Giant NZ Cable Logger exported

Brightwater Engineers’ telescopic, towered, long distance, 55 tonne track mounted cable logging machine offers the forestry industry here the advantages of heavy-duty, high-altitude selective handling meshed with readily available support from the Nelson-based manufacturer.

The track-mounted BE 85, Brightwater’s flagship of the fleet, is a fully-engineered cable logging machine (yarder) that matches the best from the rest of the world’s yarder manufacturers. It has an extended range capability, enabling it to log up to 750 m.

The units are driven by 400 hp Cummins engines, coupled to an Allison six speed powershift transmission. The electronic shifter ensures that gear selection is very easy and features a lockout that prevents overloading or overspeeding the transmission. This gives a very good range of speeds and line pulls, enabling the largest loads to be carried, as well as the ability to return the rigging gear to the bush at up to 80 km/hr.

Each winch drum is fitted with multi-disc plate clutches for smooth power transmission between the gear train and the drum. At the other end of the winch drum, a multi-disc watercooled brake is fitted with enough power to stop the drum within one revolution. These brakes can absorb up to 250 hp of braking energy, which can be required with the large rotating masses of the drums and the ropes.

One of the other features that puts the BE 85 head and shoulders above the competition is the 85ft-high telescoping tower. This is a ground-mounted unit, for transmitting the stresses directly through to the ground rather than through the chassis and framework of the machine. The tower has a 60ft travelling height and 85ft operating height (although it can log at both heights if required).

The fully-swivelling sheaves at the top of the tower run in spherical roller bearings and are designed for high speeds and high loads. This sheave design and the guyline configuration allow a full 180 degree angle of logging from one setup, before having to reposition either the machine or the guy ropes.

Guy rope winches are of the free-spooling type which allows them to be pulled off freely, rather than have to power them off.

The Brightwater logging system is used in selective logging areas in the Philippines where the high-lift capability is essential to the preservation of wildlife.