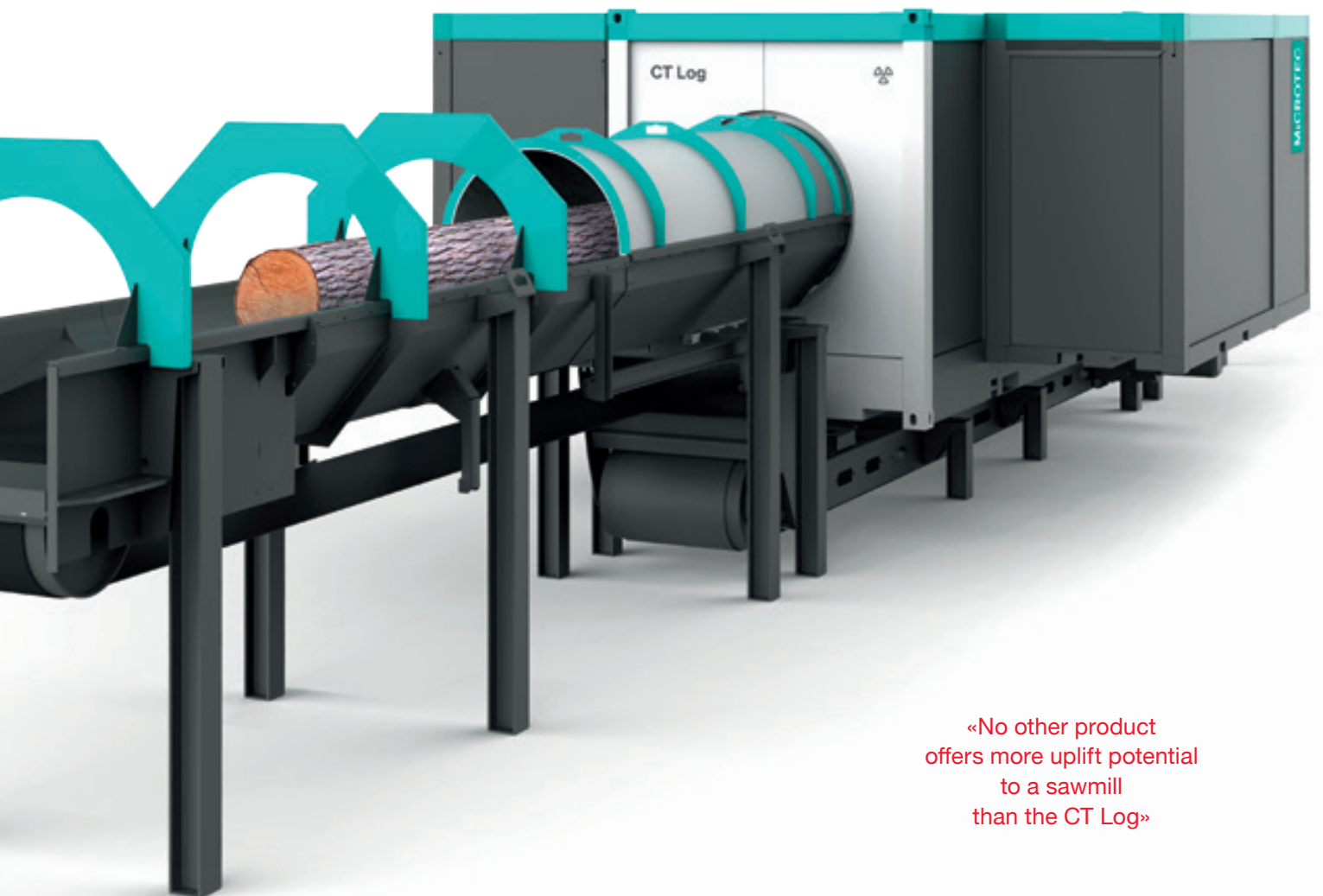


# CT Log

360° X-ray CT-Sawing Optimization  
for logs



«No other product  
offers more uplift potential  
to a sawmill  
than the CT Log»

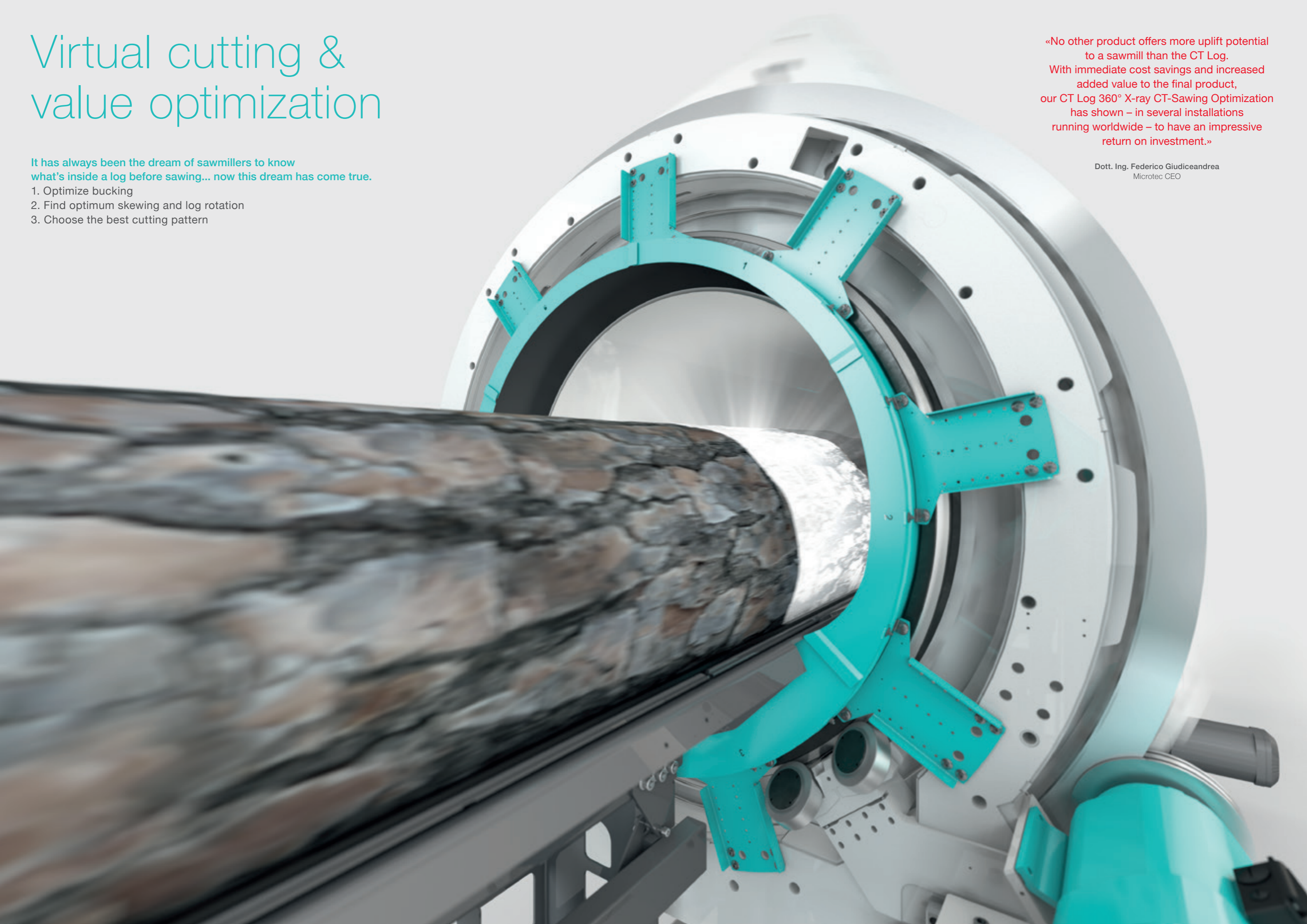
# Virtual cutting & value optimization

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

1. Optimize bucking
2. Find optimum skewing and log rotation
3. Choose the best cutting pattern

«No other product offers more uplift potential to a sawmill than the CT Log. With immediate cost savings and increased added value to the final product, our CT Log 360° X-ray CT-Sawing Optimization has shown – in several installations running worldwide – to have an impressive return on investment.»

Dott. Ing. Federico Giudiceandrea  
Microtec CEO



# The digital log

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

CT Log 360° X-ray CT-Sawing Optimization scans and digitally reconstructs the internal features of the log allowing the assessment of the optimum cutting solution in real time.

CT Log 360° X-ray CT-Sawing Optimization 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 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 and saw infeed developed by the industry leading engineers at Microtec. This approach uses a large X-ray sensor rotating around the log and an innovative mathematical inversion algorithm to perform high speed, high resolution X-ray CT-scanning.



«CT Log 360° X-ray CT-Sawing Optimization gives you unprecedented insights into your logs to optimize your production-mix according to your priorities while maximizing lumber recovery in terms of quality and resale value.»

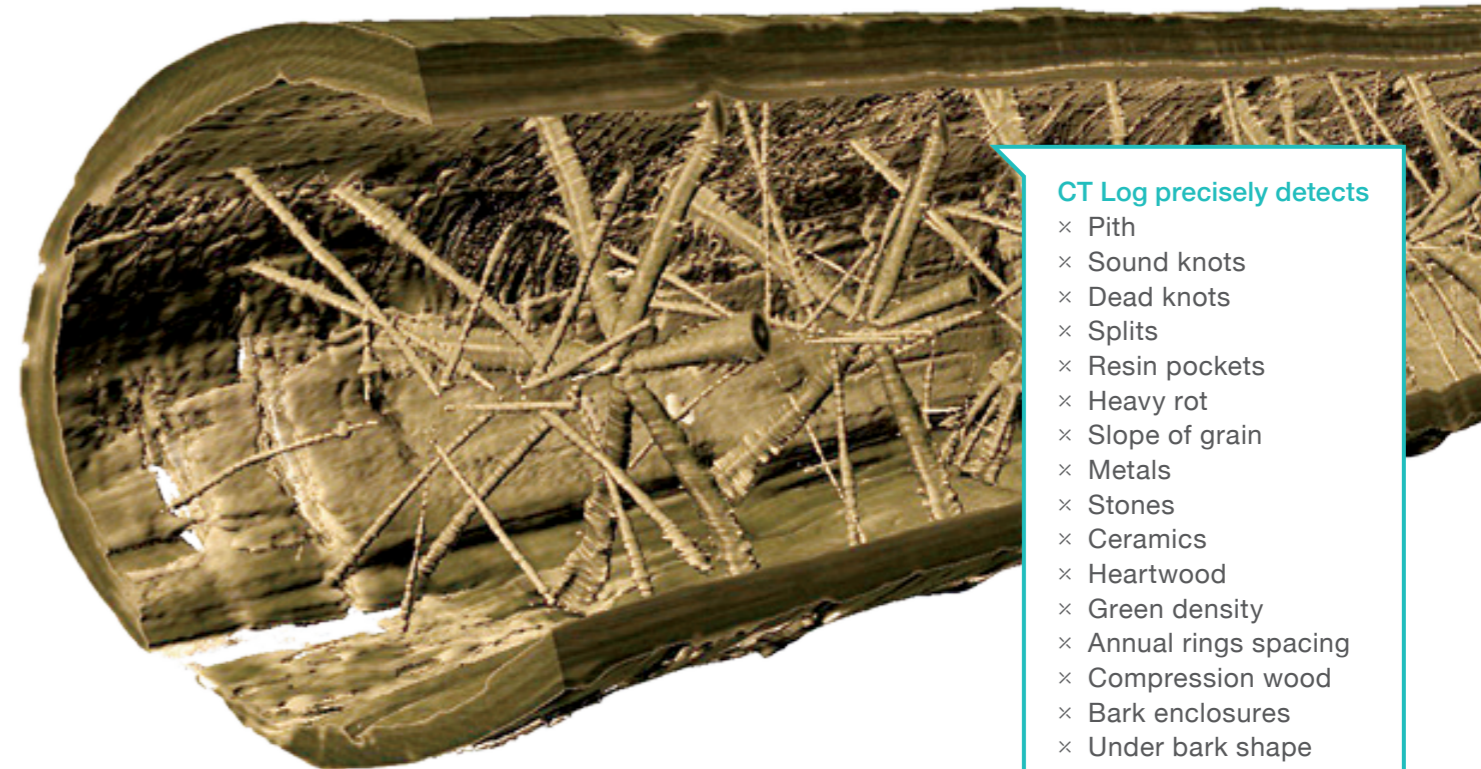
Dott. Ing. Federico Giudiceandrea  
Microtec CEO

### CT Log optimized sawing

- × 100% optimum cutting solution based on 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

### Breakdown, bucking & sorting

CT Log 360° X-ray 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.



### CT Log precisely detects

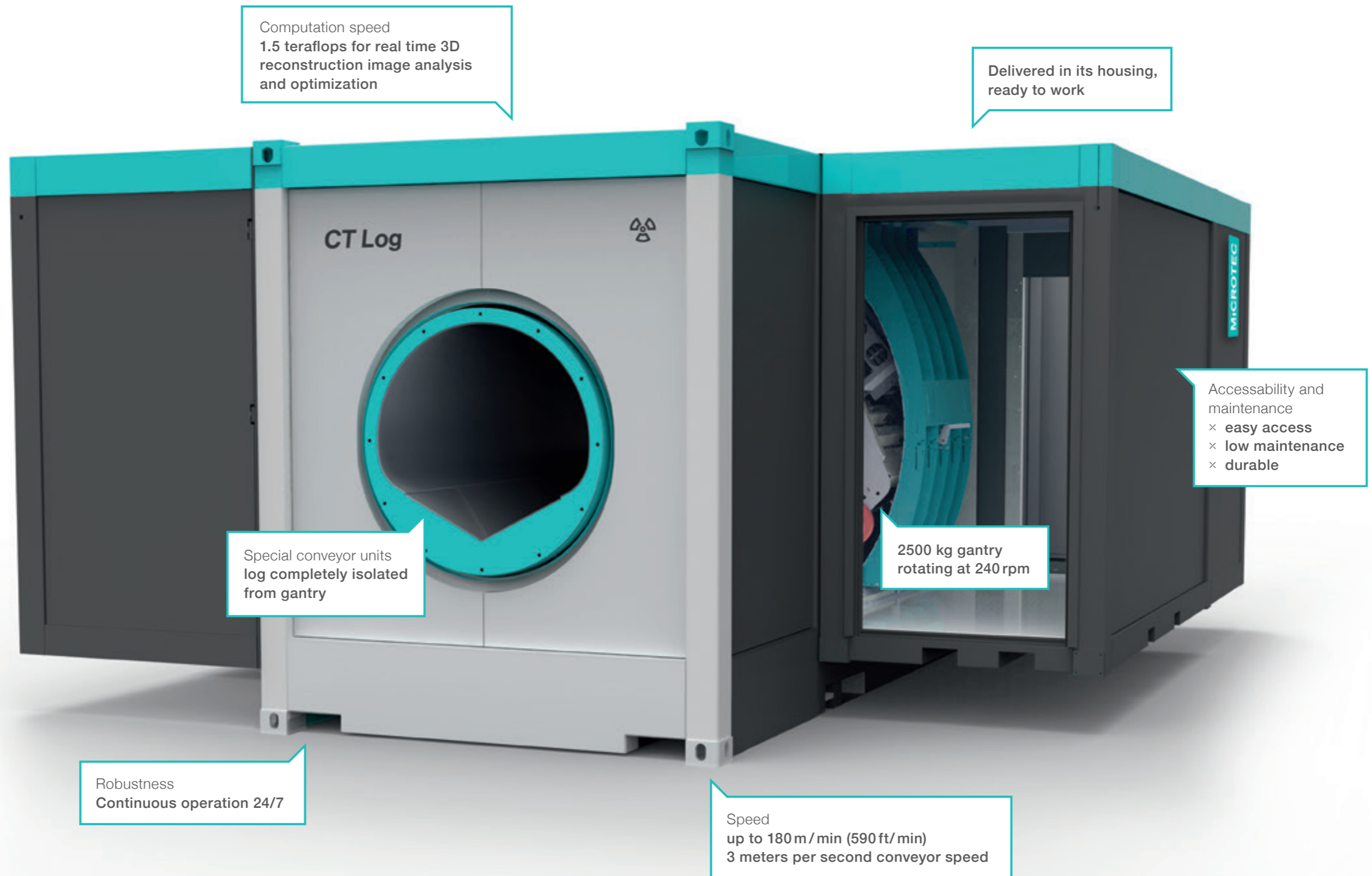
- × Pith
- × Sound knots
- × Dead knots
- × Splits
- × Resin pockets
- × Heavy rot
- × Slope of grain
- × Metals
- × Stones
- × Ceramics
- × Heartwood
- × Green density
- × Annual rings spacing
- × Compression wood
- × Bark enclosures
- × Under bark shape
- × Wood species recognition



### CT Log 360° X-ray CT-Sawing Optimization features

Conveyor speed	up to 180 m/min (590 ft/min)
Field of view	up to 800 mm (32 in)
Length of log	up to 25 m (82 ft)
Full 3D log description	✓
Quality grading	✓
Strength grading (optional)	✓
Virtual sawing	✓

# Groundbreaking innovation & engineering



Computation speed  
1.5 teraflops for real time 3D  
reconstruction image analysis  
and optimization

Delivered in its housing,  
ready to work

X-ray shielded  
housing

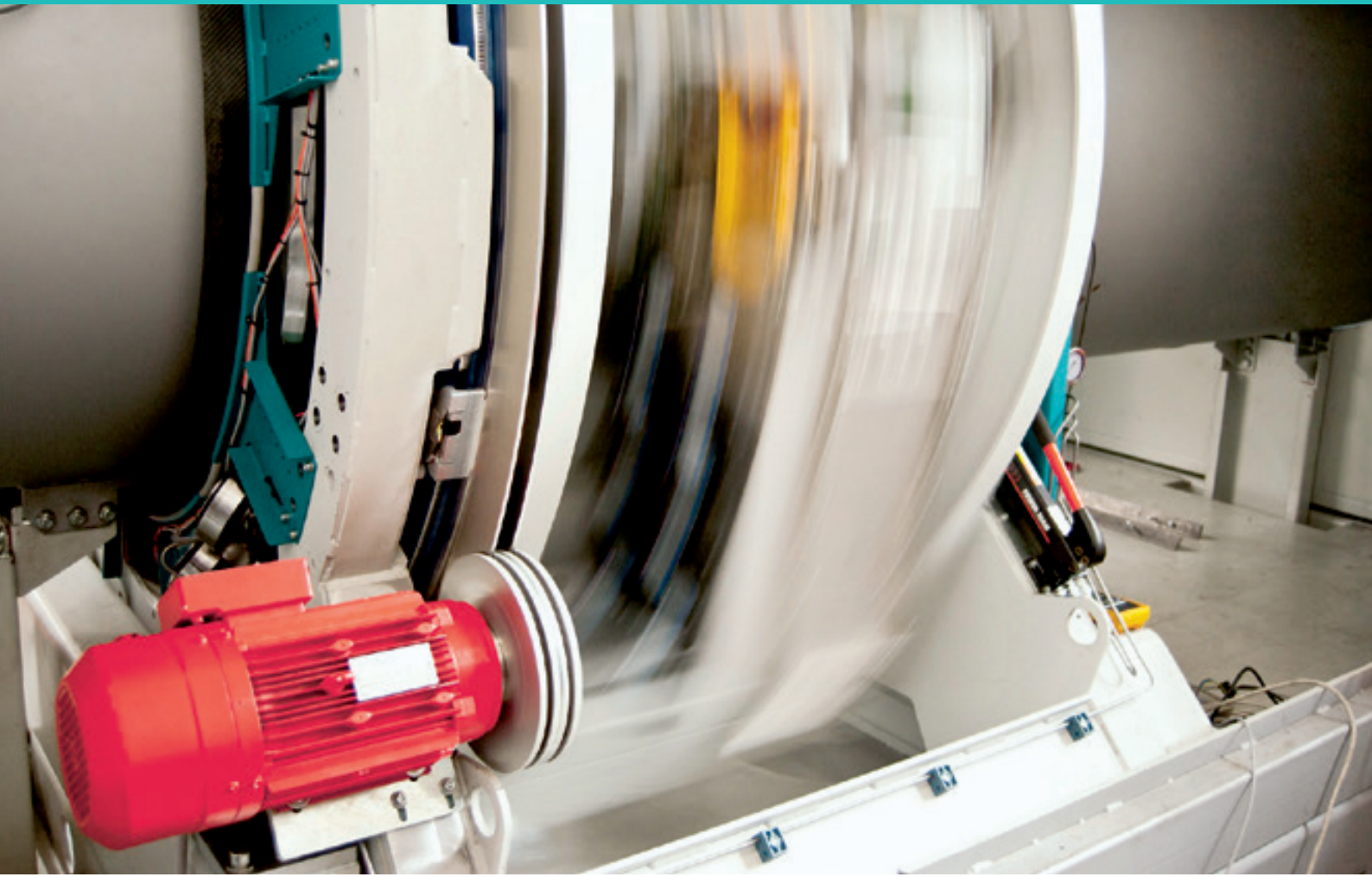
Special conveyor units  
log completely isolated  
from gantry

Accessibility and  
maintenance  
× easy access  
× low maintenance  
× durable

2500 kg gantry  
rotating at 240 rpm

Robustness  
Continuous operation 24/7

Speed  
up to 180m / min (590 ft / min)  
3 meters per second conveyor speed



# World leading wood scanning solutions

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