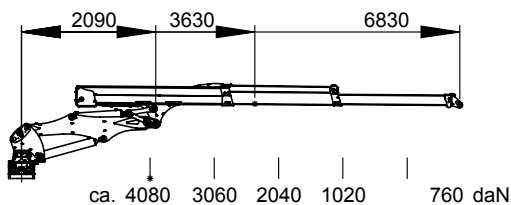
Crane 5153



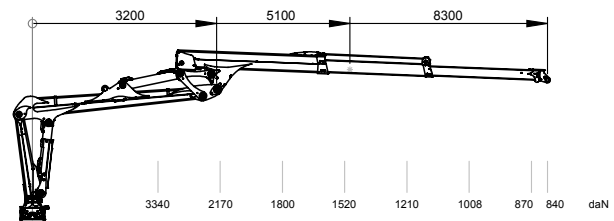
Crane 7182



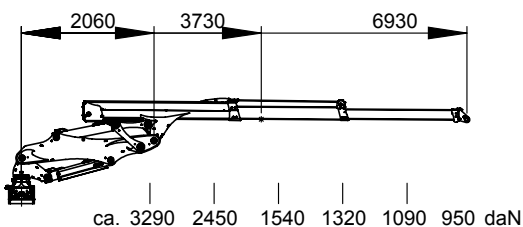
Crane 5167



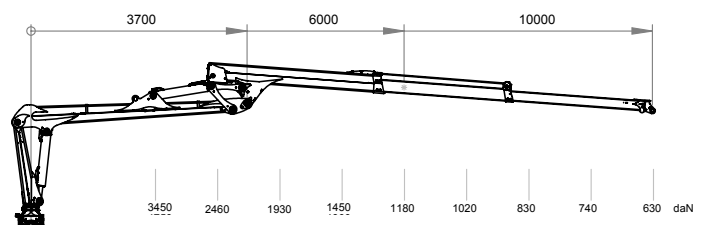
Crane 7185



Crane 7169



Crane 71100

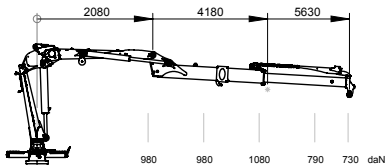


Z-cranes

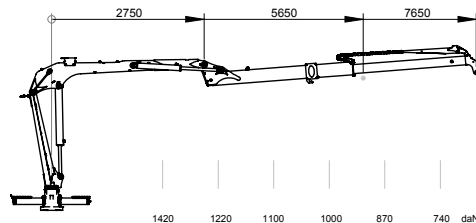


Lorry-mounted crane	Z4359	Z5376	Z5388
Crane length	5,700 mm	7,600 mm	8,800 mm
Crane column	1,740 mm	2,190 mm	2,190 mm
Lifting torque net	40.5 kNm	51 kNm	51 kNm
Telescope	simple	simple	double
Pivoting torque	15.2 kNm	21.5 kNm	21.5 kNm
Slewing range	370 °	370 °	370 °
Grippers	Pm 230	Pm 230	Pm 230
Crane control	2 control toggles with 2 electrical functions		
Operating pressure	190 bar	190 bar	200 bar
Pump flow rate recommended	35-90 l/min	35-90 l/min	50-100 l/min
Weight approx.	945 kg	1,125 kg	1,180 kg

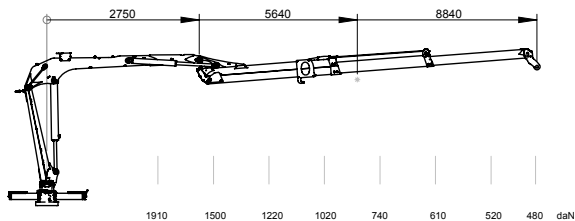
Crane Z4359



Crane Z5367



Crane Z5388



To be observed:

The stated lifting torques are maximum values and do not indicate the continuous lifting force. All figures are without gripper and rotator. The maximum lifting force can only be achieved when sufficient hydraulic pressure is provided by the tractor unit or the on-board hydraulics. The maximum system pressure must be adjusted so that the stability is assured.



Moritz implement carriers



In 2016, Moritz revolutionised the forestry tractor concept. The two new models are true to the original concept, but are technically in a new league. They offer a combination of the aspects of the proven mini felling tractor and the requirements of multifunctional, high-performance forestry tractors.

The appearance changed only little, but the technology of the compact and powerful Moritz felling tractor has been revised to a much greater extent.

Technical specs ► Page 128

Convincing technical details:

- Powerful and energy-efficient four-cylinder engine
- Large ground clearance of 320 mm
- Optimal climbing ability
- Proportional travel drive and drift adjustment to compensate for the slope downforce across the slope
- Variable chassis for easy transport and perfect stability with automatically and hydraulically tensioned double guide wheel
- Low ground pressure of only 0.28 or 0.33 kg/cm²
- Separate traction, on-board, and power hydraulics
- Full vehicle and cable winch control via radio



50 / 75 hp



96 l/min
300 bar



mechanical
PTO



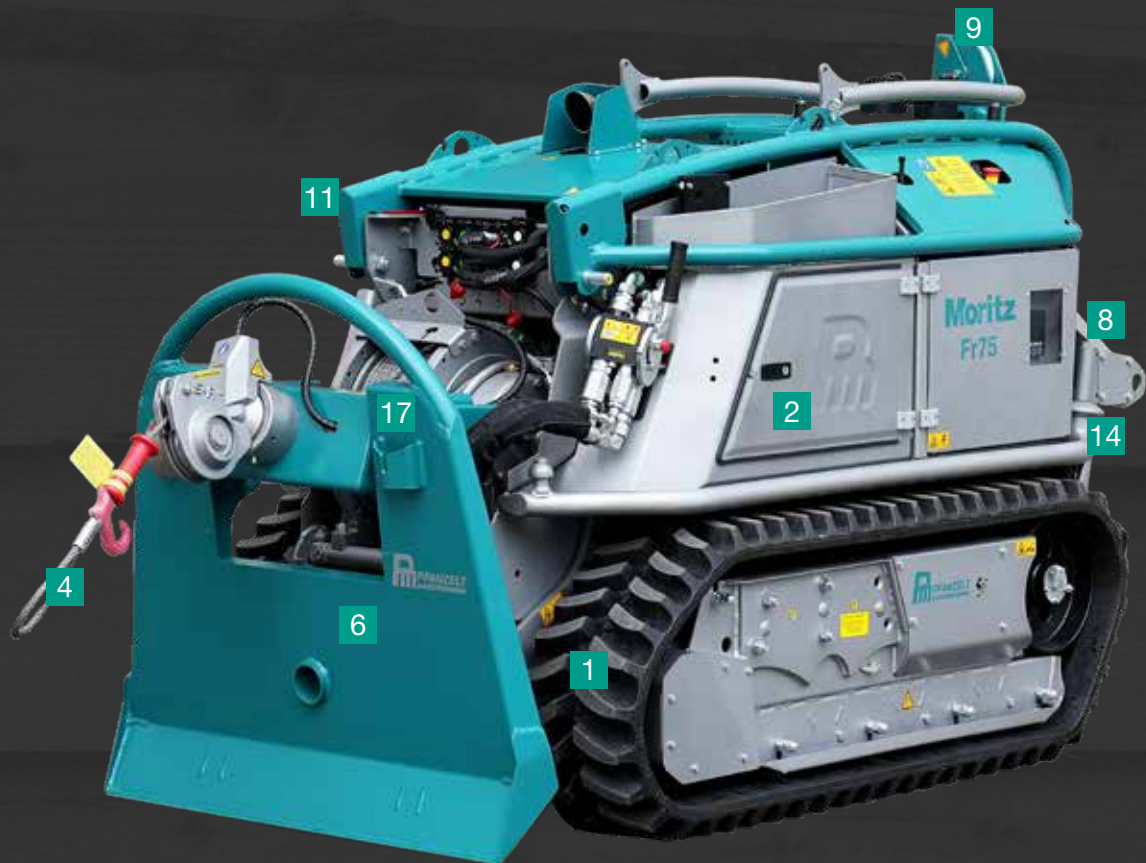
4x prop.
2x s/w



72 kN
110 m

Remote-controlled Moritz implement carrier

Technical details at a glance:



1

The undercarriage can be hydraulically extended by 400 mm to achieve an optimum undercarriage width.

2

The Moritz offers a large, lockable storage compartment, several shelves, and a chainsaw holder.

3

The new hydraulic system consists of three systems: Traction drive, on-board, and power hydraulics

4

The TUTUM crush protection protects the operator from injuries.

5

Different mounting options for different categories of lower links allow an uncomplicated attachment.

6

The Moritz can be equipped with a professional geared cable winch for felling and forwarding, or for pre-delivery.

7

The PTO is directly driven, allowing high efficiency in use.

8

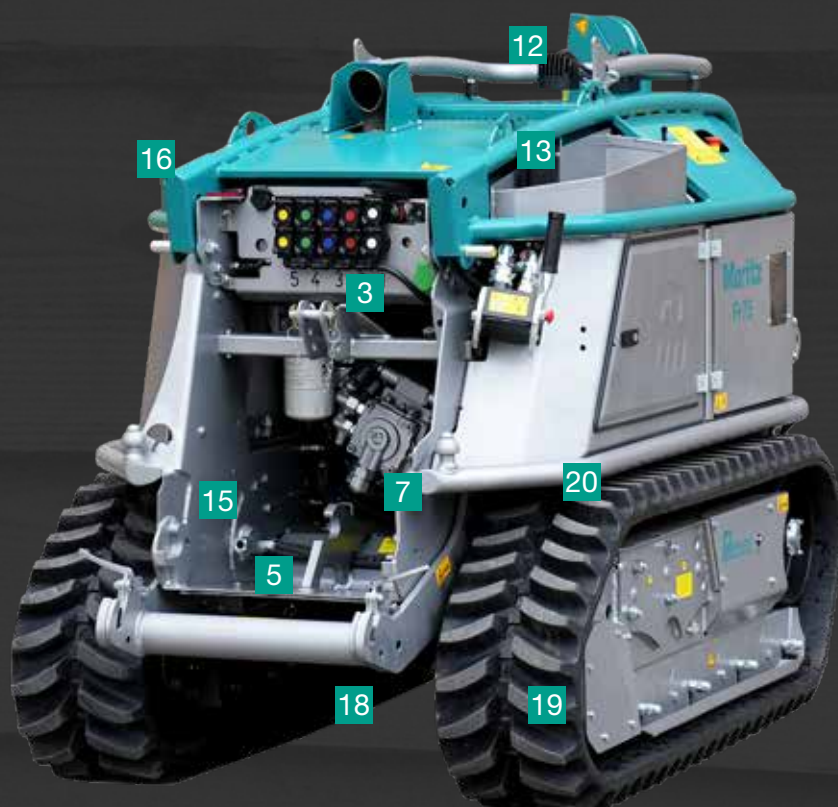
A second attachment compartment is optionally available at the front of the vehicle.

9

Safe and ground-saving use in extreme terrain is provided with the auxiliary winch.

10

All functions of the forestry tractor can be controlled and monitored by radio on the completely new, ergonomic control panel.



11

The dimensions and weight of the machine without implements allow uncomplicated transport on a car trailer.

12

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

13

The new high-torque (max. 260 Nm) 4-cylinder DEUTZ engines now have 36.4 kW and 55.4 kW.

14

The CLEANFIX reversible fan enables thorough cleaning, and thus the maximum air flow and pressure for efficient cooling

15

Thanks to the universal three-point linkage, other implements from different manufacturers can also be attached.

16

For the travelling to the field of application in the forest or for forwarding, the travel drive is equipped with two speed levels.

17

The integrated cable winch is installed into the vehicle with a low center of gravity.

18

A slope angle of 50° at the front or 40° at the rear enables a large climbing capacity through ditches.

19

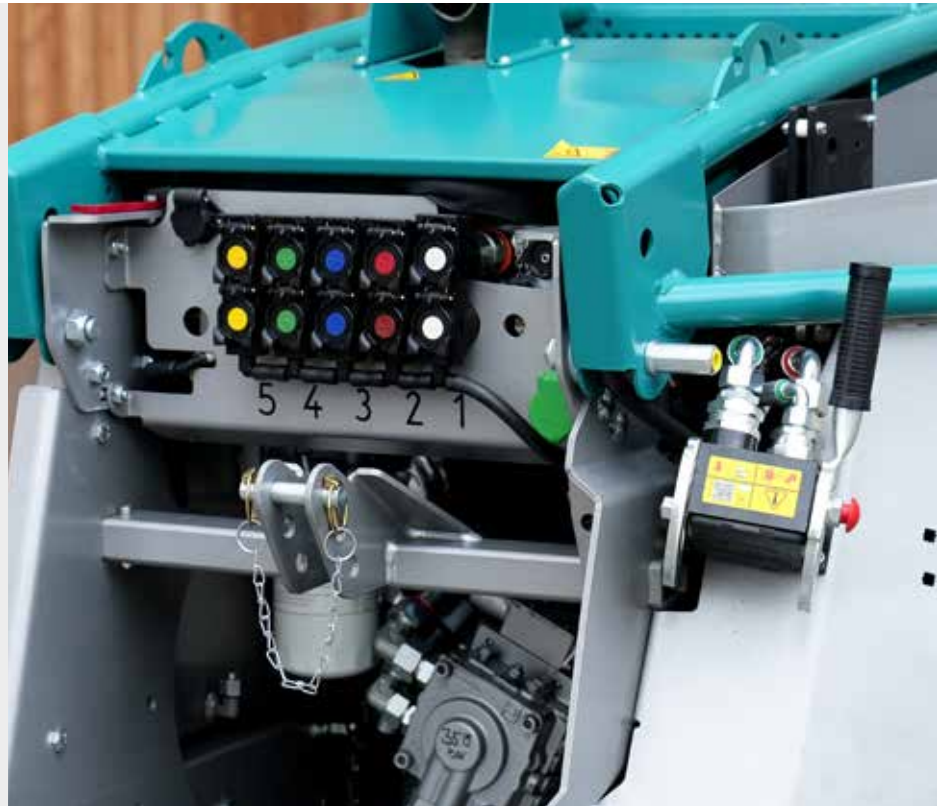
Automatic belt guidance with a hydraulically tensioned double guide wheel prevents the belts from jumping off.

20

The largely dimensioned chassis and the low dead weight allow a minimum ground pressure.

Moritz Fr70/75 mini forestry tractor

Technical details that will convince you



More power for the application

The high-torque four-cylinder DEUTZ engines have 36.4 and 55.4 kW respectively. The powerful common rail injection system and the highly efficient combustion with cooled external exhaust gas recirculation ensure optimum engine performance with the lowest fuel and emission values. The water-cooled in-line four-cylinder engine with cooled external exhaust gas recirculation is installed in the Fr75 model with turbocharging, and in the Fr70 model without turbocharging.

Together with the new powerful hydraulic system and the additionally available mechanical PTO, these new motor classes allow the operation of more performance-demanding implements and cable winches with higher pulling power.

Hydraulics for high demands

The hydraulic system consists of three separate systems for travel drive, on-board, and power hydraulics.

This separation enables a new dimension for all three systems.

- Travel hydraulics | 2x 11 kW
- On-board hydraulics | 18 l/min, 200 bar 6 double-acting control units
- Power hydraulics | 96 l/min, 300 bar with multicoupler

The operating hydraulics now offer up to four proportional and two b/w double-acting functions, all of which can be operated simultaneously via the radio control.

Full power, less fuel

The Moritz mini forestry tractor Fr70/75 is equipped with a CLEANFIX reversible fan as standard. This allows thorough cleaning and thus always the maximum airflow and pressure for efficient cooling.





More operating comfort for higher work performance

For travelling to the area of application in the forest, or for forwarding or mulching, the proportional travel drive is equipped with two speed levels. The maximum speed is 6.0 km/h.

For comfortable working, a drift can be preset on the travel drive to compensate for the slope downforce when mowing across slopes. In addition, the final speed can also be infinitely adjusted.

Optimised for sensitive soil and demanding terrain

The largely dimensioned chassis and the low dead weight enable a minimum ground pressure of only 0.28 and 0.33 kg/cm². Soil-saving driving and working is therefore unproblematic even on wet surfaces.

A slope angle of 50° at the front or 40° at the rear enables a large climbing capacity and uncomplicated driving through ditches. The large ground clearance of 320 mm allows driving over rootstocks as well as driving on forwarding lanes. The slope capability is 100%.



Easy to transport

The dimensions and the weight of the machine of 1.4 t without implement allow uncomplicated and fast transport on a car trailer.

Traction drive in a new league

To get an optimum chassis width for both transport and off-road use, the chassis width of Moritz Fr70/75 can be varied. The chassis can be widened hydraulically by 400 mm. The forestry track can therefore also be used safely on slopes. The chassis, which has a length of 1,650 mm, is available in two widths of 250 and 300 mm for special applications.

Chassis (narrow)



Chassis (wide)



Always under tension

The new, automatic belt guide via a hydraulically tensioned double guide wheel prevents the belts from jumping off even on uneven terrain or when driving over obstacles.



All functions under control

All functions of the forestry tractor can be controlled via radio using the ergonomic control panel. In addition to the operation of the traction and winch drive, this also allows the rope speed or engine speed to be adjusted. If the vehicle is not needed for a short time, the engine can also be stopped and then started again via the radio control.

If the Moritz is equipped with a third-party implement, this can also be

conveniently operated via the radio control.

- | | | | |
|---|--|----|---|
| 1 | Throttle control | 6 | Preselection of the final speed with the drive lever pressed down |
| 2 | Proportional control units | 7 | Preselection of the chassis width |
| 3 | Operation of rear and front linkage as well as unloading | 8 | Adjustment of the cable speed (proportional for both directions) |
| 4 | Preselection of the direction of travel | 9 | Lowering speed of the rear power lift |
| 5 | Drift setting | 10 | B/w control units |



Strong pull

The Moritz can be equipped with a professional geared cable winch with a pulling force of 5.0 t to 7.2 t and a cable capacity of up to 110 m for felling, forwarding, or delivery.

A proportional rope speed in both directions enables a high level of safety by adapting the rope speed to different work situations.

It can be equipped with a rope in-feed brake for proper cable winding.

Technical details ► from page 24



Stowage space

The Moritz offers a large, lockable storage compartment, several shelves, and a chainsaw holder. Fuel canisters and other accessories can be stored here and are cleared up.



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. 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.

Moritz as a remote-controlled equipment carrier.

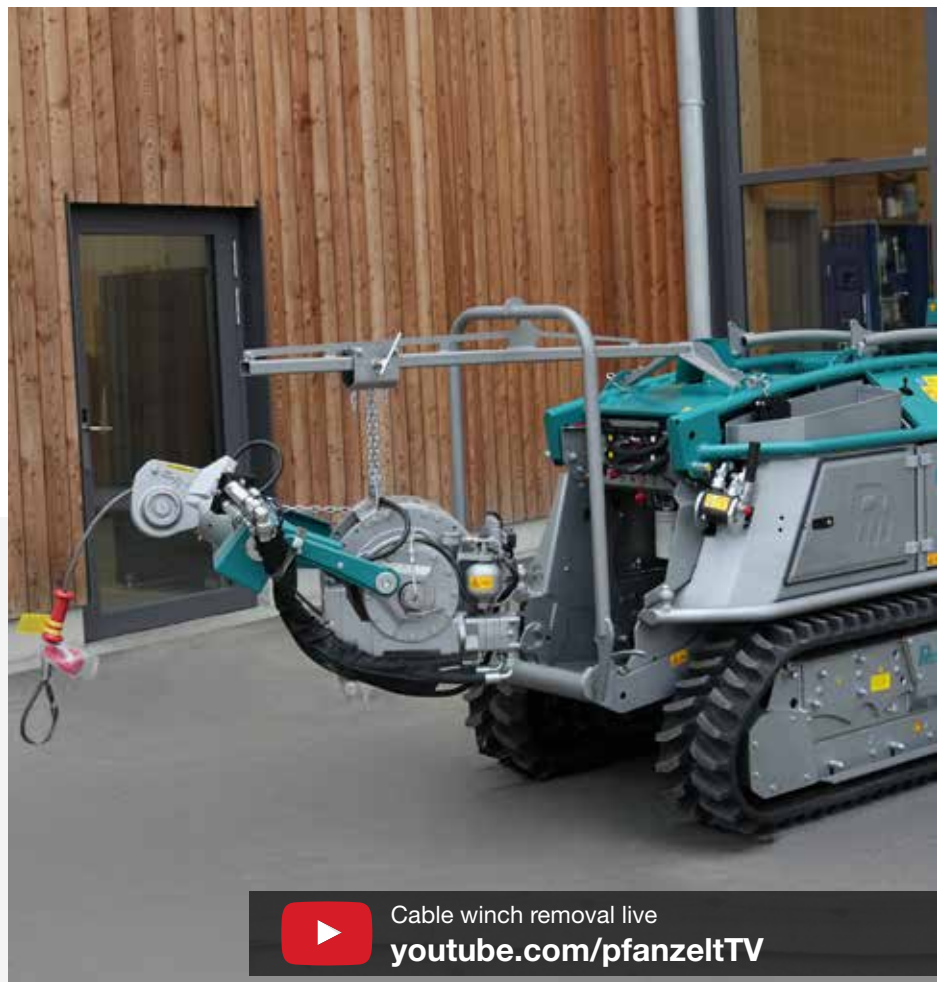


Mechanical PTO

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.

Optimum weight distribution - as a remote-controlled implement carrier and as a mini forestry tractor

In addition to a cable winch which is installed on the vehicle with a favourable centre of gravity, the 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).



Cable winch removal live
youtube.com/pfanzeltTV



- 1** Onboard hydraulics with up to 4 proportional and 2 b/w double-acting control units.
- 2** Float position, optional power lift relief, and adjustable lowering speed for the rear power lift.
- 3** Power hydraulics with 96 l/min, 300 bar and multicoupler for demanding applications.
- 4** Mechanical PTO for driving implements with high efficiency and almost no loss of power.
- 5** The cable winch can be removed in a few minutes with a lift-out device and without tools.
- 6** Three-point linkage cat. 1 with maximum lifting force of 11 kN with optional hydraulic lift relief



Multifunctional front mounting space

The right equipment for the Moritz in every field of application. A second mounting space is optionally available at the front of the vehicle. The front power lift has a maximum lifting capacity of 7 kN and can also be equipped with a top link point.



Safety and lighting

In order to optimally illuminate the working environment, additional headlights can be installed at two positions on the Moritz.

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

Implements and accessories for professionals.



MAX forestry cutter

With the MAX forestry cutter, the Moritz becomes a problem solver - for crop maintenance as well as for planting preparation and many other applications in the forest.

Technical specs:

- Standing tools
- Hydraulic front flap
- Hydraulic downholder
- Option: hydraulic side shift
- Working width 1,200 mm

Two rotors with different tools are available for the MAX forestry tiller:

- 40 carbide-tipped round chisels
- 20 firmly screwed blade tools, also suitable for tree stumps above the ground



MAX forestry mulcher

The MAX forestry mulcher is designed for mulching grass and scrub.

Technical specs:

- Swinging Y flails
- Option: hydraulic front flap, hydraulic side shifting
- Working width 1,200 mm



Auxiliary winch

For use on steep slopes, the Moritz forestry tractor can be equipped with an auxiliary winch which can be used with 360°. Safe and ground-conserving operation is thus possible even in extreme terrain.

Technical specs:

- Pulling force 10 kN
- Cable length max. 50 m
- Forward/reverse with freewheel clutch



Traction winch

Hydraulically driven traction winch for securing the crawler on steep and difficult terrain, and minimising ground damage.

Cable infeed with all-round rotating cable infeed pulley, mounted on the vertically supported rotation arm, so that the vehicle is not hindered by the tensioned traction cable, and all directions of travel can be freely selected.



Natural re-forestation, Forest conversion and maintenance



The Moritz felling tractor is the basis for near-natural and sustainable reforestation. The remote-controlled implement carrier impresses with its possibilities, from surface preparation to sowing and planting to surface care.

Attachments for reforestation:

- Sowing strip milling machine
- Sowing plough
- Plantomat container-planter
- MAX forestry tiller



Planter Plantomat and Plantomat Flex

- Automated planting
- Milling wheel for preparing the planting site
- Magazine for 50 container plants
- Operation via Moritz radio control

The planter is equipped with a hydraulically driven milling disc to clear the planting bed of unwanted growth and forest soil. Afterwards, the planting spade is used and digs the planting hole. Now the plant falls into the ground hole; the plant is pressed on by a hydraulically operated device to ensure the required ground contact. After planting is finished, the machine is moved back to its initial position.

The Plantomat planter is available in two versions: either as a compact unit or a separate system. In the latter, the strip mulcher is located at the front of the machine and the planting unit at the rear.





Sowing strip cutter

- Mechanically driven by PTO
- Milling depth 250 mm
- Trench is V-shaped
- Carbide tipped teeth
- Coarse and fine seed wheel



Stump grinder

The stump grinder is the supplement to the Moritz for all arborists, problem tree cutters, and gardeners and landscapers.

- Hydraulic support (parallel)
- Swivel radius +/- 45
- Working depth maximum 620 mm
- Hydraulic front and rear adjustment of the swivel arm
- Grinding wheel diameter 600 mm
- 24 carbide round chisels, can be used on three sides



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 for the Moritz mini forestry tractor offers the greatest possible protection for the forestry worker during the entire felling process.

Project: Natural reforestation



The area to be reforested has increased significantly in recent years. This is due to drought, bark beetles, storms and forest fires. Pfanzelt is showing how forests can be reforested in a near-natural way without large-scale technology in a large-scale project that will be supported for years.

The project area

The area is approx. 1.5 hectares. Most of the area's forest stock fell victim to a storm and bark beetle. The old stock, of which very little remains, and small areas with natural regeneration are preserved. The material still lying on the surface and sticks are also not processed if possible. So that reforestation can take place near-naturally and adapted to the terrain, a combination of planting and sowing strips and 8 x 8 m planting squares is established. The focus is on ensuring that maintenance can be carried out mechanically to the greatest possible extent in the coming years.



Surface preparation

On 15 and 16 December 2021, two Moritz mini felling tractors, each equipped with a MAX forestry mulcher, prepared the area for planting and sowing. According to exatrek machine tracking, we have laid 1.8 km of planting and sowing strips and 32 planting squares of 8 x 8 m. In addition, a 500-metre-long fence path was prepared. The Federal Forests do not normally

erect wildlife protection fences. In order to rule out wildlife browsing in this project, we deviated from the standard and instead of individual protection for the plants, we set up a complete wildlife protection fence.

Seeding and planting

„Our new container planter is partly automated, with the operator taking over the driving and positioning of the Moritz. The planting process itself is completely automatic,“ explains Voderholzer. Container plants were planted with the new Plantomat planter. For an optimal comparison, some of the planting squares were also planted by hand. Both container and bare-root plants are used. This allows us to compare the differences in results after three years at the KWF conference. The planter planted approx. 2,300 trees: 70% oak and 30% Douglas fir.

Pelleted Douglas Fir seeds were applied to around 600m² with the sowing strip mulcher. However, this is against the background that this is actually the wrong area for this, as it is very weedy.

Maintenance

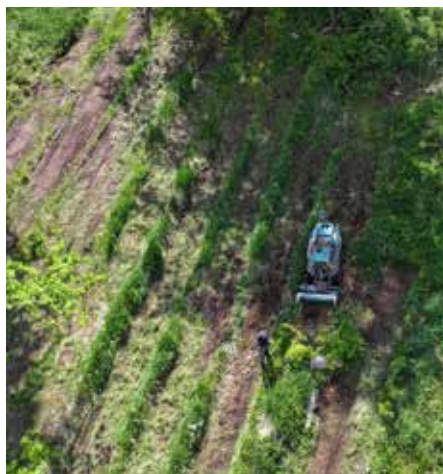
To facilitate machine maintenance, the planting and sowing strips were laid out at a distance of two metres. The MAX forestry mulcher with its working width of 1.2 metres can therefore easily remove unwanted growth between rows. Removal of the individual plants in the row is not necessary for this method. In spring 2023, another check was carried out on the project area. In particular, the drought damage from last year was assessed and partly replanted. At the beginning of July 2023, we carried out the first culture maintenance of the year. Due to the rainy months, the accompanying vegetation was very lush and the Moritz was strongly called upon with the MAX forestry tiller. In some places, the one metre high marker poles were already difficult to see

An initial conclusion

Compared to many other areas in the Schwarzenborn federal forest district, this cultivated area is very good. Even though the weather conditions were very difficult, including almost no precipitation for months in 2022, losses are low. This is significantly lower than in other newly planted areas in Hesse. In 2024, the culture is very good. The outages in 2023 due to drought have been minimal.

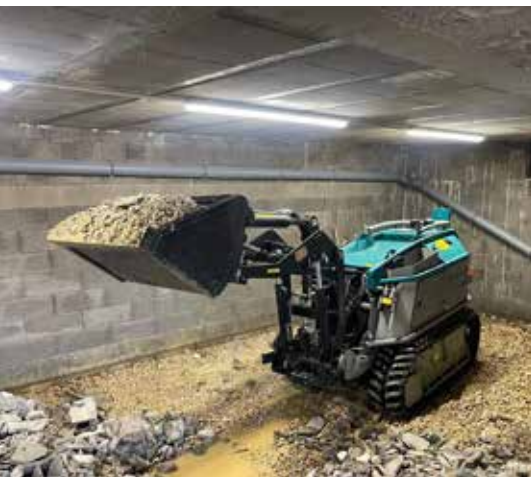
Further information and
online diary

www.pfanzelt.com



Areas of application of the Moritz





Moritz Fr70/75 mini forestry tractor

Technical specification

Technical specs:	Fr70 (PS_RH-10550/6-II)	Fr75 (PS_RH-10575/6-II)
Engine	Deutz diesel engine D2.9L4 Four cylinders, water cooled, Cleanfix reversible fan, combination radiator, fuel capacity 45 l	
Performance	36 kW / 50 hp	55 kW / 75 hp
Traction hydraulics	Closed proportional two-circuit system, all travel functions controllable via radio, Stepless driving speed, 1st driving step 0-3 km/h, 2nd driving step 0-6 km/h, Infinitely variable final speed, drift adjustment to compensate for slope downforce when mowing across slopes, automatic hydraulically tensioned double guide wheel	
Running gear	Crawler chassis with rubber running gear in AS design (width 250 mm, length 1,650 mm), Width hydraulically adjustable	
Chassis	torsion-resistant box section made of special steel, large lockable storage compartment integrated in the chassis Various anchor points for securing the mini tractor, floor protection tray made of solid steel, circumferential branch deflector with integrated hood guard	
Onboard hydraulics	separate oil circuit with pump (18 l/min at 200 bar) One proportional control system for lifting gear with floating position	
Operation	Remote control for all functions (emergency stop, gas adjustment of Diesel engine, driving and steering, fan reversal, 1st and 2nd gear, drift adjustment, optional linkage relief, forwarding shield up/down, float position of linkage, width adjustment, PTO on/off, auxiliary control valves, horn, lights, cable winch operation / pick- up for foreign devices	
Dimensions	Length 2,300 mm, width 1,150 mm / 1,550 mm Height 1,350 mm, weight 1,370 kg	Length 2,300 mm, width 1,150 mm / 1,550 mm Height 1,350 mm, weight 1,405 kg

Accessory programme for Moritz Fr70 and Fr75

Running gear 300 mm width (instead of 250 mm series)

LED working lights front and rear with bracket (caterpillar) | *Prerequisite: additional DW control valve*

Rollover bar

Transport box

Chain curtain for use with mulcher or forestry tiller

Front auxiliary winch | *Prerequisite: additional DW control valve*

- 10 kN Pulling power
- Rope 6 mm dia. x 30 m (max. 50 m)
- Rope reel and drum brake
- Control via track remote control
- Forward and reverse with freewheel clutch

Deflection pulley bottom for auxiliary front winch

Three-point linkage for external devices at the rear hydraulics

Lifting gear relief for rear hydraulics

Front power lift with max. lifting force of 7kN | *Prerequisite: Only in connection with four DW prop. and two BW valves*

Crawler PTO transmission

- Maintenance-free oil-bath running and oil-cooled multi-plate clutch
- PTO shaft speed at transmission approx. 540 at 2,100 rpm

Hydraulic top link

Power hydraulics

- closed oil circuit with axial piston variable displacement pump max. 48 kW
- infinitely variable adjustment of the oil flow rate 0 - 96 l
- maximum pressure 300 bar
- with multicoupler (A + B + leakage oil, voltage 12 V)

Pressureless return with holder

Proportional DW valve 2/1 (max. 4 pieces)

Black/White DW valve (max. 2 pieces)

Fire-fighting version

flashing beacon light mounted on a bracket and flasher in the bonnet, warning label,

Implements

Wood mulcher "MAX" with hydraulic flap and hydraulic pushing device

Prerequisite: PTO shaft transmission and 2 additional DW control valves

Recommendation: Hydraulic top link for forestry mulcher

Mechanically driven via power take-off shaft, with hydraulic flap, optimised reshredding by counter-knives in the flap, mechanical lateral displacement, hydraulic pusher device for use in high branch material, wide skids and optimised geometry, cutting depth adjustment via hydraulic top link (hydraulically Top link option), power requirement from 20 kW with cardan shaft,

Working width: 120 cm, Overall width 1,400 mm, weight 420 kg

Variant 1

40 carbide-tipped round chisels, can be used on three sides (by turning the chisel), arranged in a spiral, tool flight circle diameter 340 mm

Variant 2

20 firmly screwed blade tools, also suitable for tree stumps above the ground, arranged in a spiral, tool flight circle diameter 340 mm

(Option: with lateral hydraulic adjustment)

Mulcher 120

Prerequisite: PTO shaft transmission

Working width: 120 cm

Three-point linkage, cutting rotor with 24 hammer flails type 21, input oil-bath gearbox with integrated freewheel for PTO 540 rpm left-turning (front), skids, back-up roller with 140 mm diameter, CE guards with mechanical side shift (approx. 400 mm), flap (for rotor cleaning at standstill), cardan shaft

(Option: hydraulic cylinder for hydraulic flap)

Lateral hydraulic adjustment for wood mulcher 120

Prerequisite: Control valves

Recommendation: Hydraulic top link for forestry mulcher

Mulcher 135

Prerequisite: PTO shaft transmission and additional DW control valve

Working width: 135 cm

Mulcher with hydraulic side shift, input oil bath gearbox with integrated freewheel for 540 rpm PTO, front guards, adjustable belt tension, hammer-flail type 08, lower counter blade, support roller with 170 mm diameter, cardan shaft

Strip mulcher

Prerequisite: PTO shaft transmission

Milling depth 200 mm, mechanically driven via PTO shaft, trench type v-shaped (top 200 mm wide, bottom 20 mm wide), hard-metal tipped teeth with cardan shaft

Seed module with hopper (only in combination with strip cutting machine)

Separate hoppers for coarse grain with approx. 55 l capacity and fine seed with 10 l capacity, electrically adjustable sowing frequency, automatic switch-off of the sowing unit when vehicle stops, macrolon cover for inspection

Plantomat planting machine

Semi-automatic, radio-controlled planter for inserting container plants into the soil.

Bale size up to 6 x 6 cm square or 6.5 cm diameter, bale length up to 20 cm, planting height up to 45 cm

Traction winch

Cable infeed with 360° rotating cable infeed pulley, traction continuously variable up to approx. 11 kN, hydraulic winch drive

Implements

Stump grinder

Lateral pivoting via a cylinder (speed throttle), swivel radius +/- 45°, hydraulic height adjustment, working depth max. 620 mm below standing surface, excavation height under milling wheel approx. + 930 mm, hydraulic forward and reverse adjustment of the swivel arm, milling wheel diameter approx. 600 mm, 24 carbide-tipped round chisels, suitable for three sides, splinter protection apron to the side and rear, weight approx. 370 kg

Protection shield for persons

Two hydraulically folding protective halves, hydraulically tiltable on two levels, hydraulically height-adjustable, hydraulically collapsible for transport, protective shield can be quickly removed

Winch aggregates

Hydraulic winch 50 kN pulling power

Prerequisite: Power hydraulics

- Worm gear drive: Power transmission to the winch drums by means of hydraulically actuated multi-disc clutches
- Pulling force 50 kN
- max. cable capacity 110 m x 11 mm
- Average cable velocity hydr. 0.40 m/s
- Multi-disc brake
- Sinter plate clutch
- electric solenoid valve control (wet armature)
- Shield:
 - Hydraulically height-adjustable with pushing function
 - Rope reel also running upwards
 - Lifting force on the skirting bar: 14 kN
 - Shield width approx. 1100 mm
 - Trailer coupling and combination bolt K 50 (ball)

Hydraulic winch 50 kN pulling power with cable brake

Prerequisite: Power hydraulics

(Technical specifications see item 1) with swivel roller and cable brake

Hydraulic winch 60 kN pulling power

Prerequisite: Power hydraulics

- Pulling force 60 kN
- Max. cable capacity 110 m x 11 mm

all other specifications correspond to the cable winch unit with 50 kN pulling force

Hydraulic winch 60 kN pulling power with cable brake

Prerequisite: Power hydraulics

(Technical specifications see item 3) with swivel roller and cable brake

Hydraulic winch 72 kN pulling power

Prerequisite: Power hydraulics

- Pulling force 72 kN
- Max. cable capacity 90 m x 12 mm

all other specifications correspond to the cable winch unit with 50 kN pulling force

Hydraulic winch 72 kN pulling power with cable brake

Prerequisite: Power hydraulics

(Technical specifications see item 5) with swivel roller and cable brake

Lift-out device - mechanical installation and removal aid for quick winch change

Start your configuration now.
configurator.pfanzelt.com



Pfanzelt forestry and system tractors

Pfanzelt forestry machines guarantee the lowest operating costs. The combination of modern engine technology, a powerful hydraulic system, and an economical power-split or hydrostatic transmissions are the basis for economic success.



Felix special forestry tractors

The Felix special forestry tractor can be assembled in a modular system and thus adapted to the respective area of application. 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.

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Pm Trac multipurpose tractors

With the new series *Generation 38*, technology has undergone extensive further development. The Pfanzelt Pm Trac system tractor is THE tractor for combined use in agriculture, forestry, and landscaping.

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Implement carrier K-Trac

For the first time, on the IFAT 2022, Pfanzen presented the new implement carrier for year-round use in the municipal sector as well as in environmental maintenance. The hydraulic full suspension which can be automatically locked, and the all-wheel steering enable safe and ergonomic work.

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Pm Trac multipurpose tractor *Generation 38*

At the ZLF 2004 in Munich, Pfanzelt set standards with the presentation of the Pm Trac multipurpose tractor. The development trend - using a tractor chassis from the large-scale production to the completely own tractor chassis - makes the Pm Trac unique. Among other things, the continuously variable and power-split transmission variaDRIVE - a proprietary development for Pfanzelt forestry machines - offers new possibilities and contributes its share to the motto of the new Pm Trac generation: *Versatility is its strength - working and operating comfort its virtue.*

The Pm Trac multipurpose tractor of the *Generation 38* is optimised for combined use in agriculture, forestry, and landscaping thanks to its unique vehicle concept.

The core of the Pm Trac machine concept includes the centrally located large tractor cab and the central superstructure space above the rear axle. Fast and flexible adaptation to different working conditions is based on the Pfanzelt System Attachment (PSA).

Convincing technical details:

- Six-cylinder engine with 205, 253, and 292 hp respectively, Cleanfix changeover fan, and 400-litre fuel tank
- Power-split, continuously variable gear unit variaDRIVE up to 50 km/h (max. driving speed with reduced engine speed)
- Hydraulic system with 160 l/min at 210 bar (optional 200 l/min as well as additional power pack directly at the power take-off of the gearbox)
- New machine control software for complete customisation of the operation to the driver
- Pneumatically suspended XXL comfort cab with optimum all-round visibility and rotating operator stand
- Support frame with 4 variable mounting and attachment areas for the heaviest implements
- Pfanzelt system receptacle: Toolless quick-change console for crane and cable winch

Technical specs ► Page 147



Pm Trac multipurpose tractor live in action.
youtube.com/pfanzeltTV

Pm Trac multipurpose tractor

Fields of application

Designed for forestry applications, the Pm Trac multipurpose tractor is also universally applicable.

Forestry

Forwarding of long and short timber

For long and short timber forwarding, the rear mounting space, which is located directly above the rear axle, is used for mounting the cable winch and forest crane. Depending on the area of application, a rear crane (low column) or a loading crane (high column) can be set up with a favourable centre of gravity.

With Pfanzelt's system mount, the different types of cranes and the forestry winches can quickly and easily be assembled and disassembled.

Versatility in forestry

In forestry, the Pm Trac is not only convincing in classic forwarding use. In addition to the use with a forestry mulcher for area cultivation, the Pm Trac can also show its full potential with an energy woodcutting gripper. When used with a felling unit or a mulching head on the forestry crane which requires a higher hydraulic power, a powerful auxiliary hydraulic system can be installed.

The Pm Trac's performance spectrum also includes the use of a shredder. In addition to shredders with their own engine, shredders driven by the tractor's PTO shaft can also be combined. The rear PTO of the Pm Trac is still accessible even with the crane and winch mounted.





Municipality and landscaping

Thanks to the rear attachment space with rear power lift, other implements such as mower spreaders can also be driven in combination with an additional edge mower or area mulcher.

The Pfanzelt System mount serves as a support frame for the Pm Trac. The extreme forces involved when using heavy-duty forwarding cranes or mower implements are absorbed by the

supporting frame and dissipated in a controlled way.

The Pm Trac is also the ideal helper in landscape maintenance.

For municipal use, a municipal coupling plate can be installed instead of a front hydraulic system.



Agriculture

As soon as the forestry implements have been removed, the tractor can be used for agricultural purposes without any additional conversion measures, as neither the rear power lift nor any other relevant components are modified for forestry operation. In addition to the rear and front attachment areas, front loader consoles are also part of the multiurpose tractor's concept.



Pm Trac *Generation 38*

Technical details at a glance:

1

Perfect feeling of space in the XXL cabin thanks to the largely dimensioned **air conditioning with automatic control**.

2

Comfortable, air-suspended cab for two persons with **air-suspended driver's seat** and large passenger seat.

3

7 m² glass surface and a **340° electrically rotating operator's platform** for an optimal view of the working environment.

4

Plenty of storage space for chainsaw, fuel canister, and tools for forestry.

5

High-torque and economical 6-cylinder engine with **205, 253, or 292 hp**.

6

CLEANFIX reversing fan for radiator cleaning with optimum cooling and considerable fuel savings.

7

Front hydraulics with optional front PTO.

8

Quick and easy **removable fenders** and lighting equipment for road travel.

9

The thrust tube front axle with **automatic blocking** for crane work enables perfect standing.

10

12 work lights on the cab roof provide optimum illumination of the working environment.

11

A well thought-out system of **protected hoses** on the complete crane ensures minimum downtime.

12

The Power Link System (toggle joint connection) guarantees maneuverable crane operation, greater reach, and more lifting power.

13

Additional **crane floodlights** turn night into day and always light up the gripper area.

14

The **telescopic cylinder** is internally mounted, protecting it from damage.

15

Equipped as standard with a powerful **flange rotor** and on request also with a **double pendulum brake**.

16

PSA (Pfanzelt system mount) for the attachment of a cable winch, forwarding or loading crane as well as mowing booms.

17

Professional and powerful **Double drum gear winch** with two times 6 or 8 t pulling force.

18

Freely accessible rear power take-off shaft, trailer rail, rear hydraulics even with mounted crane (without pole shield).

19

EU Tier V: Exhaust aftertreatment with SCR technology, AdBlue injection, and a particle filter.

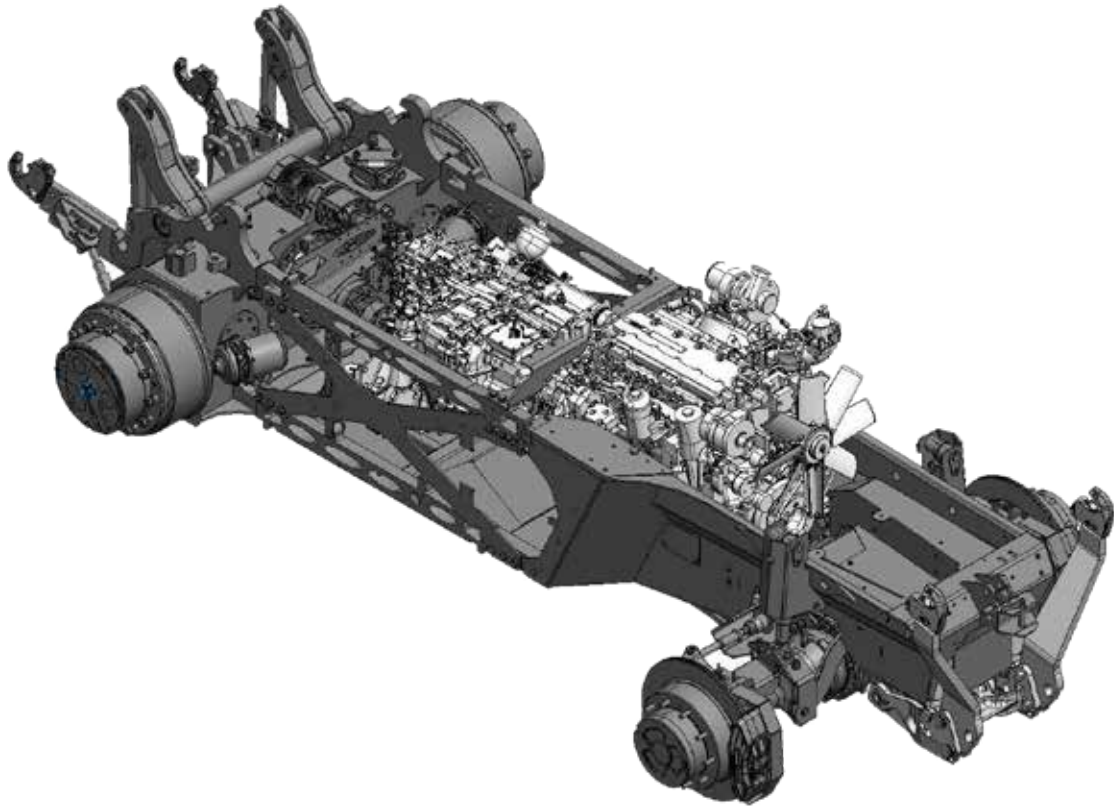
20

Safe working via an **active standstill control** is provided by the continuously variable, power split transmission.



Pm Trac multipurpose tractor *Generation 38*

Technical details that will convince you



The chassis

The new Pm Trac is not only energetic with its new bonnet design. The chassis has also undergone many further developments and new components have been used. The chassis is built over a frame in which the individual units are installed. The biggest change to the chassis concerns the transaxle. The transmission and rear axle unit was previously purchased from ZF. With the new series, Pfanzelt produce the unit themselves - the variaDRIVE transmission as well as a planetary-driven rear axle from Pfanzelt are used. The Pm Trac *Generation 38* is now based on an almost 100% Pfanzelt tractor chassis. This enables the complete adaptation of all components to heavy-duty use in forestry and as a multipurpose tractor. The days of using components from agricultural tractors are over. The Pm Trac plays in a new league.

variaDRIVE

The comfortable and powerful handling corresponds to that of familiar power-split transmissions. However, additional comfort is offered when changing the direction of travel. This operates more gently and quickly. In this way, it is comparable to that of a hydrostat. The transmission is also efficient and performance-oriented thanks to the three travel ranges in forward drive and two travel ranges in reverse drive.

- Top speed 40/50 km/h
- Motor gear management
- No switching of clutches in shunting mode up to approx. ± 7 km/h
- Reduction of the engine speed when the final speed is reached
- Individual preselection of maximum speed for special applications (for example, forestry milling)

4 Implement and mounting compartments

In addition to the rear mounting compartment which is positioned with a favourable centre of gravity above the rear axle, the Pm Trac has a three-point implement compartment on the front and rear. Optional front loader consoles are available.



- 1 Rear compartment
- 2 Rear three-point linkage
- 3 Front three-point linkage
- 4 Front loader console



Crane set-up and dismantling in detail
youtube.com/pfanzeltTV

Pfanzelt system mount (PSA)

Due to the changed cabin position towards the middle of the vehicle, additional equipment can be placed in the rear body space using the Pfanzelt system mount (PSA). It is located directly above the rear axle and therefore optimally designed for the load and the vehicle's centre of gravity.

A special quick-change system allows the implements to be changed within a very short time without tools. The assembly or disassembly of the crane and winch takes less than 20 minutes.

Crane set-up/dismantling in less than 20 minutes

- Tool-free assembly and disassembly in less than 20 minutes
- One-man system
- PSA | Pfanzelt system mounting for winches and crane (optionally also as a universal base plate for other implements)
- Separate dismantling of crane and winch is possible

Road Travel

A roadworthy transmission technology and a standard road approval for 50 km/h allow the operator to approach or change locations quickly and without additional transport technology. The vehicle can also be driven on public roads in combination with a forwarding trailer or a trailer chopper.

The lighting system and fenders required for road travel can easily and quickly be converted for forestry operations. The four fenders, which are mounted as a pluggable system, are taken off the vehicle. The side indicators and front lights are concealed behind protective devices.



More hydraulic power

The Pm Trac's hydraulic system now has a standard capacity of 160 l/min at 210 bar, which can optionally be increased to 200 l/min. In addition, the new variaDRIVE transmission enables an additional power pack to drive high-performance implements via a direct power take-off. Depending on the power requirement, the power pack can deliver more than 100 kW drive power. For high efficiency and higher

hydraulic pressures, additional 180 l/min at 350 bar are possible in the closed system.



Forest protection

Pfanzelt's Pm Trac forest protection concept includes bumper guards for the cab, roof, and engine hood as well as complete protection for the chassis.





Serviceability

Pfanzenberg's well thought-out service concept begins with easy access for cleaning the radiators and engine compartment. For optimum accessibility to the rest of the aggregate compartment, the vehicle's cab can be tilted open. Dismantling the loading crane and winch releases the last part of the chassis. The base plate of the tractor can also be opened by a cable winch.



Stowage space

Useful and tidy space for a chainsaw, fuel canister, and other useful accessories is provided by a large tool box below the entrance to the vehicle cabin.



Well-being zone with a view



XXL comfort cabin

The pneumatically suspended, large-volume cab which was developed by Pfanzelt enables quiet and comfortable working with perfect all-round visibility. A new noise insulation concept allows quiet and vibration-damped operation during use, especially at high engine speeds.

- More than 7 m² of glass surface provide optimal view of the working environment and increase work safety
- The steering column can be easily folded away when working in the forest
- Relaxed, ergonomic seat position on the air-suspended operator's platform which can be electrically rotated by 340°
- Always within reach, all the controls, the pedals, and the touchscreen terminal rotate together with the seat



Unique in the forestry industry and essential for municipal use is the comfortable passenger seat.





The machine software

The intelligent machine control system, which is operated via a touchscreen monitor on the seat, allows presettings to be stored for four operators. A Pfanzelt default user, which cannot be modified, is also stored.

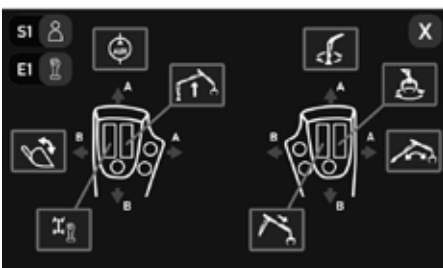
An additional operating terminal for road travel is located next to the steering wheel. All important parameters are displayed there in the driver's best possible view.



The new command centre on the rotating operator station

- Driver management for four drivers incl. individual assignment of joysticks and control levers
- Presets for hydraulic control units, crane functions, and auxiliary pumps
- PTO management
- Engine speed management
- Adjustment of the driving characteristics

Excerpt from the extensive menu navigation



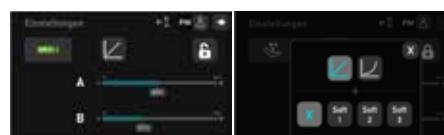
Adapted to the driver; he can individually preselect the assignment of all joystick functions and operating levers for hydraulic control units at the operator station, and save them in the driver management system.



The hydraulic management allows pre-setting of all crane functions (including flow regulation, adjustment of characteristics of individual hydraulic functions and ramps).



In addition to the preselection of speed and start-up characteristic, an automatic switch-on and switch-off can also be pre-set in the PTO management.



Cranes for the Pm Trac Generation 38

The crane programme by Pfanzelt is one of the most extensive on the market. For the Pm Trac, modern and powerful professional cranes are available in different lifting classes from 5 to 7 mt and reaches up to 10 m. In addition to the technical specifications, the cranes also differ in their design.

Forwarding grapples and cranes

Pfanzelt has designed special cranes to be mounted on the Pm Trac. The two available series differ in terms of grapples and cranes. The former have a low crane column and are therefore specially designed for grinding long timber. Forwarding cranes, unlike forwarding grapples, have a high crane column and are optimised both for grinding long timber and loading a forwarding trailer with short timber.

Technical specs ► Page 104



Winches for the Pm Trac *Generation 38*



On the Pm Trac, Pfanzelt's winch units are mounted under the forest crane above the rear axle.

Double drum units with a pulling force of 6 or 8 t are available. Depending on the rope diameter and drum width, the maximum rope capacity is 150 metres. Pfanzelt uses multi-disc sinter plate packs for the exact control of braking and clutch operations. In order to avoid malfunctions of the hydraulic control, Pfanzelt's geared cable winch operates with a separate oil circuit with filter unit, which is fed by a hydraulic pump. The cable winch is operated either via an electric pushbutton control or a forestry radio system.

Technical details ► Page 24



Remote propel

In order to increase ergonomics during winch operation, the Pm Trac can also be equipped with an optional remote propel. When required, it can be activated simply by pressing a button on the display of the driver's station.

Short log forwarding with the 8-wheel Pm Trac

For combination with a Pm Trac, various Pfanzelt forwarding trailers are available for forwarding short timber. Requirements for modern forwarding trailers vary greatly depending on their application.

With a forwarding trailer with its own traction drive, the Pm Trac becomes a full-featured 8-wheel vehicle. This combination is on a par with a conventional forwarding combinations and also offers a wide range of other possible applications.

The 8-wheel system has a combined thrust of 16.1 tons. This allows demanding off-road driving with high ground protection. The drive speed of the forwarding trailer is optionally fully automatic, electronically controlled by the Pm Trac. Operator adjustments are possible if required. For example, a lead can be set.

For the combination with the Pm Trac, both the Profi forwarding trailers P17 and the logLINE back trailer L19 are appropriate.

The cable winch can be used even with the forwarding trailer attached. This makes it possible to rope logs outside the crane's reach and to carry out winch-assisted felling without any restrictions.



Forwarding trailers	P17	L19
Frame	Central tubular frame (300 x 200 x 10 mm)	Central tubular frame (350 x 250 x 8 mm)
Permissible total weight on public roads	17 t	19 t
Payload on private roads	15 t	17 t
Empty weight	approx. 2.5 t	approx. 3.5 t
Loading cross section/ length	3.52 m ² / 4,000 mm	3.5 - 4.0 m ² / 4,500 - 6,000 mm
Braking system	4-wheel pneumatic brake system	
Tyres	600/50-22.5 16 PR	600/50-22.5 16 PR
Drive system	powerDRIVE 4WD-II	powerDRIVE 4WD-II

Pm Trac multipurpose tractor *Generation 38*

Technical specification

Multipurpose tractor	Pm Trac 3820	Pm Trac 3825	Pm Trac 3830
Engine	In-line six-cylinder turbo diesel engine with electronic control, common rail, EU V exhaust stage, Cleanfix MC switchover fan		
Power (at 2,100 min ⁻¹ to ISO14396)	151 KW/ 205 hp	186 KW/ 253 hp	215 KW/ 292 hp
Torque	818 Nm at 1,500 rpm	1,027 Nm at 1,500 rpm	1,280 Nm at 1,950 rpm
Engine displacement:	7.4 litre	7.4 litre	7.4 litre
Cooling	water-cooled / turbocharger / intercooling		
Exhaust-gas aftertreatment	SCR technology with AdBlue injection, soot particle filter		
Tank capacity	400 l diesel, 40 l AdBlue	400 l diesel, 40 l AdBlue	400 l diesel, 40 l AdBlue
Transmission	variaDRIVE 0-50 km/h		
Specifications	Continuously variable, power-split transmission with cruise control function, engine transmission management, three forward travel ranges, two reverse travel ranges, max. travel speed at low-ered engine speed (approx. 1,800 rpm), active standstill control		
Front axle	Hydro-pneumatically suspended thrust tube axle with automatic level control, electro-hydrau-lically switchable differential lock, central front axle drive, integrated constant-velocity steering cylinder, axle automatically locked when crane is stationary		
All-wheel drive	All-wheel & differential lock management		
Steering	Hydrostatic steering, steering column can be folded away when working, joystick steering		
Brakes	Two-circuit air brake Rear axle: Dry drum brake, pneumatically-actuated parking brake via Tristop cylinder with inte-grated trailer test position, single-wheel brake Front axle: Dry disc brake incl. integrated Opti-Stop front axle brake		
PTO	switchable PTO 750 / 1,000 rpm (option: 1,000 / 1,450 rpm) PTO connection 1 3/8" pluggable PTO shaft, electro-hydraulic switchable wet multi-plate clutch, PTO automatic, PTO management, adjustable start-up mode, automatic switch-off (speed-dependent)		
Hydraulics	Hydraulic system with axial piston pump, controlled load sensing, hydraulic oil cooler		
Flow rate / operating pressure	160 l/min / 210 bar (option: 200 l/min)		
Power hydraulics	180 l/min / 350 bar		
Electronics	CAN BUS system: Central control and monitoring of engine, gear unit, and auxiliary control units at the operator station Integrated functions for crane settings, all-wheel drive, differential, steering Four different driver settings can be stored, additional Pfanzelt default setting		
Front power lift	max. lifting force 35 kN, double-acting		
Rear power lift	Max. lifting force 82 kN, external lifting cylinder with float position, switchable to double-acting for lifting and pushing Quick coupler for the lower link, adjustable lower link stabilisers		
Front loader	Flange points on the integrated support frame for mounting front loader consoles		
Rear compartment	Pfanzelt system pick-up (PSA), vehicle support frame for stabilisation, block design		
Cab	Large volume, air-suspended cabin with all-round visibility (over 7 m ² window area), two large roof windows, safety cabin according to ISO standards (ROPS)		
Operator stand	Air-suspended swivel seat with seat heating, rotation by electric motor by 340°		
Ventilation	Powerful heater and air-conditioning system with three-speed blower, incl. automatic climate control system		
Add. Standard equipment	Removable fenders, storage box, pneumatically controlled step, fire extinguisher		
Road approval	COC document, machine definition (agricultural tractor/implement carrier)		
Empty weight / admissible total weight	depending on equipment / 14 t		

You can find the extensive range of accessories in our configurator: configurator.pfanzelt.com





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.

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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.

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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 Pfan­zelt 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 4-WD special forestry tractor

The rear carriage of the Felix in the 4-wheel version is designed for working with long timber. If one goes back in history to the beginnings of wood recovery with machines, the technology at that time was limited to the use of winches. Only years later cranes and clamping benches came into use, although the machine concept had not changed. Consequently, all additional implements were mounted at the rear of the machine. To counteract the resulting problems with weight distribution, the machines were additionally ballasted. This resulted in disproportionately heavy machines - a problematic aspect in terms of soil conservation.

Pfanzelt have consistently worked on their concept and adapted it to today's requirements.

An additional highlight is the steering system of the Felix 4-WD

Convincing technical details:

- Optimum weight distribution for demanding terrain
- Combined steering system for maximum crop protection and impressive manoeuvrability
- Powerful but energy-efficient transmission technology hydra2POWER
- Road travels at 40 km/h enable easy changes of the places of operation

Technical details ► Page 162



Felix 4-WD special forestry tractor

Technical details that will convince you

The front end

Our new customers are regularly surprised when the Felix special forestry tractor is inspected for the first time. The reason for this is probably the rather unusual layout of the vehicle. The cabin is located very far towards the front end.

If one briefly thinks about this layout, one quickly realises that the concept behind it is different, but certainly justified. On the one hand, the short nose provides an optimum overview, while on the other hand the ideal work angle - in relation to the distance between the front axle and the front polder shield - leaves no marks when driving into the aisle.



The vehicle layout

In order to install the cable winch, crane, and clamping bench with a favourable centre of gravity, we designed a rear carriage with sufficiently large body space. This design prevents the crane or clamping bench from rearing up when forwarding heavy timber. At the same time, due to the weight distribution, working in the most difficult terrain is possible in a way which protects the soil and saves fuel.

Pfanzelt quick change system

Pfanzelt's quick change system allows a time-optimised conversion of the types F and V from stake basket to clamping bench without tools. When shifting the machine, the superstructures can be placed on the loading area at the same time.



The steering system

The Pfanzenzelt Felix 208.5 4-WD special forestry tractor is world champion in manoeuvrability. The clever combination of articulated and Ackerman steering results in unimagined maneuvering possibilities. An important design feature of the Felix 4-WD is its steering system. When driving on the road, only the articulated steering is operated via the steering wheel. During work, the steering system is converted to joystick operation. This means that the operator has independent access to both articulated and Ackermann steering. A steering angle of 70° is thus possible.

Every day, precarious situations arise. For example, if the vehicle has slid into a ditch, Felix can be maneuvered easily and in parallel out of the ditch thanks to the steering system. Even wet surfaces can be protected due to the weight distribution in crab steering mode.



Working on a steep slope

In order to ensure optimal and safest possible work even on steep slopes, the roller block is hydraulically height-adjustable. Guide tubes ensure the necessary cable protection from the power unit to the cable infeed roller. Damaging the cable with the gripper is therefore impossible.



Stanchion basket tilt

In order to shift the centre of gravity upwards when driving sideways on slopes, the stanchion basket can optionally be tilted sideways.



The road approval

Considering the work sequence on a forestry machine, it is essential to start already at the depot and not only when entering the woods. It is also decisive for economic efficiency how the machine is transported to the place of use, or how it is moved from one place of use to the next. Is a truck with a low loader necessary for transporting the forestry machine, or does the vehicle have a transmission system which also allows road travel?

Felix offers the flexibility of a vehicle concept which does not require any aids to reach or change the place of operation.





The service possibilities

The layout of the vehicle's components means that the engine, transmission, and the main hydraulic components are installed below the cab. In order to reach all areas quickly and without tools for service purposes, various maintenance openings have been installed on the Felix special forestry tractor.

In addition to the ergonomic possibility of hydraulically opening and closing the floor plates of the vehicle in a

one-man system, the cabin can also be tilted. Additional maintenance hatches at the entrances allow access from the sides.





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

Pfanzenelt'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.

Felix 4-WD special forestry tractor

Technical specification

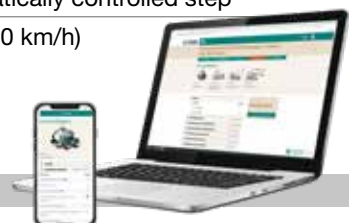
Type	Felix 208.5 4-WD F	Felix 208.5 4-WD K	Felix 208.5 4-WD V
Engine	Deutz TCD 6.1 Stage V		
Performance	133 kW/ 180 hp or 174 kW/ 236 hp (at 2,100 rpm as per ISO14396)		
Torque	818 Nm at 1,500 rpm or 1072 Nm at 1,500 rpm		
Cylinders/ displacement	6/ 6,057 cm³		
Exhaust-gas aftertreatment	SCR catalyst, for exhaust gas aftertreatment, performance (ISO 14396)		
Tank capacity	220 l		
Transmission	Pfanzelt hydra2POWER		
Specifications	Hydrostatic, infinitely variable drive, 2 pumps with 2-motor technology (each axle with one unit), drive with constant velocity drive shaft at the front and with PTO shaft coupling at the rear, hydraulic motors with wide angle technology up to 45°, max. Tractive force approx. 142 kN at 1,600 rpm, Diesel engine, hydrostatic change of direction, reversing gear (forward/reverse), driving speed from 0-39 km/h, hydraulic spring accumulator, parking brake		
Frame	Machine frame of fine-grain steel, box-type construction, central spar		
Telescopic central spar	-	-	• (1,200 mm)
Loading space	4,440 mm length	-	3,240 mm/4,440 mm
	2,070 mm width	-	2,070 mm width
	3.2 m² loading cross-section	without impact grid	3.2 m² loading cross-section
Axles	Kessler front axle (planetary rigid axle), load capacity 29 t Rear axle (planetary axle with Ackermann steering) Kessler, load capacity 29 t		
All-wheel drive	permanent all-wheel drive with hydraulic longitudinal differential electro-hydraulic lock can be engaged and disengaged at the front and rear axle		
Steering	Hydrostatic steering with separate oil circuit, Steering column adjustable in height and inclination, can be folded away during the work Combined steering function consisting of articulated and Ackermann steering in the rear, can be operated separately off-road via joystick, for driving on public roads by steering wheel (only articulated steering), rear steering locked		
Hydraulics	Pressure and volume-controlled axial piston pump in load sensing design, performance: 200 l. at 215 bar, pilot valves: Electrically proportionally controlled valves, actuated via electronically programmable control unit, joystick (Colt version), 160 l hydraulic tank.		
Control valves	Electrical, proportionally controlled valves, actuated by an electronically programmable control unit, joystick (Colt version)		
Electronics	Operating terminal, push-button operation integrated at the operator's stand, functions for crane settings, cable winch, differential, steering		
Cab	Large-volume, air-suspended cab with all-round visibility (over 7 m² window area), two large roof windows at the rear and front, safety cab according to ISO standards (ROPS) Rear window made of 12 mm mono-polycarbonate (regulation for use with cable winches)		
Air-sprung swivel seat with seat heating	The complete control station can be rotated through 340° by an electric motor Joystick supports on both armrests		
Ventilation	Heating with 3-stage blower, automatic air conditioning		
Fire extinguisher	• (integrated into cabin)		
Lighting	12 worklights integrated into the cab roof.		
Tyres	optionally: 600/65-34" 620/75-26" 710/55-34'	optionally: 600/65-34" 620/75-26" 710/55-34'	optionally: 600/65-34" 620/75-26" 710/55-34'
Additional standard equipment	Removable fenders, 2 large storage boxes, pneumatically controlled step		
Empty / admissible total weight	Depends on the equipment / 18.0 t (40 km/h)		

Felix 6-WD special forestry tractor

Technical specification

Type	Felix 214.5 6-WD K	Felix 214.5 6-WD V
Engine	Deutz TCD 6.1 Stage V	
Performance	133 kW/ 180 hp or 174 kW/ 236 hp (at 2,100 rpm as per ISO14396)	
Torque	818 Nm at 1,500 rpm or 1072 Nm at 1,500 rpm	
Cylinders/ displacement	6/ 6,057 cm³	
Exhaust-gas aftertreatment	SCR catalyst, for exhaust gas aftertreatment, performance (ISO 14396)	
Tank capacity	220 l	
Transmission	Pfanzelt hydra2POWER	
Specifications	Hydrostatic, infinitely variable drive, 2 pumps with 2-motor technology (each axle with one unit), drive with constant velocity drive shaft at the front and with PTO shaft coupling at the rear, hydraulic motors with wide angle technology up to 45°, max. Tractive force approx. 142 kN at 1,600 rpm, Diesel engine, hydrostatic change of direction, reversing gear (forward/reverse), driving speed from 0-39 km/h, hydraulic spring accumulator, parking brake	
Frame	Machine frame of fine-grain steel, box-type construction, central spar	
Telescopic central spar	-	• (1,200 mm)
Loading space	-	3,240 mm/4,440 mm
	-	2,070 mm width
	without impact grid	3.2 m² loading cross-section
Axles	Kessler front axle (planetary rigid axle), load capacity 29 t Rear axle (planetary rigid axle), NAF tandem axle	
All-wheel drive	Permanent all-wheel drive with hydraulic longitudinal differential Electro-hydraulic lock can be engaged and disengaged at the front and rear axle	
Steering	Hydrostatic steering with separate oil circuit, Steering column adjustable in height and inclination, can be folded away during the work Articulated steering, can be operated separately via joystick when driving off-road, via steering wheel when driving on public roads (only articulated steering), rear steering locked	
Hydraulics	Pressure and volume-controlled axial piston pump in load sensing design, performance: 200 l. at 215 bar, pilot valves: Electrically proportional controlled valves, controlled by a electronically programmable control unit, joystick (Colt version), hydraulic tank 160 l.	
Control valves	Electrically proportionally controlled valves, actuated by an electronically programmable control unit, joystick (Colt version),	
Electronics	Operating terminal, push-button operation integrated at the operator's stand, functions for crane settings, cable winch, differential, steering	
Cab	Large-volume, air-suspended cab with all-round visibility (over 7 m² window area), two large roof windows at the rear and front, safety cab according to ISO standards (ROPS) Rear window made of 12 mm mono-polycarbonate (regulation for use with cable winches)	
Air-sprung swivel seat with seat heating	The complete control station can be rotated through 340° by an electric motor Joystick supports on both armrests	
Ventilation	Heating with 3-stage blower, automatic air conditioning	
Fire extinguisher	• (integrated into cabin)	
Lighting	12 worklights integrated into the cab roof	
Tyres	optionally: front: 620/75-26" rear: 650/45-22.5"	optionally: front: 620/75-26" rear: 650/45-22.5"
	or front: Nokian 28L-26" rear: 710/40-22.5"	or front: Nokian 28L-26" rear: 710/40-22.5"
Additional Standard equipment	Removable fenders, 2 large storage boxes, pneumatically controlled step	
Empty / admissible total weight	Depends on the equipment / 20.4 t (40 km/h)	

You can find the extensive range of accessories in our configurator: configurator.pfanzelt.com





K Trac implement carrier

Thanks to its vehicle design, the K-Trac implement carrier is optimised for year round service in the municipal sector and in environmental maintenance. The hydraulic full suspension that can be automatically blocked and 4 steering options enable an extremely safe and ergonomic operation.

Technical details that will convince you:

- **Fast** | continuously variable variaDRIVE transmission (80 km/h)
- **Powerful** | 205, 253 or 292 hp/up to 200 l hydraulic power
- **Manoeuvrable** | Combined 4-wheel steering
- **Flexible** | 4 changeable attachment and mounting bays
- **Comfortable** | Pneumatically suspended XXL comfort cab with rotatable driver's stand or full-fledged front passenger seat



Made in
Germany



All-season vehicle for road maintenance

As different as the seasons, so are the uses in these periods. With its 4 attachment and mounting bays, the K Trac masters everything from winter service, tree maintenance, pruning to mowing work.



Manoeuvrable and fast

Thanks to its all-wheel steering, the new K Trac is a manoeuvrable implement carrier that doesn't shy away from narrow alleys and small-structured inner cities. With the possible 80 km/h licence, on the other hand, motorway journeys are also possible at high speed.

Areas of application

Landscape maintenance

The attachment bay at the front and the mounting bay at the rear enable equipment with different configurations for hedge trimming and mowing. Thanks to the swivelling operator stand, the driver always has an optimal view of the implements.

In spring, it can be used in combination with a salt/brine spreader and a boom for hedge trimming.



Crane operation and transport

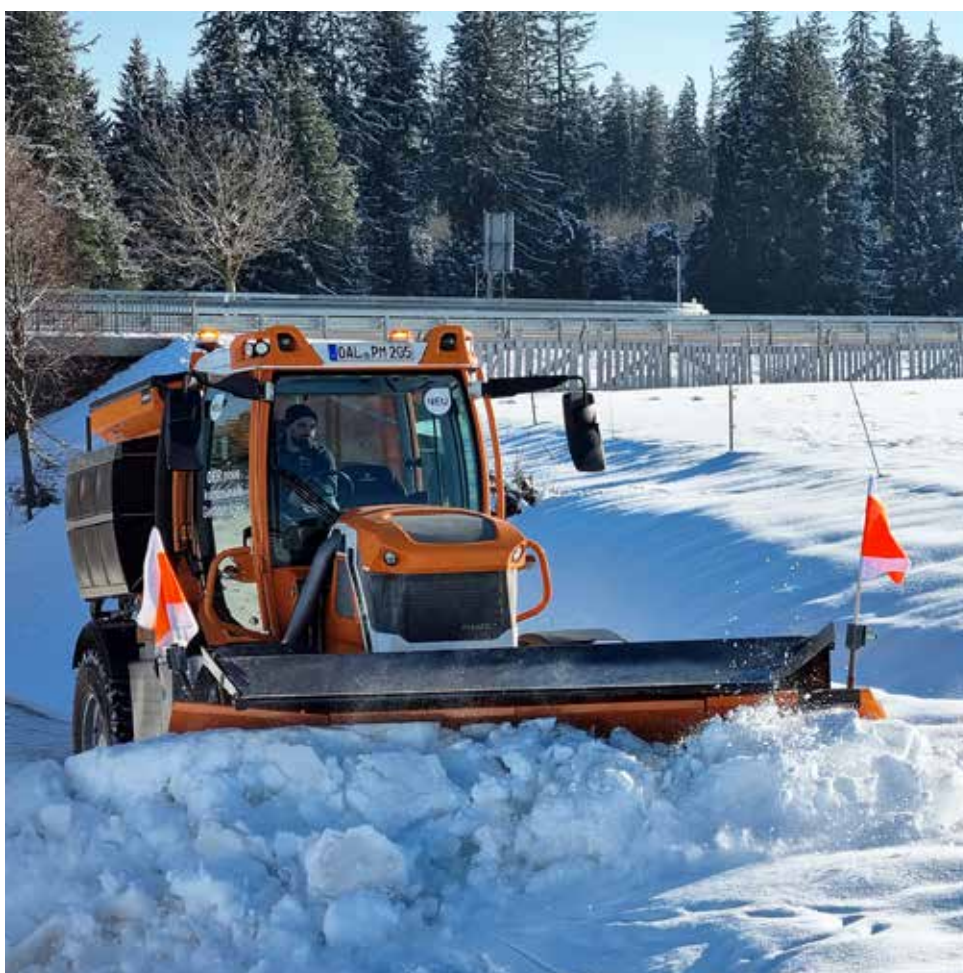
The equipment with a crane in the rear mounting bay opens up new possibilities in combination with the XXL comfort cab with rotatable operator stand. The crane can be designed as a mower boom, a combination crane or a loading crane. Different applications are possible depending on the crane type. In combination with the 80 km/h licence, the K Trac becomes a fast crane transport vehicle.





Snow blowers

For winter use, the K Trac can be equipped with a snow blower at the front and rear. Operation of the snow blower at the rear enables a new level of working comfort. The K Trac and snow blower are intuitively operated and driven from the rotatable driver's stand in a relaxed and comfortable manner.



Winter service

In winter service, the K Trac impresses with its compact front-end dimensions and the large rear mounting bay for salt and brine spreaders.



XXL comfort cab

The pneumatically-sprung, large-volume cab developed by Pfanzelt enables quiet and comfortable work with perfect all-round view. A new concept for noise insulation enables quiet and vibration-dampened operation, especially at high engine speeds. Over 7 m² of glass area provide optimum visibility of the working environment and increase work safety.

Rotatable operator stand or two-man cab

Depending on the area of application, you can choose between two variants of the cab. A version with a rotatable oper-

ator stand or a version with two air-sprung seats is available. With the second variant, it is still possible to rotate the seat slightly in order to have an optimal view when working in the roadside greenery.

The driver finds a relaxed and ergonomic seating position in the operator's seat. Optionally, it can be rotated electrically by 340°. All controls, the pedals and the touchscreen terminal rotate together with the seat, always within easy reach.



K Trac

Technical specification

Implement carrier	K Trac 1220	K Trac 1225	K Trac 1230
Engine	151 kW 205 hp EU V ISO 14396	186 kW 253 hp EU V ISO 14396	215 kW 292 hp EU V ISO 14396
Cylinder/capacity/nominal speed	6 7.4 l. 1,950 rpm		
Type of motor	AGCO power 74 HD		
Tank capacity	350 l. diesel 40 l. AdBlue		
Transmission	varaDRIVE continuously variable (0 – 80 km/h) with reduced engine speed Forward driving modes 3, reverse driving modes 2 (optionally 90 km/h)		
Rear PTO	540 rpm 1,000 rpm		
Front PTO	1,000 rpm		
Hydraulics			
Axial piston variable displacement pump	160 l./min, 210 bar (optional 200 l./min, 210 bar)		
Front/rear power lifts	optional		
Control valves	2 DW electr. Rear end (optional: additional 2 DW electr. prop. front and rear)		
LS connexion	Rear power bracket (LS connexion)		
Dimensions			
Empty weight	8,200 – 9,200 kg*		
Permitted total weight	14,000 kg (optional 17,000 kg)		
Permissible axle load	6,000 kg front 11,500 kg rear		
Bearing load	2,000 kg automatic trailer coupling 3,000 kg ball head with sliding carriage		
Dimensions	4,990 mm long* 2,400 mm wide (standard) 3,220 mm high* Minimum width: 2,250 mm maximum width: 2,800 mm		
Ground clearance	540 mm*		
Wheelbase	3,325 mm		
Weight distribution	FA 55%, RA 45%		
Turning circle	14.60 m front-axle steering 10.50 m all-wheel steering (with standard tyres)		
Mounting bay	Width up to approx. 1,010 mm inside, above the mudguard up to max. outside width, Height up to approx. 2,820 mm depending on tyres, Length approx. 2,000 mm, also more depending on overhang		
Tyres	400/80 R 28 – 440/80 R 30 Nokian TRI 2 (standard)		

* Values depend on equipment



You can find the extensive range of accessories online in the configurator: configurator.pfanzelt.com



Forwarding grapples RZ230

The RZ230 hydraulic grapple is supplied with a front loader and three-point hitch. This ensures a flexible use for the forwarding or loading of logs. The work can be carried out much faster with the forwarding grapples. This is effortless without getting off the tractor. Fixed lengths can be lifted and carried by a curved toothed bar between the lower links. An electrical switchover enables the grapples to open/close, or turn the rotator.

Convincing technical details:

- Mounting frame for front loader (Euro mount) and three-point linkage (Cat.II)
- Professional clamshell grapple with 0.23^{m2} cross-sectional area and 1.25 m opening width
- Electrical switching between grab and rotator (double-acting hydraulic connection required)
- Weight approx. 350 kg

Technical specification	RZ230
Mounting frame for front loader (Euro mount)	•
Mounting frame for three-point attachment (Cat. II)	•
Endless rotator	4.5 t
Grapple opening width	1,250 mm
Grapple cross section	0.23 m ²
Weight	approx. 300 kg



PM Pfanzelt Maschinenbau GmbH
Frankau 37
D-87675 Rettenbach a. Auerberg
Tel. +49 (0) 88 60 / 92 17 0
E-Mail info@pfanzelt.com
www.pfanzelt.com

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