

FALCONWinch Assist



Safe and Versatile

The Falcon Winch Assist has been developed through thousands of hours of operational testing, in a wide range of conditions, resulting in several safety features to eliminate operator risk and with the added collaboration from crews, this machine is simple to operate and maintain. With minimal impact to the base excavator machine, the system also can be used as a conventional excavator, for digging or tracking, that is why The Falcon Winch Assist is the only Hydraulic Winch Machine on the market that provides your crew with Safety, Simplicity, Productivity, and Real Versatility.

Give your crew a machine that will get the job done well while having peace of mind for their safety.



01 Control System

Easy to use control system provides full remote control use of the winch machine.



Multipurpose Design

Minimal difference in length and weight to the original counterweight allows full use of the machine as an excavator.



Versatility

Can be spec'd with a rotating grapple to help load out trucks and shift wood around the job site.



1^{1/8} Swaged Rope

157,000 lb breaking strain. 46,000 lb safe working load.



Tension Monitor

Accurate real-time rope tension readout in the tethered machine.



Optional Quick Hitch

The ability to fit a quickhitch for multi-purpose applications.



Emergency Estop

Located either side of the machine and there is also a remote Estop on the downhill machine controls.

Forestry made simple



The Felling Machine Operator only has to manage one rope when operating downslope reducing complexity and potential snags.



The operator only needs to adjust the desired tension setting during operation so they can concentrate on the task at hand.



The Winch System design provides less mechanical and electrical complexity and therefore less opportunity for faults and breakdowns.



The Winch Unit is enclosed by rear guarding for protection with easy access points for maintenance.



The Falcon Winch Assist single rope system allows you to winch from the bottom of the hill in uphill/high-side winch applications safely and productively.



Binding/side-washing around trees - the single rope system allows you to safely bind trees stumps without causing damage to the rope.



Winch Mode

When the Falcon Winch Assist is in Winch Mode, the winch can be remotely operated by the operator of the tethered machine. The Falcon Winch Assist has several safety systems built in to keep the operator safe and in control at all times.

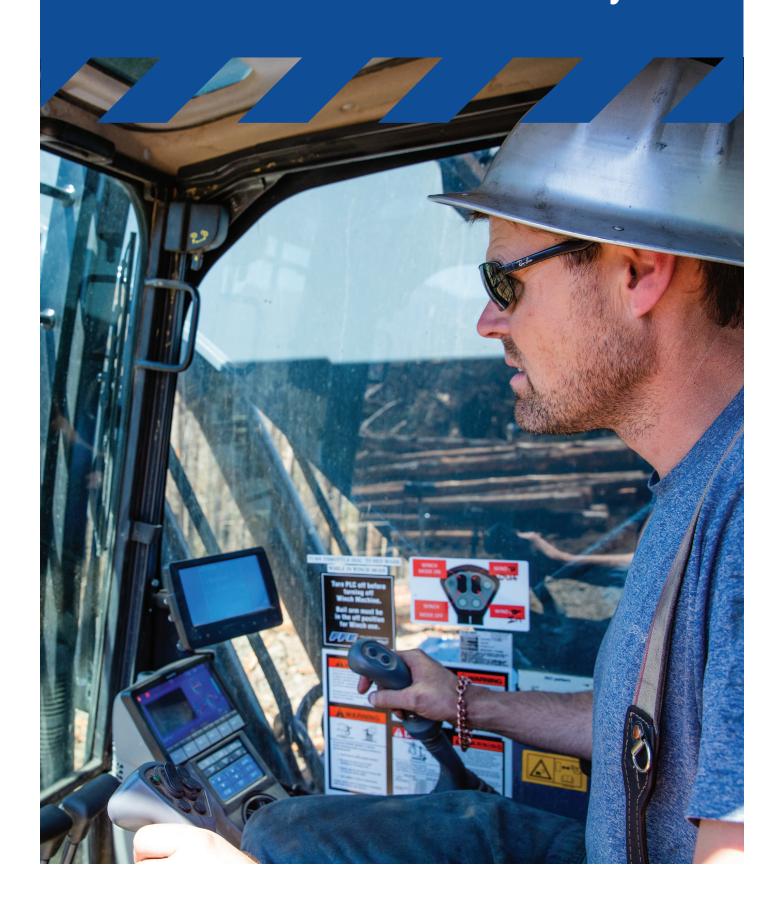
The Tethered Machine operator can maximize stability and traction by selecting one of eight pre-set rope tension settings that is best suited to the steepness and environment.

Standard Excavator Mode

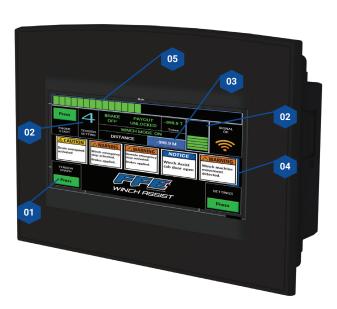
When the Falcon Winch Assist is switched to Excavator Mode it will perform in the same manner as a normal excavator for digging operations as well as log loading and shoveling (if fitted with the optional quick-hitch & grapple plumbing).

The advantage to the Falcon Winch Assist system is that the weight distribution of the machine is very similar to factory specs once the Winch unit has been fitted to the base machine. This allows the machine to operate effectively as an all-purpose excavator.

FALCON Winch Assist Control System



Downhill Machine





Tension Graph

The screen displays a graph of the cable tension of the cable. It is continuously recorded at 1 second intervals and will store up to 1 hour



Tension Setting & Bar Graph

The digital readout & bar graph display the current tension of the rope. This has 8 settings depending on the assistance required.



Rope Distance / Zero Distance

This displays the length of rope currently payed out.



Main Alarm Display

The alarms display in the centre of the screen. When an alarm is active it will flash and pulse an audible alarm.



05 Drum RPM Graph

The graph indicates the current speed of the drum.

The Joystick Control is ergonomically designed so that the operator does not need to lift their hand from the controls and can easily adjust tension settings.



Winch Mode On/Off

Easy-press on/off.



Tension Setting Up/Down

This adjusts required tension settings from 1 - 8.





Manual Pay Out/Wind In Rope

Easily adjust payout or wind in of the rope manually.



Remote Emergency Stop

Press and hold the emergency stop button for one second to activate.

Tethered Machine Joystick Controls



Specifications

Winch Unit Width	118" - 149" (Dependent on excavator make and model)
Winch Unit Height	80"
Winch Unit Weight (incl. rope)	14,000 - 15,000 lb (Dependent on excavator make and model)
Operating Rope Tension	8 settings ranging from 440 - 46,000 lb (Dependent on gear ratio)
Rope Size	1 ^{1/8} " Swaged Rope
Rope Safe Working Load	50,000 lb (Machine SWL = 46,000 lb)
Rope Speed	150 ft/min to 240 ft/min approximate (Dependent on gear ratio)
Winch Drum Capacity	1,000 ft
Gear Boxes	Dual Planetary Gearbox
Safety Accreditation	Designed to AS3990 & Certified by an IPENZ Charactered Engineer to AS1418





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