

# TRACTION-WINCH

T8 - T10 - T14 - T20 Series



[www.TimberMAX.ca](http://www.TimberMAX.ca)



# TRACTION-WINCH T8 - T10 - T14 - T20 Series

## Continuous evolution of Steep Slope technology

The challenges that loggers, foresters and forest companies face daily result in solutions and improvements that reflect the incredible resourcefulness of those who work in the industry. We've seen major technological breakthroughs throughout the decades – and there is more to come. Established in 2017, TimberMAX has strong roots in the forest industry, although our technology has applications across a wide range of industrial applications. Road building, construction and mining are just a few industries that share steep slope challenges like forestry, in addition to facing tightening environ-

mental, social and economic expectations. Providing safe, productive and user-friendly solutions to working on steep slopes is what we do, and we are dedicated to the continuous innovation of our products and services.

## Steep Slope

Accessing timber and recruiting qualified equipment operators continues to be a challenge – TimberMAX has introduced an innovative and reliable solution for loggers: the Traction-Winch. The T-Series Traction-Winch is robust, powerful and reliable. The winch's compact spooling system makes it compatible with a wide range of carriers, while simplifying and reducing the cost of installation.

## Safety

The mechanization of logging operations has significantly reduced the number of accidents. However, the industry still needs to be aware of the risks and dangers inherent in logging, and operations need to be intensively managed with safety top of mind. TimberMAX is not only building logging equipment; our commitment is to ensure the users of our technology have the training and the support to get the maximum benefit from our equipment and return home safely.

## Table of Contents

Page 3 .....	Why should you use the Traction-Winch
Page 4-5 .....	Configuration solutions and application example
Page 6-7 .....	Features
Page 8-9 .....	Pictures of Traction-Winch in action
Page 10-11 .....	Metric and Imperial specifications
Page 12 .....	iWinch® automatic control system
Page 14 .....	Dealer information
Page 16 .....	Contact information





## WHY should YOU use the Traction-Winch?

- ➔ **Safety:** The system provides traction assist, which in combination with the iWinch® Control System allows the operator to better identify limits and dangerous work situations.
- ➔ **Productivity:** Delivers significant improvements to productivity while reducing costs in areas where yarders are too expensive and conventional equipment reaches its traction and safe operating limits.
- ➔ **Soil Disturbance:** Substantial reduction in soil disturbance. In areas where it might have been necessary to stop operations and wait for dry conditions, it is now possible to keep working throughout the year by utilizing our steep slope winch technology.
- ➔ **Snow:** It improves accessibility to timber in areas affected by heavy snowfall.

## WHAT are the limits?

### Operator Skills

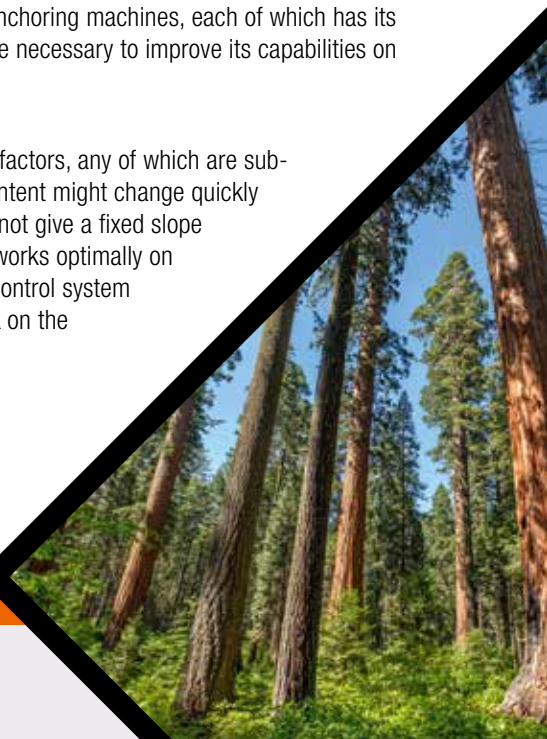
Even with the use of proven technologies, human error can still result in an accident. Establishing safe work standards and procedures is extremely important. Like any new technology, there is a significant learning curve to the TimberMAX Traction Winch. However, with our assistance we are confident that any experienced operator can adjust quickly and will ultimately find themselves working in a more productive, more controlled and safer work environment.

### Equipment Operational Limits

The Traction-Winch is not a fail-proof anchor safety device and should be used within its predefined safe working limits. Failure of the anchor or one of its components is a possibility – it is essential that the operator's safety not be solely reliant on the winch. The Traction-Winch can be mounted on a wide range of carriers and anchoring machines, each of which has its operating limits. Modifications to the carrier may be necessary to improve its capabilities on steep slopes.

### Ground Conditions

The traction capacity of the soil depends on many factors, any of which are subject to change. For example, the soil's moisture content might change quickly following heavy rain. This is why TimberMAX does not give a fixed slope limit. However, experience shows that the system works optimally on slopes from 35%-70%. The TimberMAX iWinch® Control system can provide the operator with continuous feedback on the traction capacity of the soil.



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## Robust, Powerful, Reliable

The TimberMAX Traction-Winch Package consists of the winch unit, hydraulic component, and the iWinch® Control System. The winch is compact and features a built-in spooling device, making it compatible with a wide range of carriers. Through field experience and continuous product improvement, TimberMAX believes that there is a machine configuration that will work for you.

## Configuration Solutions

### One Machine System

The winch is installed on the steep slope machine. The cable is attached to a stump or suitable anchoring point.

- Quicker setup time
- Static line
- Cost effective for full-time dedicated cutting machine

### Two Machine System

The winch is installed on a carrier (excavator, dozer, or tractor) or suitable anchoring machine.

- Versatility: Tether a skidder, buncher, harvester, or forwarder
- Minor modification to the slope machine required
- Extra power from the anchor machine engine

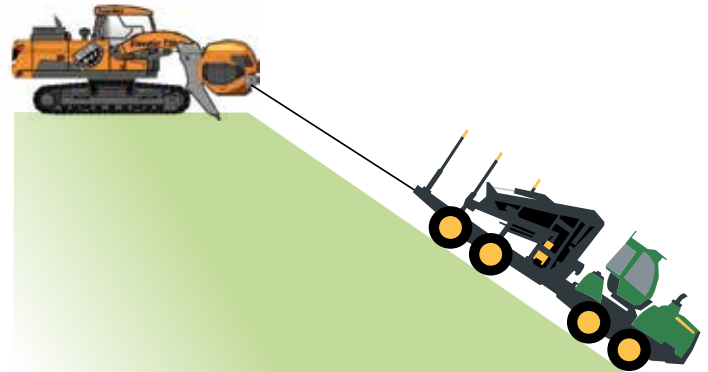


# APPLICATION EXAMPLES



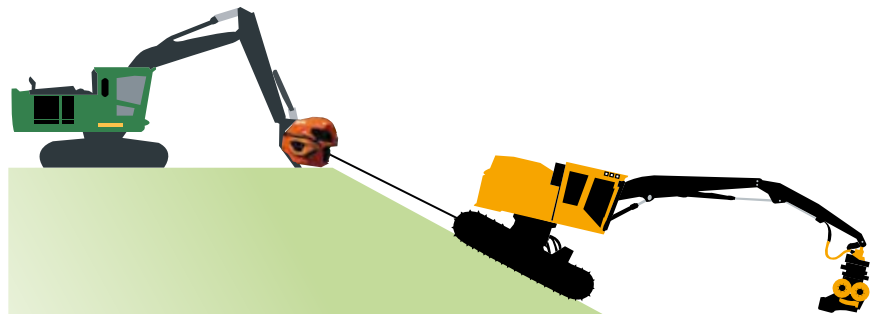
## TimberMAX ELEVATOR®

- Powerful self powered winch unit
- High performance, flexible
- Fully remote operated



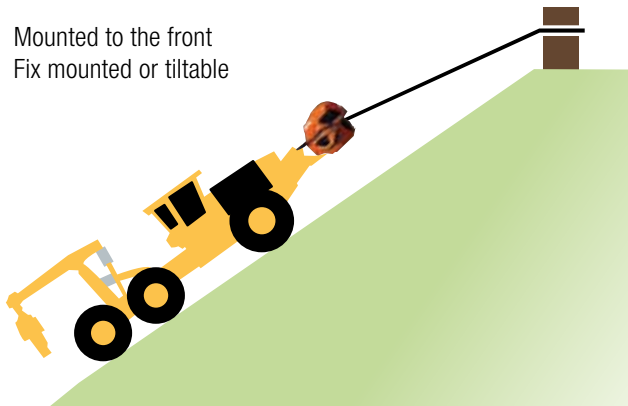
## Tracked Excavator

- Versatile and cost effective
- Compatible with quick attach System



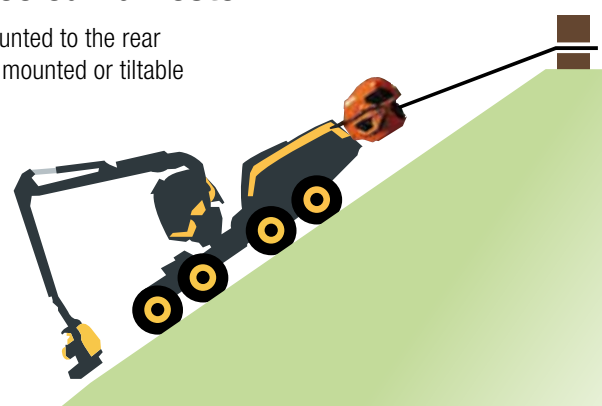
## 4WD/6WD Wheeled Skidder

- Mounted to the front
- Fix mounted or tiltable



## Wheeled Harvester

- Mounted to the rear
- Fix mounted or tiltable





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## UNIQUE Concept

Limited carrier modifications required Standard mounting dimensions makes installation simple and swapping between machines easy.

Carrier Requirements:

- 1" Pressure Line
- 1" Return Line
- 3/4" Drain Line
- Electrical Cable (5 connectors) including +24 V Supply

## TimberMAX Drive

Powerful, Reliable and Efficient It is powered by a variable displacement hydraulic motor, which allows high torque or high speed under low load conditions. The winch drum transmits power through the three-stage planetary gear drive. A multi-disc, spring applied brake secures the drum.

## REMOTE Control

Easy to Operate TimberMAX has remote controls available to match your installation and options.



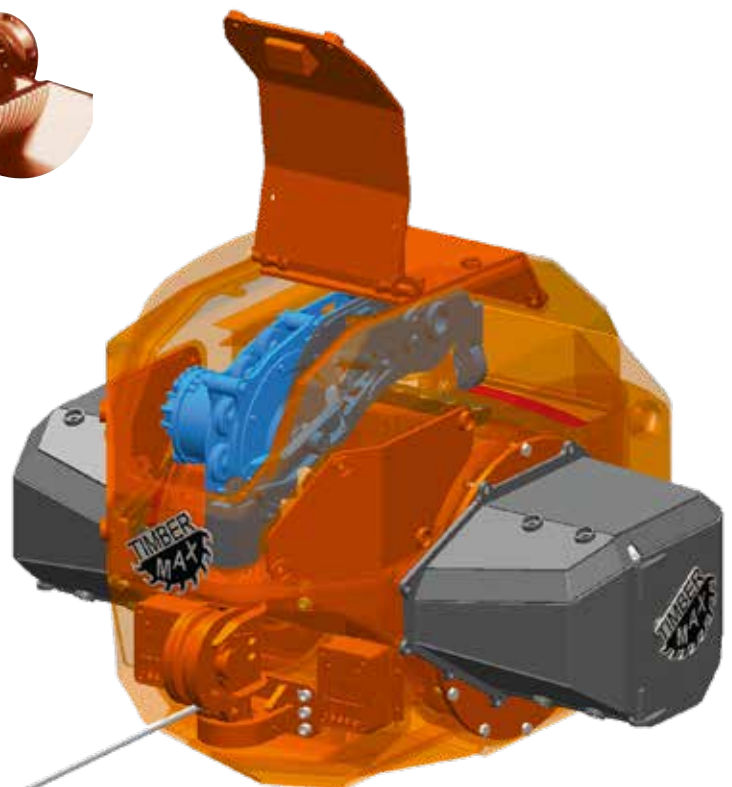
## EXCAVATOR Mount Ready

### Versatile, and Dynamic

No need to install sheaves, pulleys, or drums on the carrier. Most 24 + ton units can be used as the base carrier.



Powered by  
**Rexroth**  
Bosch Group





## QUICK Attach

### Converts Carrier to Winch-Assist

This system enables the carrier to operate as a road builder without restriction, while the quick attach allows you to convert to winch-assist quickly.



## iWinch® Control System

### Intuitive, and User-Friendly

- Winch pull setup, tension monitoring with alarms
- Redundancies and safety features for maximum operator safety
- Remote diagnostic ready



## PIVOTING Rope Guide

### ± 45 degrees

The TimberMAX rope guide contains an oversized bearing and a swivel-mount allowing for operation within 45 degrees from the center.



## COMPACT Design

### Perfect Spooling

With a reliable and robust spooling system, the winch drum has been designed to extend cable lifetime and reduce operating costs.





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## A UNIQUE Product

It's clear that the logging industry has been searching for technology to provide safer practices in steep slope harvesting, and TimberMAX has risen to the challenge. The T-Series Traction-Winch is easy on the eyes, and frankly – it's cool!

The versatility of being able to mount the winch directly to a skidder, buncher, harvester, forwarder or secondary machines such as the TimberMAX ELEVATOR®, or an excavator, makes this system an attractive and cost-effective option.



## The LOGICAL choice

Seamless integration into the machine's operating system provides smooth operation and ease of functionality for the operator. Since the T-Series is an attachment, you can swap the bucket or power-clam with the winch in approximately 15 minutes. This quick transition maximizes the machine utilization and transforms it into a robust, powerful, and reliable Traction-Winch System!





# VERSATILITY



Used Feller Buncher Mount



Downhill skidding



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## Metric specifications

	T8	T10	T14	T20	T20HD
Winch Pull (kN)	80	100	125-140	180	180
Rope dia. (mm)	16	16	19	22	25
Capacity (m)	340	500	360	540	420
Max Speed (km//h)	10	6	6	8	8
Weight (kg)	1700	3000	3000	4200	4200
Min. Flow (l/min)	200	200	200	300	300
Pressure (bar)	310	290	340	320	320

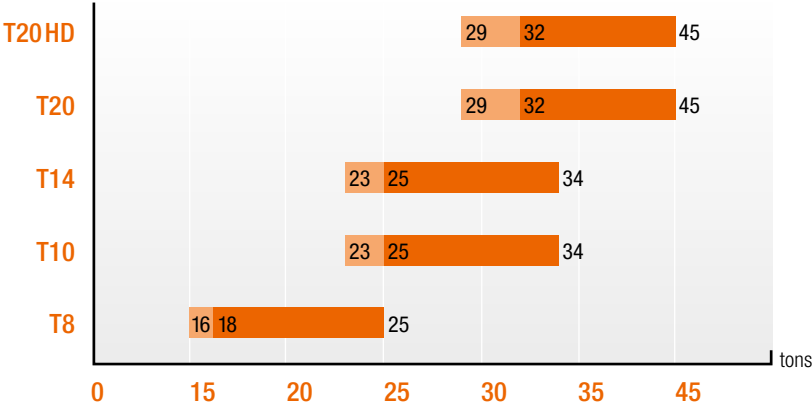
Not included T10-T20 Winch Bracket 1200kg

## Imperial specifications

	T8	T10	T14	T20	T20HD
Winch Pull (tons)	9	11	14	20	20
Rope dia. (in)	5/8"	5/8"	3/4"	7/8"	1"
Capacity (ft)	1100	1640	1180	1770	1380
Max Speed (ft/s)	9	5,5	5,5	7	7
Weight (lb)	3700	6600	6600	9240	9240
Min. Flow (gpm)	50	50	50	80	80
Pressure (psi)	4300	4200	4930	4200	4200

Not included Winch Bracket 2600lb

## Base Excavator size chart

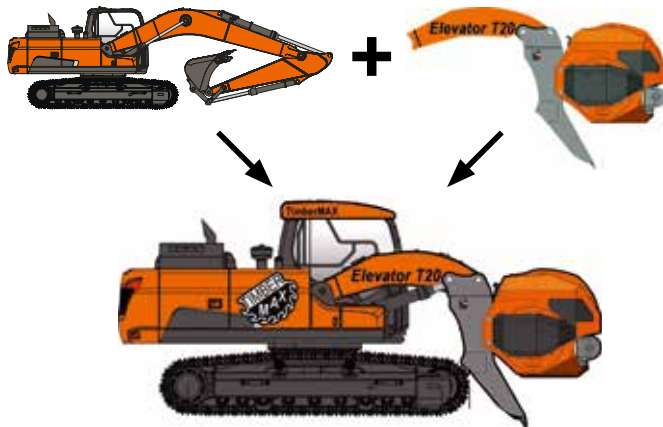




# TimberMAX ELEVATOR®



## Convert excavator in Fully remote operated Traction-Winch System Wide Range of carriers compatible



The TimberMAX ELEVATOR® is an install kit that upgrades a construction excavator into a fully remote operated Traction-Winch System. With this installation, the excavator will have the capacity to reach an upper trail, and once it is in the desired location, it will be able to position and anchor itself safely to start operations. The original boom can be used or a purpose-built boom can be mounted to increase stability. Ask your dealer for more information.

- Integrated remote control for all hydraulic functions
- Good ground clearance, agile in harsh environment
- Good resale value



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## iWinch® Automatic CONTROL System

### User-Friendly, Embedded Solution

**Winch® Display:** The display is mounted to the tethered machine, and relays information essential to the effective operation of the winch unit to the operator on a high-contrast, 12" monitor. Additional information available includes diagnostics, troubleshooting, and statistics.

**Drum Camera:** The spooling quality is paramount to maintain a long cable lifetime. The camera gives the operator the opportunity to confirm at any time that the system is operating correctly.

**Tension Setup:** The iWinch® system recognizes which direction the slope machine is moving. It can be set to 3 different tension settings:

1. Uphill
2. Not Moving
3. Downhill

At any time, the operator can reduce the pre-set tension with the potentiometer.

**Slope Test:** Operators can test the soil traction capacity by having the cable tension reduced to zero, to determine if the machine will hold on the slope unassisted. Safety is a priority!

**Documents:** The iWinch® comes with user manual, checklists, schematics, and Spare Parts Book.

## KEY Features

### Bidirectional Communication

TimberMAX believes it is paramount to have safe communication between the winch and slope machine and offers a high-end solution. Even in a two-machine configuration, it is possible to monitor the winch unit. The operator in the tethered machine can monitor the following:

**Winch Carrier Alarms:** Low Fuel, Low Engine Oil Pressure, Check Engine, Over Temperature, Low Hydraulic Oil Level

### System Protection and Speed Control of the Slope Machine

The TimberMAX Traction-Winch can be utilized for both track and wheeled machines. Track machines tend to require a high pull and lower speed; the wheeled application requires a faster cable speed. This system is integrated to limit the top speed while the winch is engaged, preventing overspeed while enabling the operator to focus on the task at hand.

### Data Logging and Statistics

The angle sensor mounted in the slope machine allows the operator to get feedback on the current slope gradient. Winch tension, slope gradient, and slope test data are recorded in the iWinch®.

This data can be accessed and utilized for operational planning and reporting.

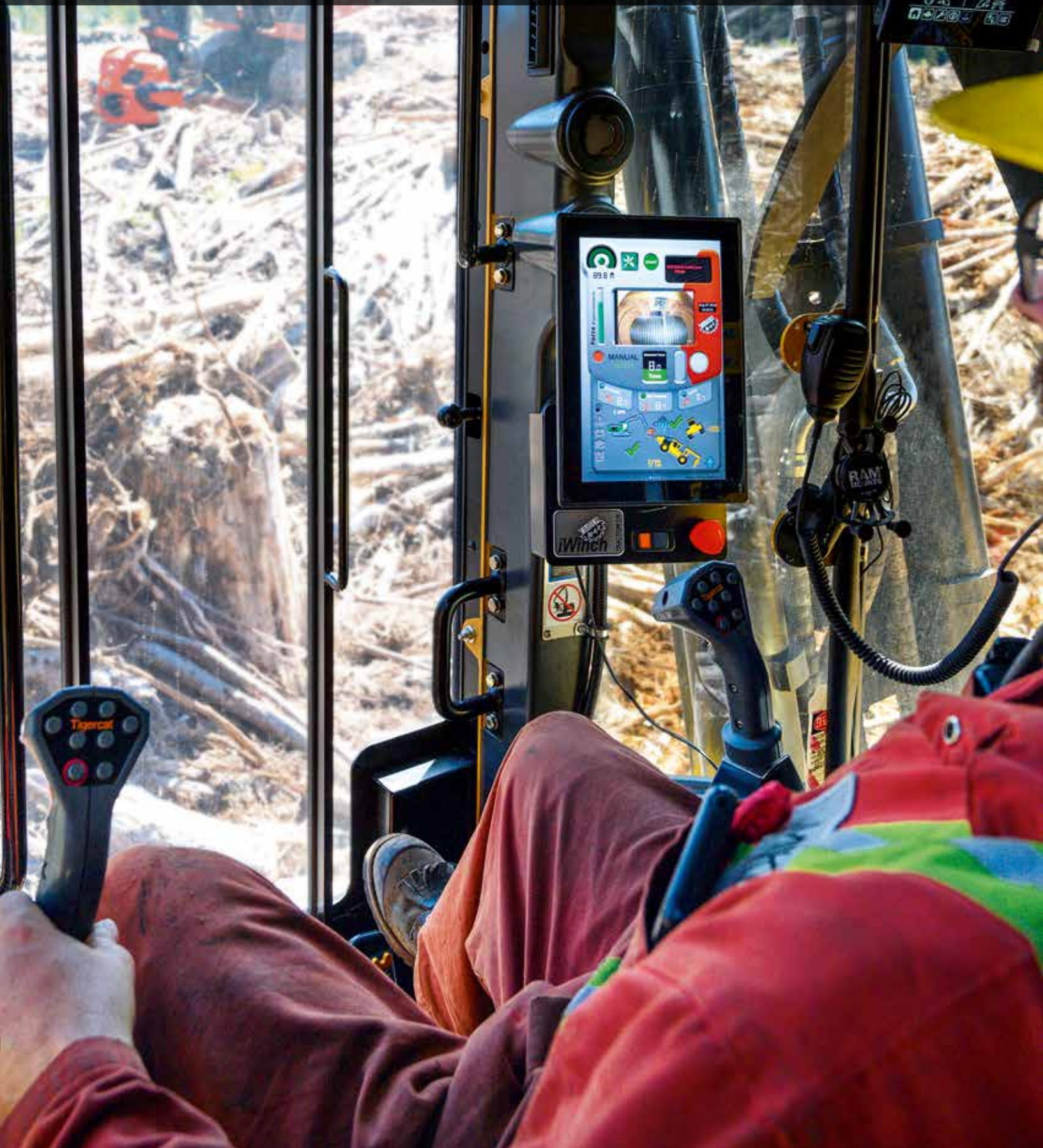






# USER-FRIENDLY

## Advanced Safety Features



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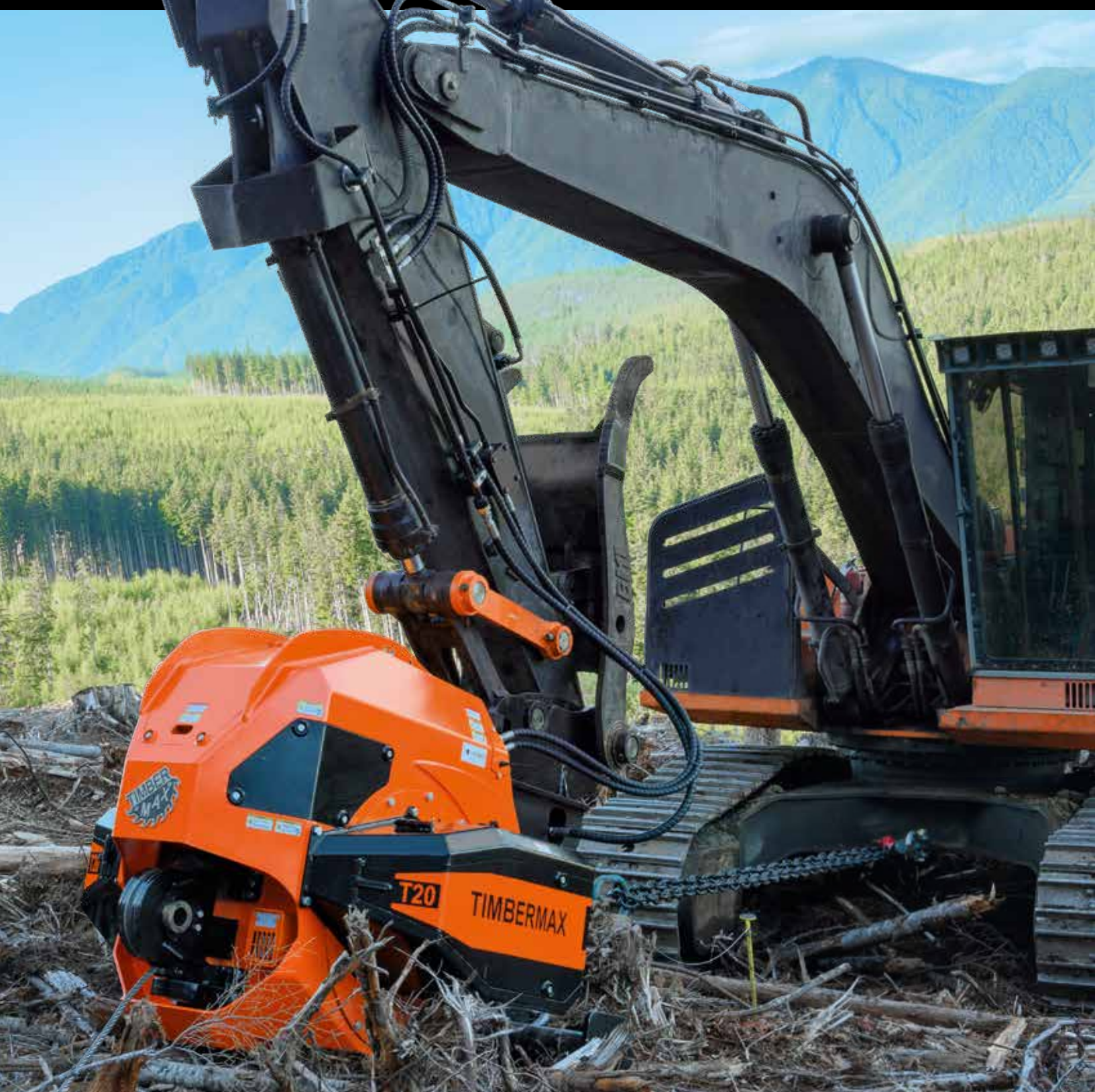
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