MULTISENSOR SCANNING TECHNOLOGIES for LOG MERCHANDISING YARDS

by MiCROTEC
Italy
MiCROTEC FACTS:

Founded: 1980

Locations:
- Brixen (Bolzano) ITALY
- Linz AUSTRIA
- Mestre (Venezia) ITALY

Turnover: 24.0M€

Employees: 120

Headquarter in Brixen (Bozen) ITALY
Core Business:

Scanner Systems and Automation Solutions for the global woodworking industry.

Accompanying Activities:

Basic research in cooperation with specific universities and institutions.

Research and development of new technologies and software applications.

Conversion of research results into industrial products and system solutions.
Basic system outline for Log Merchandising Yards:

IR-scanner system, 2/4 fold parallel

IR-scanner system, 2 fold 90°crosswise

Laserscanner system, 4 fold, true shape

Image scanner system, full 360° LED/SMD image

Resonance frequency measurement system

X-ray scanner system

Quality scanner system, full 360° auto grading
iRED

IR-scanner system, 2/4 fold parallel
500 linear scans/sec
Resolution <2mm
iRAS

IR-scanner system, 2 fold 90° crosswise
500 linear scans/sec
Resolution <2mm
Certified, authorized and sealed
**DiSHAPE**

Laser Scanner System, 4/6 fold  
500 full true shape scans/sec  
System trigger >2kHz  
Resolution <1mm  
Certified, authorized and sealed
DiSCAN

The Ultimative Scanner Head
DiSHAPE
Easy integration in every machinery
DiSCAN based modular system
Interface to
iRAS and DiSHAPE
Dual HD color cams
Calibrated real images

Real time data processing
Fully automatically carriage control
Cutting pattern optimizer
Off line evaluation and works preparation
Easy integration into existing systems
SCREENLOG

Full 360° log image in HD-resolution (0,25mm)
   Photorealistic appearance
      Allows raw material segregation
   Digital data image and log data record
      Easy installation in existing plant

Reinforced image processing combined with DiSHAPE
ViSCAN for logs

Non destructive resonance frequency measurement system
Laser based interferometer measurement
Not influenced by any ambient noise
**TOMOLOG**

X-ray based log quality scanner

- Diameter up to 500mm
- Branch size + -5mm
- Internode length + -10mm
- Wood density + -1kg/m³
- Scanning speed < 200m/minute
Application summary

Log and merchandising yards
Internal log description and segregation
  Sawmills
  Scanning of logs and pruned cants
    Plymills
    Automated peeling of pruned logs
LOGEYE  The functional integration into one multisensor log scanner system

DiSHAPE

SCREENLOG

ViSCAN

TOMOLOG
LOGEYE

Is the functional integration into one multi sensor log scanner system

...keep us again no. 1 innovating the wood!
CT. LOG

Is the first rotating full CT system for log scanning

...keep us again no. 1 innovating the wood!
CT.LOG
Provides HD full 3D log scanning

...keep us again no. 1 innovating the wood!
Thank you!