

New Waratah Head offers effective mechanisation for treated poles

An exciting development for forestry mechanisation in Southern Africa is the introduction by Bell Equipment of the Waratah H290 Harvester Head as a safe, efficient and cost effective solution for the debarking and processing of Eucalyptus trees for the treated pole market.

According to Bell Equipment's General Manager: Forestry, Sugar and Agriculture, Derek Howe, the tried and trusted Waratah H290 is particularly well suited to this application as the use of special hydraulically driven rubber feed rollers minimises mechanical damage to poles, as which is currently experienced in traditional mechanised pulp log debarking, to produce poles that consistently exceed SABS standards.

"The H290 is a powerful, high-capacity head which features the highly efficient SuperCut 100 saw unit and can fell and process trees up to 760mm in diameter and debark and debranch to as thin as 50mm in diameter. This makes the head suitable for all treated poles, from transmission and telephone poles all the way down to

fencing poles. We are also confident that the head could be used to remove Wattle bark undamaged," he says.

Delimiting is carried out by four moving delimiting knives and one fixed, adjustable top knife, which creates an effective system that provides 100% coverage. This presents the perfect geometry for excellent delimiting and debarking quality regardless of the log diameter.

Together with innovative tweaking and some Waratah tricks, the sophisticated knife control and dual-speed feed motors of the H290 delivers high production, cost effective debarking. These feed motors generate an impressive feed force of up to 41.6kN with a maximum feed speed of 4.5-6.0 m/s.

Derek believes that the H290 offers a more cost effective alternative to the treated pole sector and that customers will "definitely enjoy a cost per tonne benefit" over manual delimiting and debarking, and increasing a safer environment in the plantation, by mechanising.



Taking a closer look at the Waratah H290, are (from left): Chris Scheepers of Bosbok Ontginings with Operator, Amos Magagula, and Bell Equipment Sales Representative, Charles Inggs.

Well suited to both tracked and wheeled carriers - either a 22t to 30t excavator or a similar sized, purpose-built harvester - the H290 carries a warranty period of 2 000 hours.

Optional equipment available for the H290 includes a colour marking system, stump treatment and pine rollers.

Meanwhile Bell Equipment, Waratah's dealer in the Southern African region, first identified an opportunity to mechanise the debarking element and the accurate processing of Eucalyptus trees into transmission pole logs about two years ago and undertook a detailed product development programme (PDP).

As part of the Bell PDP process the H290 was continuously scrutinised by the company's engineers, technical staff, parts department and marketing team to ensure that the unit would be able to successfully fulfill its role in this niche market and that Bell would be able to offer a high standard of aftermarket support by trained and dedicated technical, parts and sales personnel.

"We also had lengthy discussions with Jules Larsen the General Manager of Waratah Asia Pacific and Africa, and met with the Waratah engineers at the factory in New Zealand, to carefully create an understanding of the necessary standards that needed to be achieved in the extremely quality sensitive pole market in Africa," says Derek.

"Knowing his desire to achieve perfection, we approached Jos Badenhorst, the General Manager of MTO Forestry's Lowveld region, to allow us to conduct trials in their typical Eucalyptus stands being harvested by our long-time mechanised customer, Bosbok Ontginings, owned and managed by the father and son team of Koos and Chris Scheepers.

"We have subsequently completed trials, which commenced in March and during which we perfected the head capabilities to achieve the high standards demanded in the production of transmission poles and fencing poles," says Derek.

According to Chris Scheepers the H290 Head during the trials the H290 was fitted to a John Deere 759JH in stands of varying sized Eucalyptus trees. "The unit has been working with an experienced operator who soon mastered the necessary technique and consistently achieved a production rate of 15m³ per hour in trees of 0,4m³ on relatively flat areas. Higher productivity was recorded with some assistance with some labour involvement. The introduction has been like a breath of fresh air," says Chris.

Derek continues: "Along with our Bell Technicians and Sales Representative, Charles Inggs, we also involved certain contractors, quality inspectors and treating plant management from KwaZulu-Natal, Mpumalanga and the Northern Province to add their input, and we have since delivered thousands of transmission and fencing poles, which have continuously surpassed the demanding quality standards.

"All the main players in the pole treating sector have endorsed our new head and its capabilities, and a special thanks must go to: Matt Pennyfather who allowed deliveries into Lows Creek Treating Plant, as well as Schalk Theron and André Schoeman of Tzaneng Treated Timbers in the Tzaneen area and the valuable input of Pieter Bruwer of Northern Timber Sawmills in Tzaneen, Andrew Pratt of Agatha Sawmills and Gary Hughes of the R & B Timber Company in KwaZulu-Natal," he adds.



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