

# PT-400: A NEW MOVEMENT IN THE WORLD OF PRIME MOVERS



**PRIME  
TECH**

a brand of FAE Group

Standards defined by  
PT-400 introduce a new  
way of working.

## Join the movement: explore new ways!

PrimeTech's PT-400 defines new standards with its high productivity, very low ground pressure, great reliability and high degrees of safety and comfort.

Entirely designed and manufactured by PrimeTech, PT-400 integrates components supplied exclusively by firms which are leaders for the quality they provide (Caterpillar, Danfoss, Parker, FAE).

PT-400 is the practical expression of Prime Tech's vision: our aim is to build Prime Movers which help our clients get their job done faster, more efficiently and at lower cost.

PrimeTech was established in 2005 and is based on the twenty years' experience of the FAE Group, from which it has inherited the expertise that has put FAE in a leading position in the production of professional mulchers for forestry and agricultural applications and in the sector of dirt road preparation and soil stabilization.

In PrimeTech's DNA there are the same strict design criteria, choice of materials and components, plus a strong commitment for innovation and special attention to design and ergonomics.









PT-400 is suitable for applications for all types of terrain and climate.

## Born to be flexible

PT-400 is the first prime mover with motorized traction suitable for agricultural and forestry mulching operations and in the building industry. High productivity, low ground pressure, reliability, safety and comfort: the benefits and strong points of PT-400 make it suitable for all types of terrain and climate, as well as a wide range of different applications.

We have designed it to guarantee the same high performance in each separate application, also due to the quality of the work and reliability ensured by the FAE front attachments:

- Land clearing
- ROW and utility work
- Forestry and reforestation
- Construction business
- Fire pre-suppression and Suppression
- Recreational clearing
- Reclamation of agricultural land;
- Stabilization of foundation layers for roads;
- Maintenance and building of unpaved and gravel roads, forest roads and ski slopes.

The market potential of PT-400 is global: it doesn't matter whether you need PT-400 in Australia or Canada: sales and after-sales service is ensured by an international network and by the presence throughout the world of the suppliers of strategic components.









Motor, hydraulics  
and electronics.

## Heart and sinew for high performance

The designers' choice of the most important component on the machine was guided by the aim of ensuring high performance also for the heaviest duty applications without losing quality, reliability and without affecting maintenance costs. The result is the heart of PT-400 - a Caterpillar C13 Acert turbo diesel engine of 415 HP (310 KW), 6 in-line cylinders, volume 12.5 litres (763 in<sup>3</sup>) (coupled with huge torque for the mulcher head) - an easily accessible motor (compliant with Tier 3/Stage IIIA standards) that meets the needs of PT-400.

Sauer Danfoss pumps and motors have been chosen bearing in mind perfect integration with the other main components on PT-400.

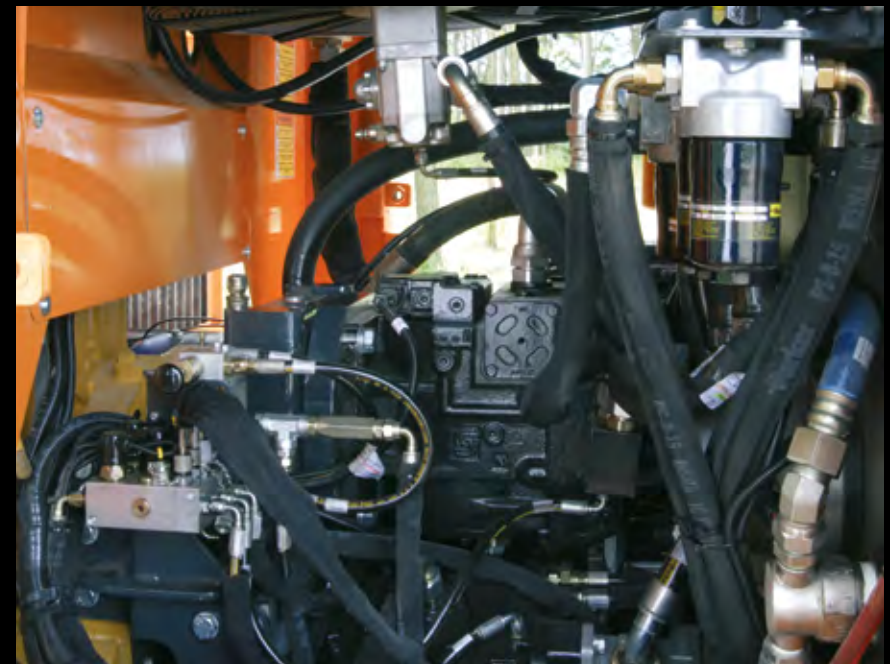
The choice of hydraulic transmission has a series of advantages that distinguish PT-400 from PTO-driven tractors:

- bigger lifting range for the front attachment, meaning greater flexibility;
- fewer vibrations make it possible to work more smoothly and uniformly;
- less wear and tear on the prime mover and its major parts.



The electronic components - supplied by TSD - are designed to provide smooth control of the vehicle and adapt to the specific working and environmental conditions.

An illuminated easily read display, ergonomically installed and easily accessed, allows the operator to control all the machine parameters in real time.





## The advantage of being lightweight

### Very low ground pressure.

The oscillating PT-400 undercarriage, fixed to the chassis by forged steel pivots, ensures high performance, also in terms of durability. A robust equalizer bar provides symmetry in motion. 800 mm (32 in) industrial two-faced track shoes provide ground pressure of just 0.35 kg/cm<sup>2</sup> (4.95 psi), an exceptional result for a machine of this type. With such low ground pressure the machine can also work on swampy ground where others cannot operate. The oscillating tracks and perfect distribution of masses reduce strain on the structure to a minimum.

These important features provide better control of the vehicle even in extreme working conditions: that's why PT-400 guarantees high performance on any type of terrain.





## Efficiency in its DNA



PT-400 has been built to keep maintenance costs to a minimum, thanks to high reliability, reduced downtime and design choices that are oriented to maximizing efficiency, functionality and cost: productivity ratio.

Easy access to the engine (neatly fitted, with panels that are easy to detach and disassemble for compressed air cleaning) and various components simplifies maintenance operations and reduces machine downtime.

All components subject to wear are standard and easily found anywhere in the world: they are supplied exclusively by companies which lead the field in quality standards, so wherever you use PrimeTech you have the benefit of a prompt efficient after-sales service network.

PT-400 distinguishes itself for its low maintenance costs.





PT-400 surprising in its choice of ergonomics and comfort.

## The art of balancing power and ergonomics

Operators work better and with greater precision when the tool is designed to be easy and comfortable to use: their comfort translates into greater safety and better job performance. This is why in designing PT-400 maximum importance is given to aspects of ergonomics and comfort. In particular, the PT-400 cabin has a series of strong points:

- a spacious interior with great external visibility;
- a level of sound-proofing that is the best on the market (78 dB with the front attachment working!);
- the lowest vibrations level felt with the

machine in motion;

- the ergonomic position and ease of use of joysticks;
- display and control panel;
- the air conditioning system;
- comfortable adjustable driver's seat which is heated and air suspended;
- MP3 player.









Safety as an essential  
working condition.

## Safe in every movement

Every detail of PT-400 is designed to work in complete safety; in particular:

- every PT-400 comes with a manual fire extinguishing system, which can be activated by simply pressing a button located in the cabin;
- air-shut-off system: integrated with the diesel engine, which immediately automatically shuts off fuel and air to the engine if the rpm rises and goes out of control (e.g. when working in gas fields);
- Lexan Margard® cabin windshields, made in highly shock-proof and scratch resistant material;





- ROPS-FOPS-OPS approved;
- roll-bar, which protects the operator's cabin and the vehicle from falling trees and branches;
- driver emergency exit on the top of the cabin;
- rear-view-camera (option).





PT-400 has a series of special options for all working conditions.

## Equipped for anything

A series of options can integrate the standard equipment for PT-400 to adapt to specific working conditions:

- Rear winch with a pulling power of 13t (28700 lbs): permits the machine to get itself out of critical situations.
- Rear view camera, protected by a Lexan Margard® shield: automatic ignition in reverse gear, automatically shown on the display for greater working safety.
- GPS GARMIN satellite system: used to define the machine's position, but also to trace a linear work path.
- Lights for rear and side illumination of the work area, protected by Lexan Margard® shields.





- Reversible fan: the fan air flow direction can be reversed automatically; especially important in summer, when the air is dusty, to clean the radiator.
- Pre-heating system - a 16 kW burner which self-feeds from the diesel oil tank and pre-heats engine diesel, hydraulic oil, gas oil and batteries - to avoid any cold-start issue even at extremely cold temperatures. Deferred activation of up to 7 days can be programmed by means of a digital timer.
- Roll-bar protection with Lexan Margard® glass;
- Compressed air system for cleaning the front window for a better visibility in case of sand or dust accumulation;
- Quick coupler on the lifting frame to attach/ remove the front attachment more easily;
- System of external screens for the cabin for increased safety of the operator.
- Rear ripper, to rip the ground and prepare it for plantations (up to five lines).





## F&E experience is ahead

### II PT-400 can be fitted with different front attachments.

The PT-400 front attachment, made by F&E, provides high quality operations and reliability, and is build to match our customers' various needs and working conditions.

The rotor is designed so that only one tooth at a time is grinding or milling, making its work more effective than that carried out with the teeth all in a straight line: there are fewer vibrations and the operation is smoother and more regular, with less wear and tear on the equipment.

Application flexibility is also ensured by the possibility to choose from different types of front attachments and teeth:

> The F&E 300/U forestry mulcher is a heavy duty machine; it uses 2 Danfoss 160 cc hydraulic motors. The rotor diameter is 60 cm (24 inches), working width varies from 230 to 254 cm (90 - 100 inches), according to the model, mulching diameter can reach 40 cm (16 inches). Comes with hydraulic pushing frame. Can be supplied with type B/3 or C/3 fixed tools. There is an optional stone resistant rotor for use on particularly stony ground.

> The F&E 500/U forestry mulcher is ideal for difficult heavy-duty jobs; it uses 2 Bosch-Rexroth 200 cc hydraulic motors. The rotor diameter is 70 cm (28 inches), working width varies from 232 to 256 cm (91 - 100 inches), according to the model, mulching diameter can reach 50 cm (20 inches). Comes with hydraulic pushing frame. Can be supplied with type A/3 or C/3 fixed tools. There is an optional stone resistant rotor for use on particularly stony ground.



Tooth type A/3



Tooth type B/3



Tooth type C/3



Tooth type STC/3





> The FAE 300/S forestry tiller head is a multi-purpose front attachment to use in forestry work for mulching stumps to a depth of up to 40 cm (16 inches) and felling bushes, and for stabilizing roads, earth and flattened areas. Combined with this equipment the PT-400 can be used in particularly difficult conditions where other machines cannot operate. Two powerful Danfoss 250 cc hydraulic motors with variable displacement drive the rotor by means of parallel axial reduction gears with flexible coupler. The diameter of the rotor is 70 cm (28 inches) and it is equipped with type A/3 teeth.



> The FAE 500/RC rock crusher is the ideal solution for rehabilitation, reclamation, and stabilization of stony land. The rotor operated by two Danfoss 250 cc hydraulic motors has a diameter of 70 cm and a working width ranging from 232 to 256 cm (91 - 100 inches), according to the model. The fixed cutting teeth type STC/3, made of high-tensile steel, is very resistant to wear and tear, can crush any type of stone, even of large dimensions and deeply set.



Tooth type A/3



Tooth typw STC/3



From today PT-400  
provides a new way of  
working: anywhere in the  
world.

## A step into the future

The new standards defined by the PrimeTech PT-400 represent a future already here: a new way of working that is available all over the world.

PT-400 is intended for the global market, and it makes no difference whether it's used in Canada or Australia: sales and after-sales services are ensured by an international network and the presence throughout the world of the makers of the machine's strategic components.

Reliability, convenience and safety, low maintenance costs and consumption, high performance, low ground pressure, comfort and safety: these are the reasons for choosing PT-400.

Discover a new way of working.

Discover PrimeTech's PT-400!





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