CT Log
Computed Tomography for the sawmill of the future
The sawmill of the future...

It has always been the dream of sawmillers to know what’s inside a log before sawing... now this dream has come true.

1. Log sorting according to quality
2. Optimize bucking
3. Find best value cutting solution

Find the best...
Full digital log reconstruction and virtual grading for true value optimization in the bucking and sawing processes.

CT Log Computed Tomography scans and digitally reconstructs the internal features of the log allowing the assessment of the optimum cutting solution in real time.

CT Log Computed Tomography allows continuous, qualitative and full 3D log reconstruction. For the first time, size and position of internal wood defects can be accurately described in all three dimensions. Using the internal defects, CT Log evaluates appearance, quality, and strength properties and assesses their impact on the final products before the physical breakdown of the log. Sawing and bucking solutions are continuously optimized based on the highest quality and resale, allowing production to be managed according to real-time priorities.

Large Cone-Beam Computed Tomography is the most innovative technology for the log yard developed by the industry-leading engineers at Microtec. This approach uses a large X-ray sensor rotating 360° around the log and an innovative mathematical inversion algorithm to perform high speed, high-resolution X-ray CT-scanning.
Breakdown, bucking & sorting
CT Log Computed Tomography data is the basis for the powerful breakdown optimization software, Maxicut, that determines the best cutting pattern with the highest outcome based on quality and resale value of the final products. Interopt Bucking Optimization determines cross-cutting based on the highest value cutting pattern solutions in various areas within the log. Winlog Sorting Optimization enables log sorting and control of the log & merchandising yard.

<table>
<thead>
<tr>
<th>CT Log Computed Tomography features</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyor speed</td>
<td>up to 180 m/min (590 ft/min)</td>
</tr>
<tr>
<td>Field of view</td>
<td>up to 800 mm (32 in)</td>
</tr>
<tr>
<td>Log length</td>
<td>up to 25 m (82 ft)</td>
</tr>
<tr>
<td>Full 3D log description</td>
<td>✓</td>
</tr>
<tr>
<td>Quality grading</td>
<td>✓</td>
</tr>
<tr>
<td>Virtual grading</td>
<td>✓</td>
</tr>
<tr>
<td>Strength grading (optional)</td>
<td>✓</td>
</tr>
</tbody>
</table>

CT Log Computed Tomography precisely detects:
- Pith
- Sound knots
- Dead knots
- Splits
- Resin pockets
- Heavy rot
- Slope of grain
- Blue stain
- Metals
- Stones
- Ceramics
- Heartwood
- Green density
- Annual rings spacing
- Compression wood
- Bark enclosures
- Under bark shape
- Wood species recognition
Virtual cutting & value maximization

CT Log optimized sawing
- 100% optimum cutting solution based on the highest value of final products
- Increased value in every sawn log compared to any other breakdown solution
- Maximization of lumber recovery quality that significantly increases revenues & resale value

Digital fingerprint
Through the integrated Microtec solutions CT Log, Logeye 302 Fingerprint and Goldeneye 900 every log can be recognized and tracked to the boards by the ‘digital fingerprint’. Therefore, besides cutting optimization, complete traceability from log to board can be guaranteed.
World leading wood scanning solutions