



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:

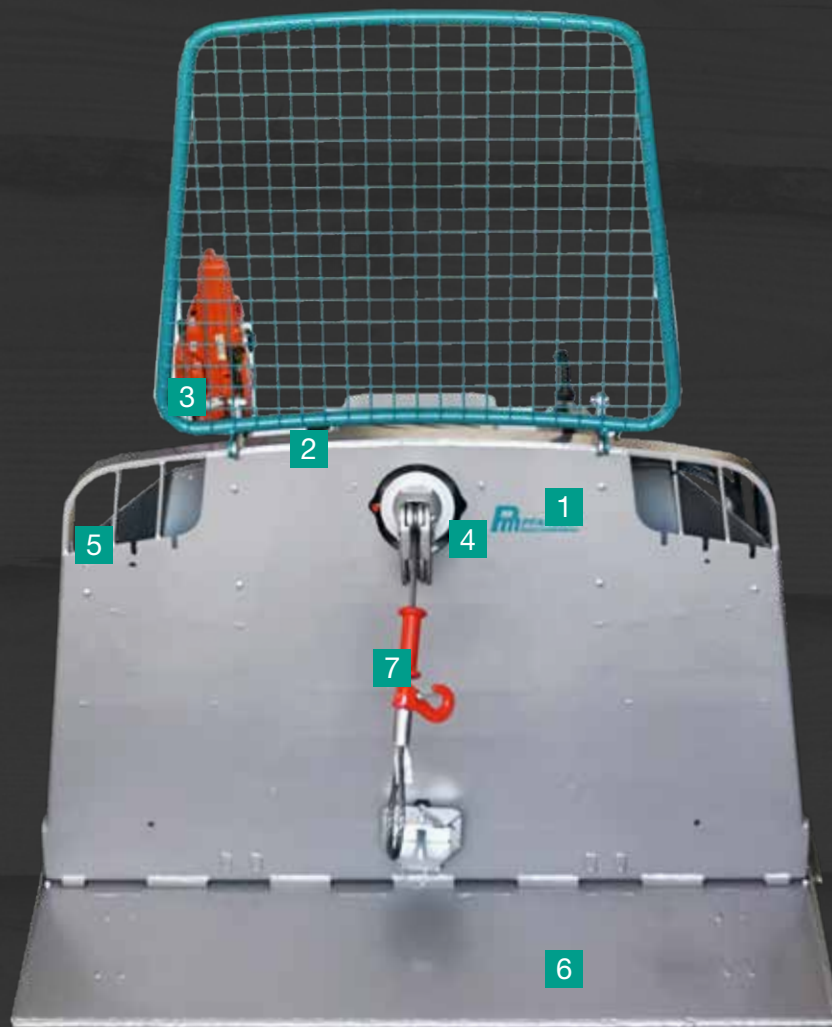
- Best tensile force ratios from the lower to the upper rope layer
- Constant pull winch models P163K, P173K, and 273K without loss of traction
- Wide rope drum for large rope capacity and low loss of traction
- Reliable power transmission via spur and worm gears running in an oil bath
- Exact control 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

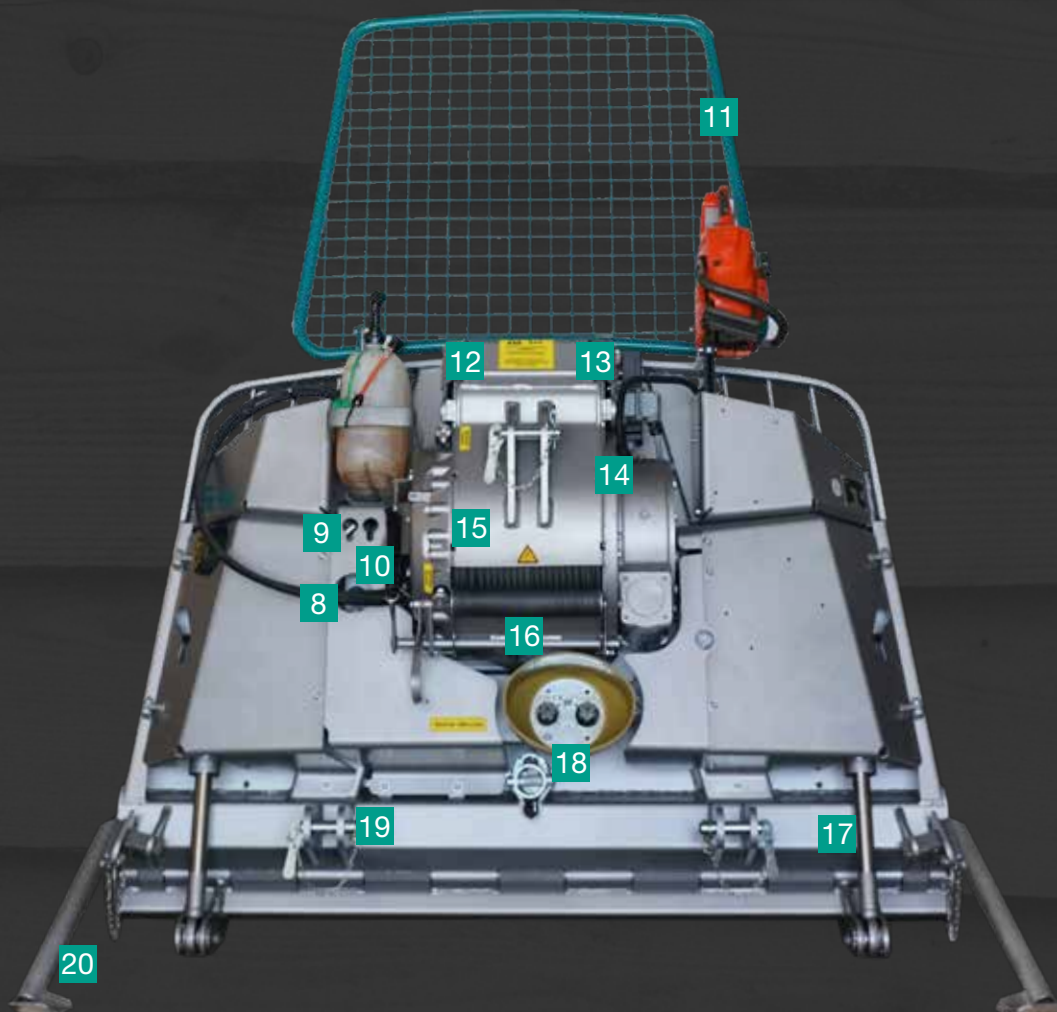
The hydraulic pressure can be checked quickly and easily on the standard pressure gauge.

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.

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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.

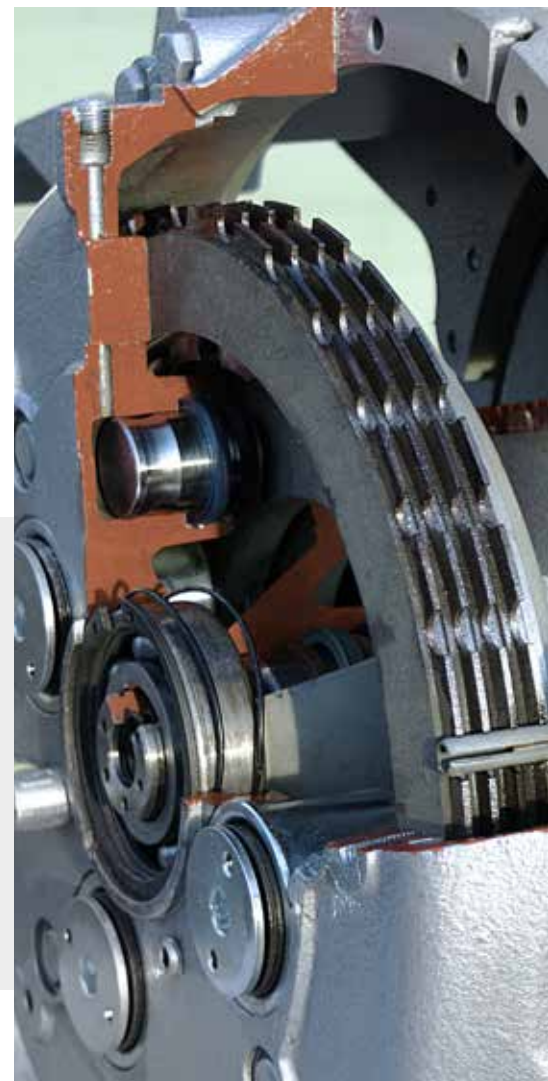
Drive

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

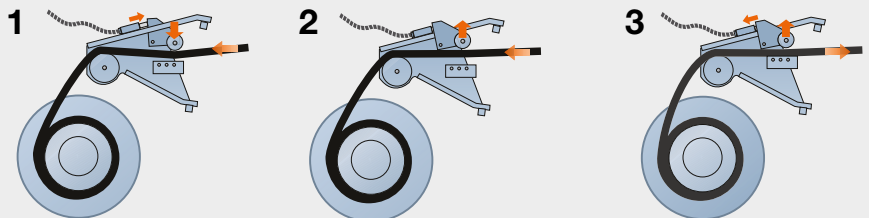
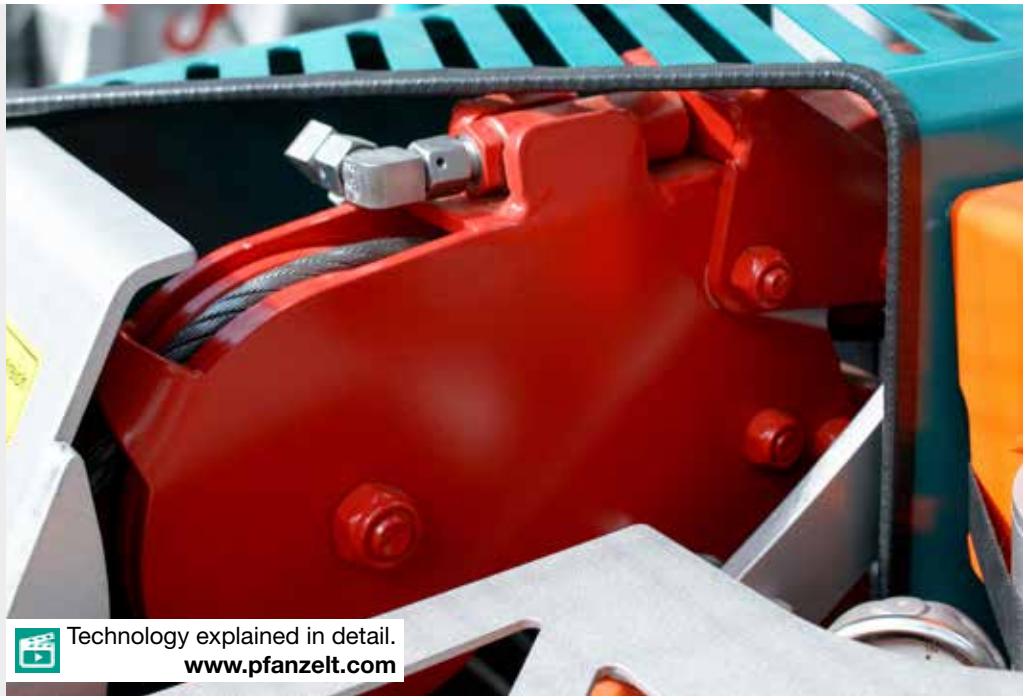
By activating the function *Pulling*, the rope infeed brake is also activated.

Position 2

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

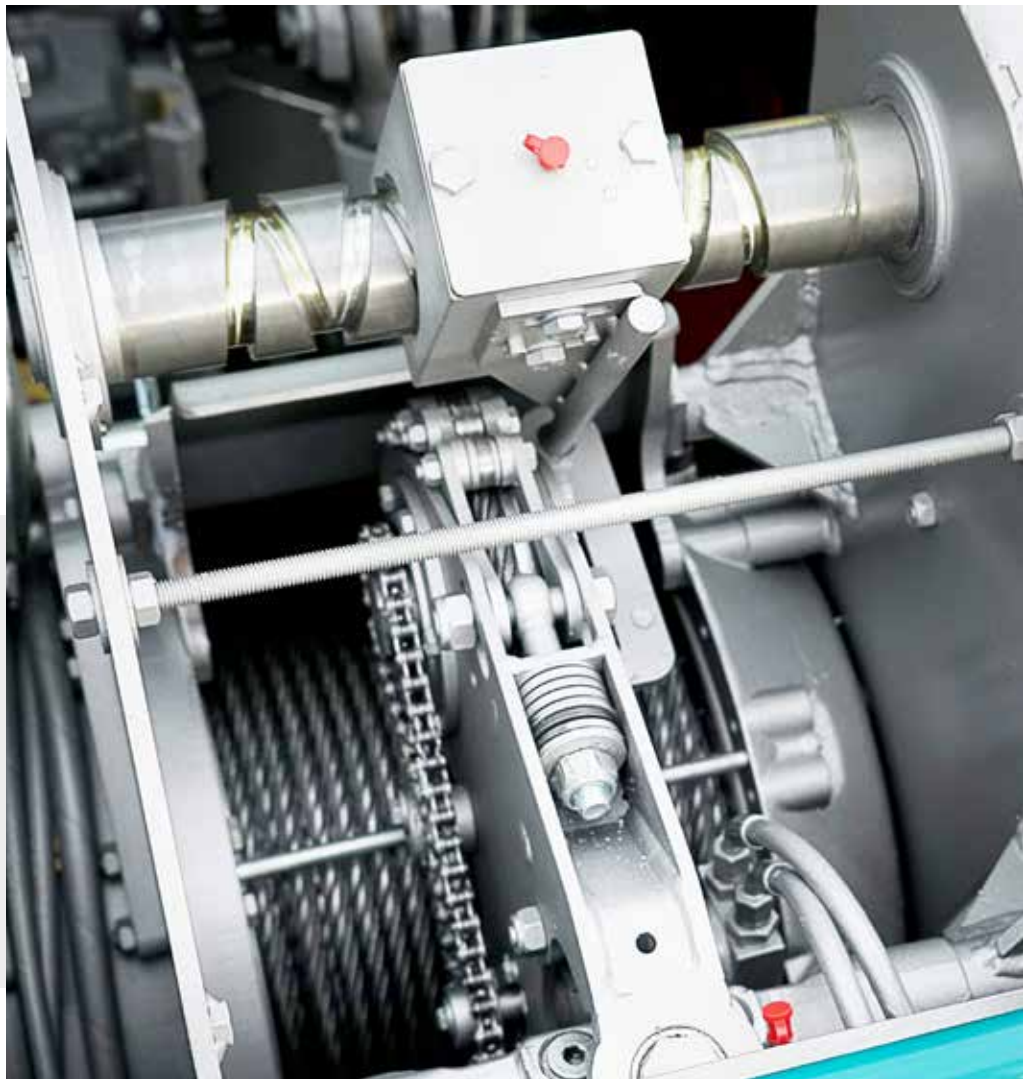
Position 3

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.

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

maximum pulling force.

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.

