



# A MEASURED REPORT

WITH PETER WILLIAMSON JNR

At the Forestry Expo in August, I met with a couple of guys who were visiting from Estonia. They were from the company Balmec and they were very keen for us to trial their harvester measuring wheels.

I had not heard of Balmec before but Peter Williamson Jnr, who is trailing their products on Timber Tech Harvesting Ltd's John Deere 1470G, was familiar with them and had heard positive reports.

Balmec manufacture harvester feed rollers, roller arms, de-limbing knives, slewing racks, hydraulic rams, measuring wheels, and other accessories for most types of harvesting heads.

Balmec dates back to 2007 when they formed the company Metsavennad Gruupand offering a repair service to the forest industry which included fabrication, hydraulic repairs and chain sharpening. In 2008, the company's first feed rollers were manufactured and these products

were soon exported to Sweden and Poland through local dealers.

In 2010, the company was re-named Balmec Forest OU and their exports spread further afield with dealers in Latvia and Lithuania now offering their products.

Their first de-limbing knives were manufactured in 2011. Manufactured using SSAB steel, the knives were first fitted to a John Deere 758HD harvester. John Deere then started to sell Balmec's harvesting products throughout Europe and export sales further increased to include Russia and Brazil.

After renovating and upgrading an old peat factory to a modern facility, Balmec was able to further increase its range of products. They invested in CNC machinery and started to manufacture top knives, chain catchers and track accessories. Austria was added to the list of countries with official Balmec dealers.

Balmec continually looked at ways to improve the accuracy of measuring timber because crooked trees and loose bark can cause the measuring wheel to lose contact with the stem and may require a few passes to measure correctly. Saw-mills are very strict and do not want to pay for over length timber that they cannot use; they can even reject a load of timber, which then has to be returned to the forest to be rectified. This is time consuming and expensive for the contractor. In 2016, following months of successful testing of the Balmec SC type measuring wheel, it was put into production and made available for most makes and models of harvesting heads. The company also manufactures other types of measuring wheels for all species of trees, including the slippery Eucalyptus.

In 2018, their 10,000 feed roller left the production line destined for a Log Max 6000 working in Canada and this year has seen the introduction of Eucalyptus de-barking rollers. They are currently available for John Deere, Komatsu and Log Max heads but more makes are being added on a constant basis.

For our test, three measuring wheels arrived and after a discussion with Peter we decided to trial the SC-type measuring wheel first. As we were heading into autumn we thought this would be perfect as



*Measuring wheel 180x100 Z30 SC - "Scattered" profile - this profile is the most universal, as it cuts completely through the bark measuring accurately even the stems with loose bark.*



*Measuring wheel 180x100 Z30 W - wheels are more aggressive therefore give better grip. The "W" stands for winter.*



*Measuring wheel 180x100 Z30 S*



**balmec**

over the coming months we would hopefully be able to test this type in wet and freezing wintery conditions. Then, the spring of next year, when the bark starts peeling and the sap is rising, will provide another good test for measuring accuracy. Peter's engineer came out at the end of September to fit the SC type measuring wheel – it was a like for like fit and new bolts and cap screws were used. It took Peter two attempts to calibrate it properly, this was because it was a different style of wheel to what he was used to rather than any manufacturing or design issues.

Peter has been harvesting a mixed crop of Norway and Sitka Spruce with a tree average of 1.31m<sup>3</sup>.  
*"The measuring wheel was fitted onto the H415 at*

*the start on this site, so far I have processed 4300 m<sup>3</sup> and the measuring wheel has been extremely accurate in the larger sized trees. From next week I will be moving onto 0.2 m<sup>3</sup> average larch which will test the measuring wheel in small and extremely twisted crop."* reported Peter.

The compartment did contain a small block of bent Larch trees and the forwarder operator, Murray Crosbie, shocked Peter with a very rare compliment. He couldn't believe there were no over length pieces while loading; normally on Larch this twisty there are quite a few long pieces where the measuring wheel loses contact and the loose bark on Larch trees can cause measuring problems.



*Balmec offer measuring wheels for most harvesting heads including John Deere, Waratah, Ponsse, Komatsu, Log Max and Kesla - all with a 1-year warranty, with unlimited working hours.*

*Peter found the measuring wheel measured perfect in the large timber.*

*A beautiful final crop remains after previously being thinned.*



The only negative comment Peter had, and it is only a small gripe, was that on this John Deere H415 head the grease nipple behind the measuring wheel was a bit awkward to get to with the grease gun. He maintained that if the wheel was two millimetres less in diameter it would make maintenance easier without affecting performance. He did point out that other heads might not have the same problem.

He has not yet had to re-measure any produce due to over lengths and admitted that this has improved his productivity and ensured Murray remains happy on the forwarder.

As I left Peter and headed down to the forest road, I looked over the stacks at roadside. Murray had been unloading the forwarder from the forest and stacking next to the road, with the timber stacks



*Wallpaper stacking from the forest side with no long lengths sticking out.*

facing the road looking like they could be wallpapered. This is testament to both a conscientious forwarder operator and a harvester that is deadly accurate with its measuring. In the next issue we will hopefully see how it is performing with frozen trees.

Rab Easton

[www.balmec.com](http://www.balmec.com)



### Cantilever Access Control Gates

Bespoke built cantilever access control gates suitable for commercial / industrial application and farm access roads.



**Ideal for security traffic control** and where road surfaces are broken and uneven. Standard features include:

- Key phob activation
- GSM telephone activation
- Keypad activation
- Manual override system
- Wind generator and PV charging system
- Compliant with HSE BS/EN. 12445-2001

Tel: 01353 861530  
 Email: [info@tmmf.co.uk](mailto:info@tmmf.co.uk)

[www.TMMF.co.uk](http://www.TMMF.co.uk)