The Role of Timber Harvester Heads in Recording a Harvest

Fact Sheet

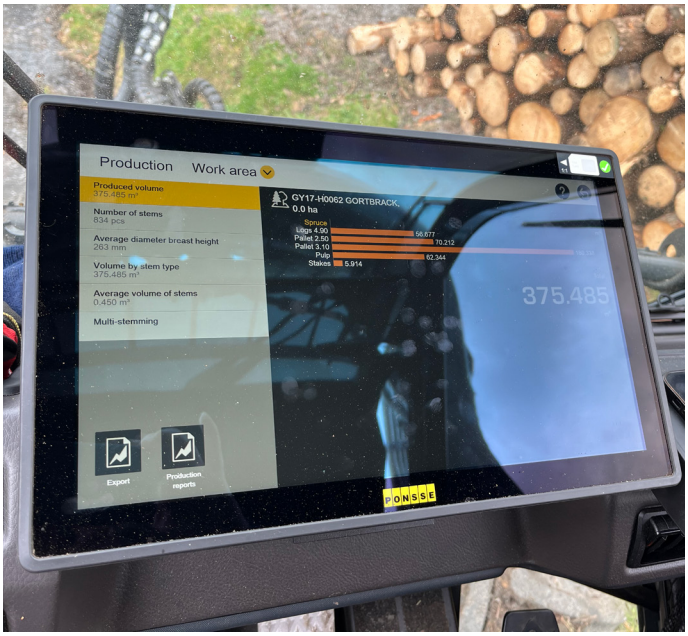
6

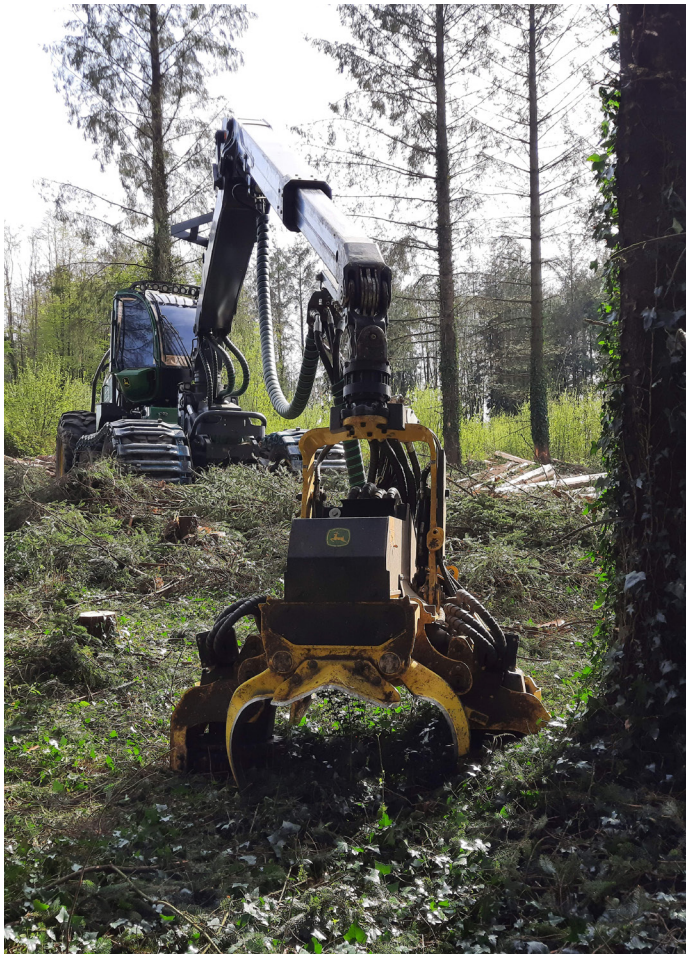
Accurate, real-time information on the volume and classification of timber being harvested is an essential tool for forest managers, contractors, and forest owners. It enables effective monitoring of harvesting progress, ensures compliance with forest management plans, and supports transparency and traceability in timber production.

Modern mechanised harvesters are equipped with advanced onboard computers and measuring systems, that record data automatically as trees are processed. These systems measure each log's length and diameter as it passes through the harvester head, allowing the machine to calculate the volume and assign the log to a specific product category (e.g., sawlog, pallet, pulp, or stake).

This data is invaluable not only for tracking productivity and optimising harvesting but also for post-harvest analysis. It can be used to confirm whether the harvesting operation has met yield expectations, whether the correct sizes and categories of trees were cut, and whether any adjustments to future operations are needed.

Data available from the technology onboard modern timber harvesters plays a powerful role in managing forest operations. This data is also a valuable resource to forest owners; providing real-time information on the volume, percentage and number of different products cut on a specific site or in a particular period of time.





Example

The image overleaf shows summary printout data from a timber harvester. It outlines the breakdown of harvested timber by species, log length class, volume (in cubic metres), and number of logs, giving a clear overview of the output from a specific forested area. This kind of data-driven insight supports efficient decision-making, improves communication between harvesting teams and forest owners, and enhances the overall sustainability and profitability of forest operations.

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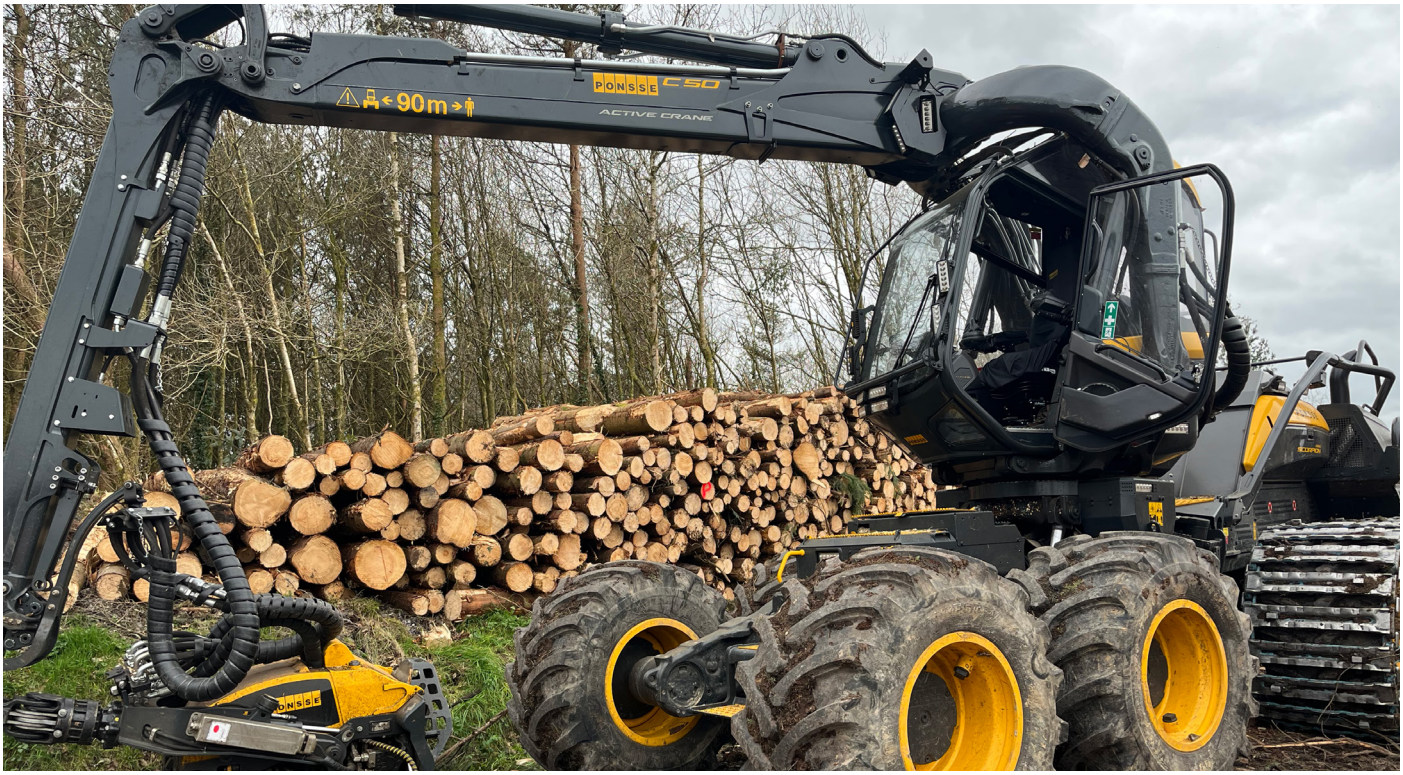

TimberMATIC

Sample Printout			
Spruce	**Length Class**	**Vol m³**	**No. of Logs**
Commercial	4.90	1635.58	4751
	5.50	481.43	1111
Comm 2	3.70	842.40	3385
Pallet	2.50	419.52	4171
	3.10	1039.86	8623
Pulp	3.00	1607.01	23781

Sample Printout			
Spruce	**Length Class**	**Vol m³**	**No. of Logs**
Commercial	4.90	42.42	126
Comm 2	3.70	15.87	88
Pallet	2.50	21.03	237

This printout contains two datasets:

1. The first dataset (top section) is data from an area of 11 ha of clearfelled spruce forest.
2. The second dataset (bottom section) represents a much smaller area of 0.4 ha of windblown spruce forest.

Each dataset categorizes the harvested spruce timber into different classes; *Commercial* (Sawlog), *Comm 2* (Stakewood), *pallet* and *pulp*.

For each timber class, the report provides the length (m), the volume (m³) and the number of logs processed.

Relevance to forest owners

This simplified example highlights the efficacy of modern harvesting equipment in assessing and processing trees as it harvests.

This data can easily be made available to the forest owner and represents another part of controlling and recording timber harvests supporting transparency and traceability in selling timber.

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