THE BIG ONE

MOBILE **TRACTION WINCH**

T WINCH 30.2

ENGLISH

ecoforst
PROGRESS OF TECHNOLOGY

2020

A UNIQUE COMBINATION.
SUSTAINABILITY AND FORESTRY.

ECOFORST

A young, dynamic and highly motivated team can be found behind the name ecoforst, whose main target focuses on simplifying the timber harvesting in steep and difficult accessible terrain. Based on the world wide experience with the TWINCH 10.1 and the 10.2 as well as customer demands for a bigger winch led to the construction of the 30.2.

The idea of the construction of an innovative traction winch was born in order to keep safety as high as possible, while keeping damage to a minimum.

It allows access to rough terrain while taking into consideration all necessary ecological set-ups for a continued development of nature.

SOIL PROTECTION

Sustainable cultivation means taking care and use of forest areas in a way that maintains or even improves the terrain`s productivity with its output, its regeneration ability and its vitality.

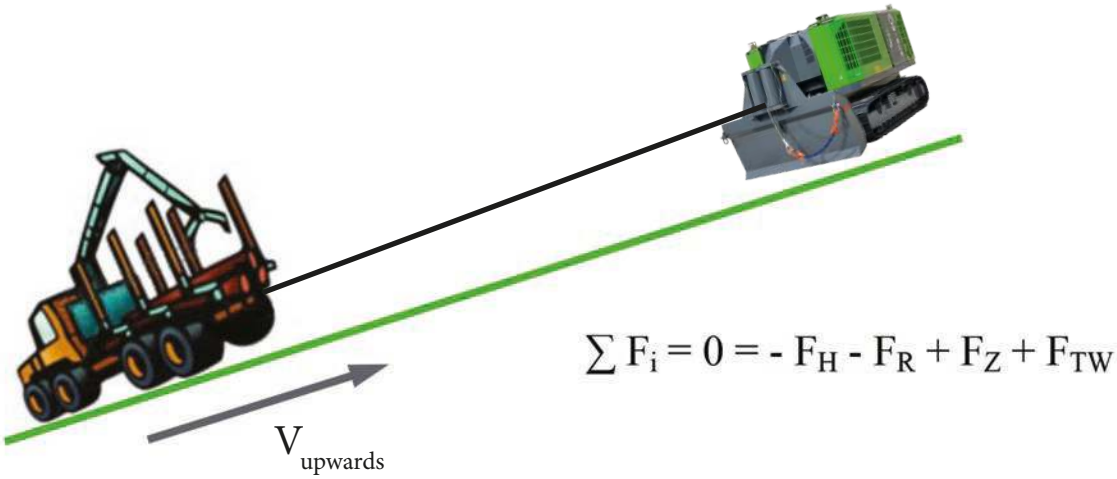
With the help of a traction winch the whole braking power and tractive force of the timber harvesting machine can be supported in slope transition terrain at any time. Serious damage to the soil is reduced because of a slip value of less than 20%, which makes it easier to systematically develop logging trails.

SAFETY AS A BASIC PRINCIPLE

Within the last years the development of lighter forestry machines, due to the use of new tensile steels, has contributed to the fact that the limits of passable slopes has steadily increased upwards.

In order to guarantee the safe use of machines in such steep terrains the timber harvesting machine has to be adjusted to the expected field of operation, taking into account the slope gradient and changes in weather conditions. The traction winch can significantly contribute to safe working provided that the machine itself is placed in a stable position, including the machine`s own braking efficiency.

FORCES IN THE RIGHT BALANCE



T-WINCH

In all places where unsecured driving leads to too increased risk for human and machine, the solid TWINCH traction winch assistant can be used. Not only is the application of the traction winch a considerable cost saving for the operator because of the verifiable reduction of fuel consumption, but the use of T-WINCH also represents an environmentally conscious approach in the field of timber harvesting. The remarkable construction together with the functional design, ensures an approved and reliable operation in situ. An easy reach of the operation field is provided by the help of the crawler movement and the radio control. The plate in the front part of the machine provides even more stability in rough terrain.

HIGHLIGHTS

- **With the use of T-WINCH no undesirable rear weight and no structural alteration works of the basic machine are required**
  Irrespective of the decision which machine is used for working on steep terrain, a maximum of safety is provided together with a minimum of installation work.

- **Independent steering along forest roads is possible by uncoupling the rope**
  An easy release of the safety rope ensures the possibility of leaving the logging trail at any time. A remote storing of the timber, somewhere along the forest road can therefore be achieved easily.

- **Maximum safety preventing rope breakage**

- **Use of more machines at the same time**
  T-WINCH is always a valuable assistance to safe working.

YOUR BENEFIT.
POWERFUL SUPPORT.
MINIMAL FUEL CONSUMPTION.

INSPIRED DESIGN AND TECHNOLOGY

Ecoforst builds a traction winch which will ensure the client profits from organising their work more efficiently by the use of modern design, carefully considered operational tasks and quality construction materials.

The diesel engine transmits the maximum torque to a double pump unit with adjustable delivery volume. These two pumps power both the closed hydraulic cycle of the winch transmission as well as the open cycle of the additional auxiliary functions. Thus the crawler movement drive and the movement of the plate can be controlled synchronously, which leads to a maximum ease of use.

To guarantee a low fuel consumption, pressure and volume flow of both pumps are continuously adjusted to the active load by using a load-sensing system.

ENGINE

> Robust FPT diesel engine
> Maximum power output 305 kW
> Worldwide availability of spare parts

TOOLBOX

> Hydraulic lift and lowerable
> Ergonomic access

ROPE OUTLET

> Hardened high quality rope guides
> Bearings on all rope guide elements
> Stable fixing to the base frame

INTELLIGENT TECHNOLOGY. CONTINUOUSELY VARIABLE POWER. EFFICIENT PERFORMANCE CONTROL.

CAST IRON DRUM

> Good winding behaviour
> Rope capacity 560 m
> Rope diameter 26 mm
> High tensile strength
> Special compaction
> Long operating life

WINCH TRANSMISSION

> High dynamic torque
> Integrated multi-disc brake
> Easy maintenance
> Hydraulic pressure 460 bar

CRAWLER MOVEMENT

> Stable crawler construction
> Lateral guides
> Powerful chain drive
> 600 mm

EASY AND SAFE ASSEMBLY OF T-WINCH

1 – POSITIONING

With the help of the remote control T-WINCH can be moved to any position in the chosen terrain. Tasks i.e., change of the location through activating the crawler movement, can be handled proportionately. This makes the adjustment of an ideal and safe location for the winch easier.

Tip While driving through extremely rough terrain the traction rope of the T-WINCH can also be used as a safety rope.

2 – ANCHORING

A stable anchoring of the winch takes place through the blade and the crawler, as well as the use of additionally fixed lashing belts if necessary. The operator is notified on the remote, if the T-WINCH starts moving.

Tip Belts and other slinging accessories can be kept safely in lockable, big dimensioned storage boxes.

3 – OPERATING

After positioning in the terrain the traction winch is ready for use. Tractive force assistance is preset by the operator on the radio transmitter. Change of direction is automatically detected by the T-WINCH. “Set and forget!”

Tip Changing the task switch of the T-WINCH into traction mode blocks all other auxiliary functions.

FORWARDER

The T-WINCH supports working on slopes and helps to maximise productivity. The use of chains or bandtracks can often be avoided because of the improved rough terrain driving characteristics of the forwarder. The reduced weight provides benefits in power consumption and prevents damage to the logging trail as well as the ground.

HARVESTER

With a maximum rope length of 560 m it is easy to keep the timber harvester safely on the slope during harvesting. During the winter months the harvester operator does not have to worry about driving in steep and rough terrain, but can concentrate fully on his main task of timber harvesting.

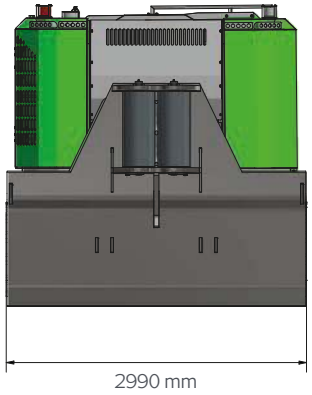
SKIDDER

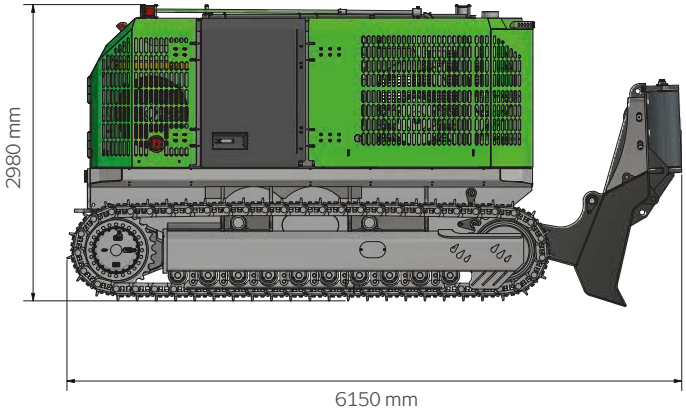
In an established forestry road system the use of skidders is still very popular. T-WINCH can support the work of skidders because of the high speed of the winch; up to 4.0 km/h and the easy uncoupling of the traction rope. Challenging slopes are no longer a handicap and the tractive force is maximised.

EXCAVATOR

For earth moving works on steep slopes, T-WINCH also offers helpful support if the driving power of the crawler movement is not sufficient. The cost-intensive use of expensive inefficient special machines can be reduced to a minimum.

TECHNICAL SPECIFICATION COMPARISON:





DIMENSIONS	30.2		10.2	
Length	6150 mm	20.2 ft	4290 mm	14.1 ft
Width	2990 mm	9.8 ft	2250 mm	7.4 ft
Height	2980 mm	9.8 ft	2120 mm	7 ft
Weight	33 000 kg	37 t	10.000 kg	13t

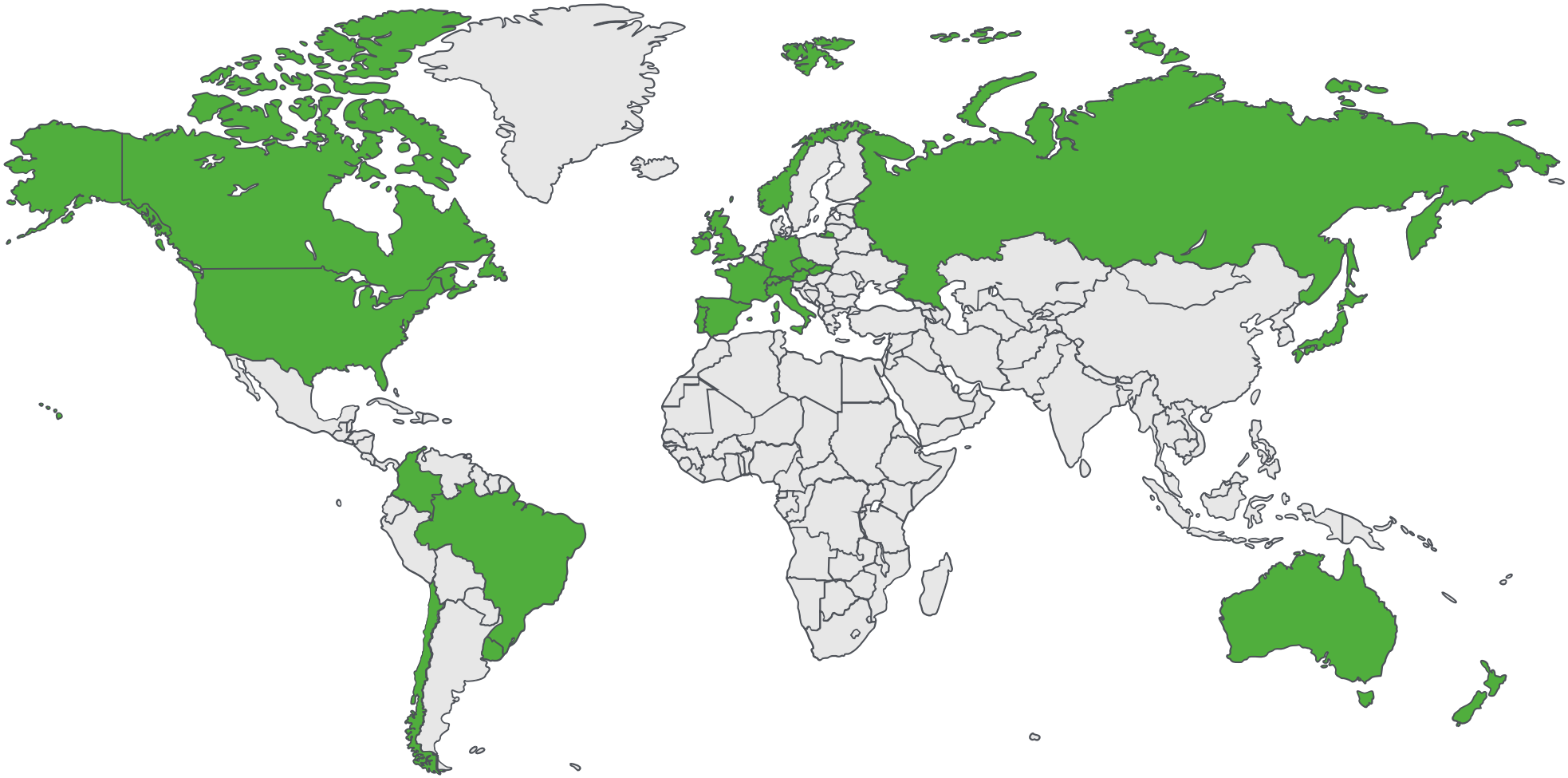
ENGINE				
Diesel Engine	FPT C87 Tier5*		FPT N45 Tier4 final*	
Max. Power Output	305 kW	414 hp	125 kW	170 hp
Fuel Tank	625 l	198 gal.	210 l	55 gal.

HYDRAULIC SYSTEM				
Winch Pump	1 x 280 ccm	17.1 cu. in.	1 x 110 ccm	6.7 cu. in.
Winch Drive	1 x 170 ccm	10.4 cu. in.	1 x 115 ccm	7.0 cu. in.
Open Pump	1 x 190 ccm	11.6 cu. in.	1 x 75 ccm	4.6 cu. in.
Oil Volume	350 l	74 gal.	190 l	50 gal.
Operating Pressure:				
Chassis	320 bar		270 bar	
Winch pressure	460 bar		420 bar	

WINCH				
Max. Pulling Force	200 kN	22 t	100 kN	11 t
Max. Pulling Speed	8 kph	5 mph	4 kph	2.48 mph
Rope Diameter	26mm	1.06″	20 mm	¾″
Rope Length	560 m	1840 ft	500 m	1600 ft

*) Non emission engine available for selected markets.

GLOBAL PRESENCE



Global presence:
Australia, Austria, Brasil, Canada, Chile, Colombia, Czech republic, France, Germany, Ireland, Japan, New Zealand, Norway, Portugal, Russia, Slovakia, Spain, Switzerland, United Kingdom, Uruguay, USA

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