AUTOMATIC LOG SCALING AND LOG PROCESSING TECHNOLOGY
CONTENT:

1. COMPANY OVERVIEW
2. CURRENT STATUS OF AUTOMATIC SCALING IN CANADA
3. BENEFITS OF AUTOMATIC SCALING
4. SCANNERS
5. CONCEPT: STANDALONE SCALING STATION
S P R I N G E R - M I C R O T E C C O M P A N Y O V E R V I E W

• FAMILY ENTERPRISE
• FOUNDED IN 1952
• MORE THAN 450 EMPLOYEES
• BIG FOCUS ON INNOVATION (15% OF TURNOVER IN R&D)
• SUPPLIER OF ALL COMPONENTS IN SAWMILLS, PLANERMILLS, SECONDARY MANUFACTURING
• ONE OF THE LARGEST WORLDWIDE SUPPLIERS OF TURNKEY LOG SORTING YARDS

5 OFFICES WORLDWIDE
OVER 1500 ACTIVE CUSTOMERS
OVER 80 R&D PARTNERS
Scaling in Canada

- **Federal Government**: Measurement Canada is accepting applications from manufacturers to test and approve 3D log scanners for measurement for trade.

- **Provincial (BC)**: The ministry is accepting applications from licensees to operate a log scanner for scaling as a pilot project.

- **Springer-Microtec**: It is our goal as a company to leverage our experience in automatic scaling and log processing to have our scanner approved and in use in Canada as soon as possible.
Benefits/Payback of Scanner Based Log Scaling

- **Increased Accuracy (Volume, Species, Grade)**
- **Traceability / Auditability (Better Process Control)**
- **Improved Working Conditions for Scalers**
- **More Efficient Use of Scalers**
- **Reduction in Machinery (Loader operation)**
THE HEART OF THE LOG SCALING SYSTEM:

SCANNING

LOGEYE  OR  CT. LOG

SEMI-AUTOMATIC  FULLY AUTOMATIC
**LOGEYE**

**MULTI-SENSOR QUALITY SCANNER FOR THE LOG & MERCHANDIZING YARD**

**Features:**

- **Multi-Sensor 3D scanning for true shape, density, color and quality analysis**
- **Automatic scaling & operation control for the log yard**
- **First strength grading solution for logs**
- **High speed X-ray scanning**

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• **3D**: DiSHAPE

• Colour: SCREENLOG

• Strength: ViSCAN

• X-ray: TOMOLOG

**DiSHAPE**

**Automatic Volume Measurement**

- 4 Heads
- Dual Triangulation
- Synchronized Scanning
LOGEYE

• 3D: DiSHAPE
• Colour: SCREENLOG
• Strength: ViSCAN
• X-ray: TOMOLOG

SCDENLOG

CALIBRATED COLOUR MEASUREMENT SYSTEM FOR MANUAL SCALING
- AUDITABLE AND TRACEABLE
- ALL MEASUREMENTS AND IMAGES RECORDED IN DATABASE
- AUTOMATIC BARK DETECTION
SCREENLOG

Calibrated Colour Measurement System for
Manual Scaling

Auditale, Traceable Scaling
Auditable, Traceable Scaling
**LOGEYE**

- 3D: DiSHAPE
- Colour: SCREENLOG
- Strength: ViSCAN
- X-ray: TOMOLOG

**ViSCAN**

**ANALYSIS OF VIBRATION INDUCED BY ACOUSTIC WAVES**

- MOE (Modulus of Elasticity) measurement
LOGEYE

- 3D: DiSHAPE
- Colour: SCREENLOG
- Strength: ViSCAN
- X-ray: TOMOLOG

TOMOLOG

High Speed X-ray
- Moisture Content
- Heavy Rot / Voids
- Knot Cluster Size
- Under Bark Shape
**LOGEYE**

**Multi-Sensor Quality Scanner**
For the log & merchandizing yard

**Features:**
- Multi-Sensor 3D scanning for true shape, density, color and quality analysis
- Automatic scaling & operation control for the log yard
- First strength grading solution for logs
- High speed X-ray scanning

DiSHAPE  
SCREENLOG  
ViSCAN  
TOMOLOG

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Innovative wood processing solutions
Fully automatic scaling:
High-performance Computer Tomography  

CT.LOG
CT.Log Defects

- Pith
- Sound Knots
- Dead Knots
- Splits
- Resin Pockets
- Specie recognition
- Metals / Stone / Ceramics
- Heavy rot
- Slope of grain
- Heartwood
- Under bark shape
- Green density
- Annual ring spacing
- Compression wood
- Bark enclosures
CT.Log Defects

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WHERE TO PUT THE SCANNER:

INLINE IN SAWMILL?

STANDALONE SCALING STATION?

CAN A STANDALONE SCALING STATION OFFER MORE THAN JUST SCALING? (I.E. MERCHANDISING/SORTING)
STANDALONE LOG SCALING SYSTEM:

LOG PROCESSING
LOG PROCESSING SAMPLE
STANDALONE
SCALING / LOG PROCESSING STATION

VERSION A: BASIC
STANDALONE
SCALING / LOG PROCESSING
STATION

VERSION B: OPTIMIZING, BUCKING & SORTING
MAXiCUT

OPTIMIZATION

• BUCKING
• SORTING
• PRIMARY & SECONDARY BREAKDOWN
• CURVE & STRAIGHT SAWING
BUCKING

SECTION C-C

310 330 1460 1480 1490

slasher

container

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SORTING

SECTION D-D

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THANK YOU FOR YOUR ATTENTION

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