## So what's the big deal about Timbertechs?

## **Andy Dick**

Timbertechs, or more correctly, logger caliper tools, are the cornerstone of the Invader system developed by IFR Ltd (a company primarily owned by Forest Research) to make logs more effectively. Carter Holt Harvey is committed to the use of electronic optimising tools for log making and has asked its suppliers to install these tools. This is a huge undertaking that has forced change in practice at the work face and how we relay cutting instruction information to our crews. The driver for this change is our need to recover full value from our estate.

Value Recovery has developed as a significant discipline within forest management. Those companies involved in making and marketing logs that get Value Recovery right will survive, and those that don't, won't. Most simply put, value recovery is about knowing with reasonable accuracy what range of products your forest can produce and aligning your market mix to fit the production of these products. Value loss, or the value recovery gap, is the difference between what you could have sold in a robust market and what you did sell. Value loss can occur in a number of ways from forest to customer door. An obvious factor is a lack of suitable markets for preferred log grades. Less obvious are physical area constraints in your log manufacturing sites and the impact that this has on the number of log products a crew can make and store. As a rule of thumb the more sorts, the greater the value opportunity provided you can store a range of log products without them becoming sapstained and downgraded (another value chink in the supply chain).

Logmaking tools such as Timbertechs make the "decisions" about which log grades to cut from a stem. The decision is based on physical attributes the log maker has coded into the unit. In essence, the log maker describes the stem to a handheld computer that has been loaded with the company's log product list and priorities, and it applies this information to produce the best value result for the company. The log maker marks the stem where the computer indicates and 'skiddies' with chainsaws following up to create the logs.

The calipers alone have the potential to add value to our estate but the Invader systems has wider functionality than just being a smart aid to log making. A real plus for companies utilising this technology is that the production information stored in the caliper's computer is downloaded nightly by modem to a central database. This allows summarised reporting of log grade and volume production by crew and region each day. In addition, stem attribute information can be used recut logs to alternative cutting instructions. This allows wood flow planners to carry out "what if" analyses and quantify the value or cost of their decisions about which grades are to be cut by which crews.

Where are we at? At time of writing all CHH motormanual and hauler crews have received tools and training and 45 per cent of our daily production is produced by log

makers using Timbertechs. While this in itself is a reasonable result given that CHH manages over 80 crews from Northland to Canterbury (implementation started last October) we had anticipated smoother uptake on the tool. Delays have occurred as crews grapple with the change in thinking required to accommodate computer technology on landings. Although the tools themselves are robust and designed for the workface, the supporting software has required change as new situations were discovered during the implementation, and software bugs have caused some delays. Nonetheless, supplier and management commitment will ensure we hit our target of 80 per cent production through the tools by year-end. A real boost to that objective will be when IFR completes testing on the Processor/ Waratah version of Timbertech and releases the prototype (this was due in October).

Indirectly, Timbertechs have accelerated the move to superskids and Central Processing Yards (CPY) as production sites. Traditional landings are generally too small to accommodate log making using a system that incorporates Timbertechs and the greater number of sorts that Timbertechs can create. Superskids provide more room to spread and measure stems, store a wider range of products and enhance worker safety.



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