

Milestones of Innovation



World leading wood scanning solutions

As the worldwide partner for the global wood industry, Microtec's team members constantly create new approaches and solutions to boost value in wood processing. Microtec has been setting standards in the market since 1980.

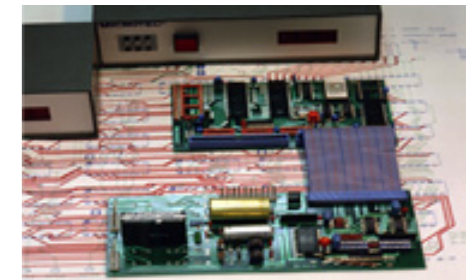
Microtec's Milestones of Innovation

1980



Microtec was founded on March 20th 1980 by Paul Durst, Hansjörg Thaler and Federico Giudiceandrea

1981



Introduction of the Intel 8080 microprocessor for numeric process control

First introduction of a personal computer (Apple II) for numeric process control

1982

Development and introduction of multiplex infrared technology to create fine definition light grids

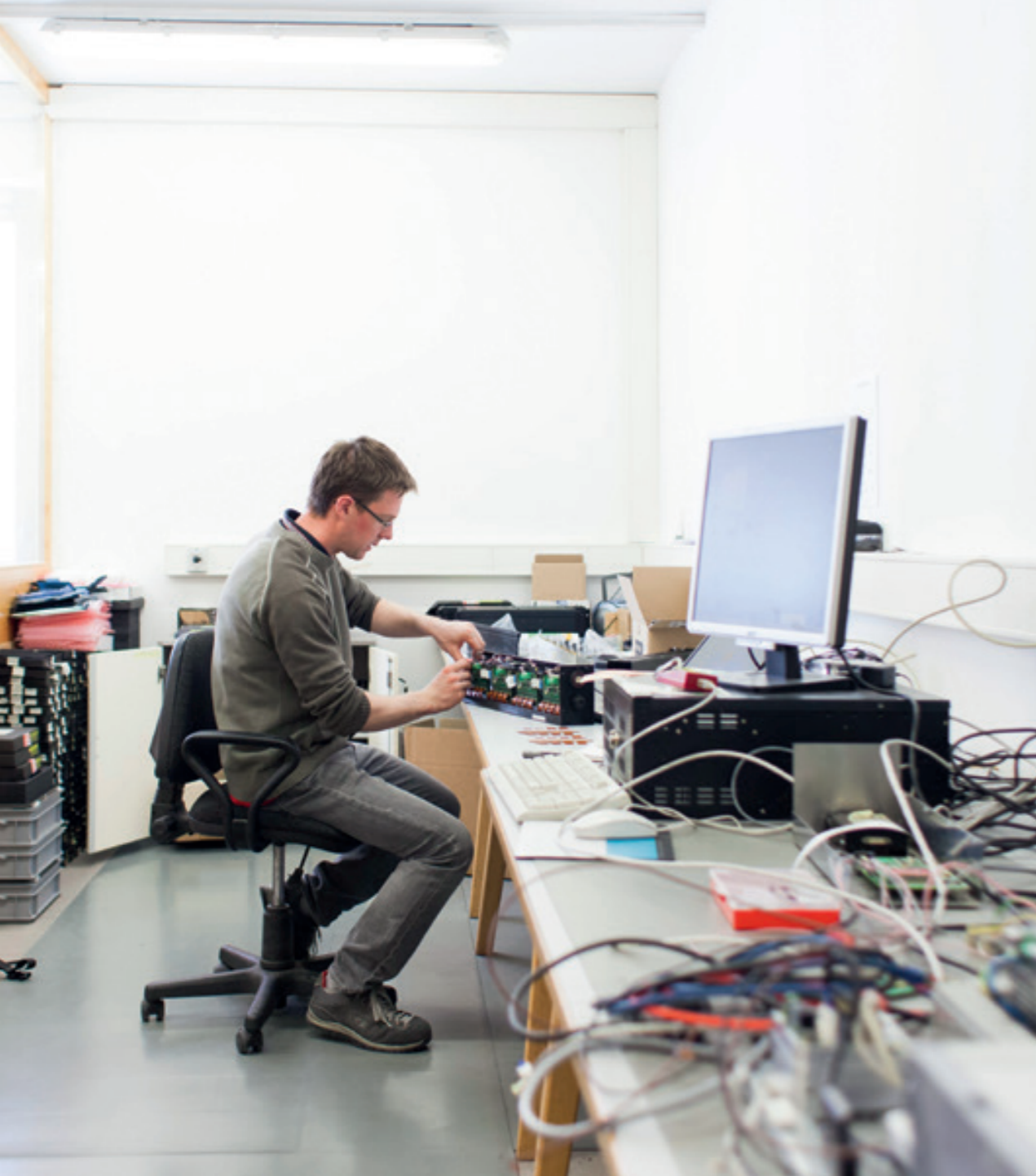
1983



Integration of all control components such as micro-processors, ROMs and monitor and keyboard drives on a single electronic video interface controller



Research



Over a fifth of Microtec's team is involved in research and development activities spreading from chip and sensor design to software and application development. Improving grading and sorting by implementing new technologies and innovative approaches is a continuous process that penetrates all aspects of the company. With more than 20 highly qualified and motivated optoelectronic and software engineers, Microtec is constantly researching and developing new solutions and systems.

«All that we do is driven by the passion of introducing new technologies and innovations to sawmills creating true partnerships with our customers.»

1984



Analogical Oscilloscope

1985

Introduction of the world's first laser light cutting technique for 3D reconstruction of the wood's surface

1986



First sorting automation

1989

Introduction of the graphic user interface and the mouse (Atari)

1990

1990
Development of real-time software driver units for plant control

1992

Completion of a Video DSP image-processing computer based on the parallel calculation process using computer networks

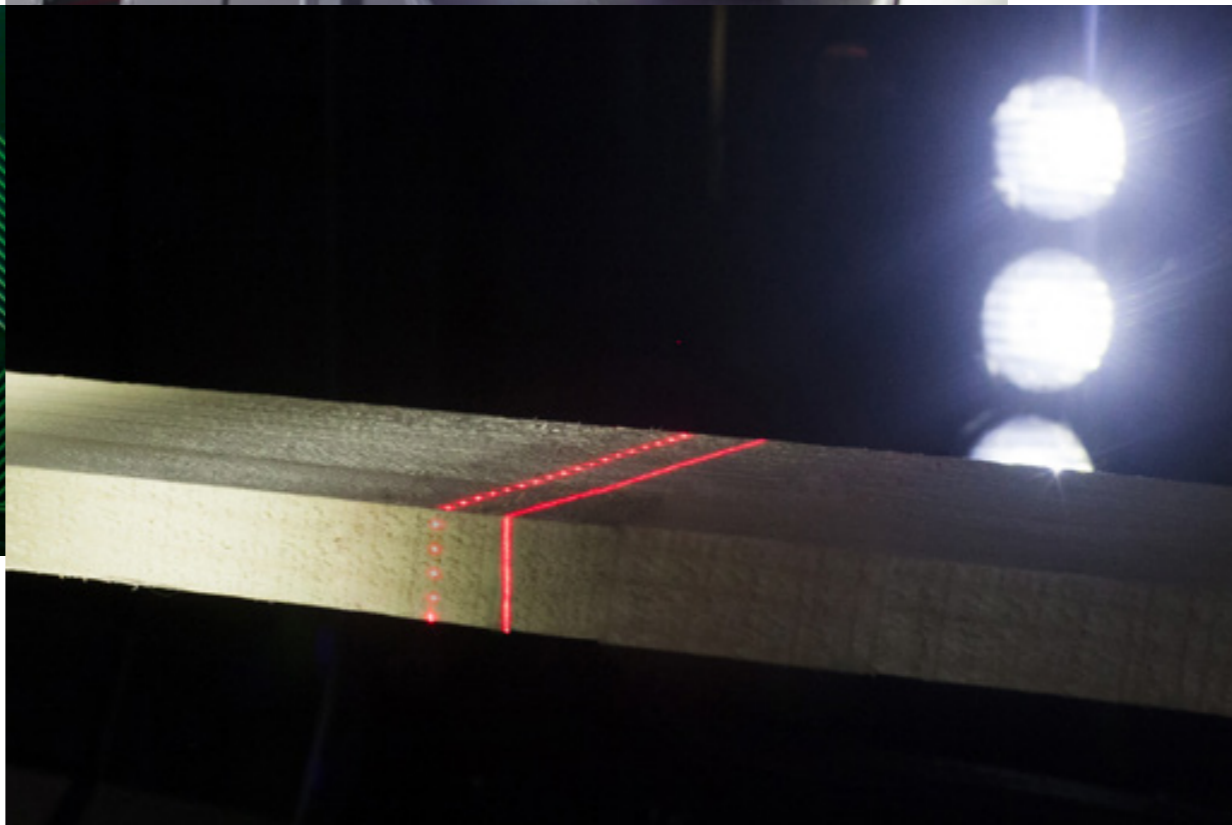
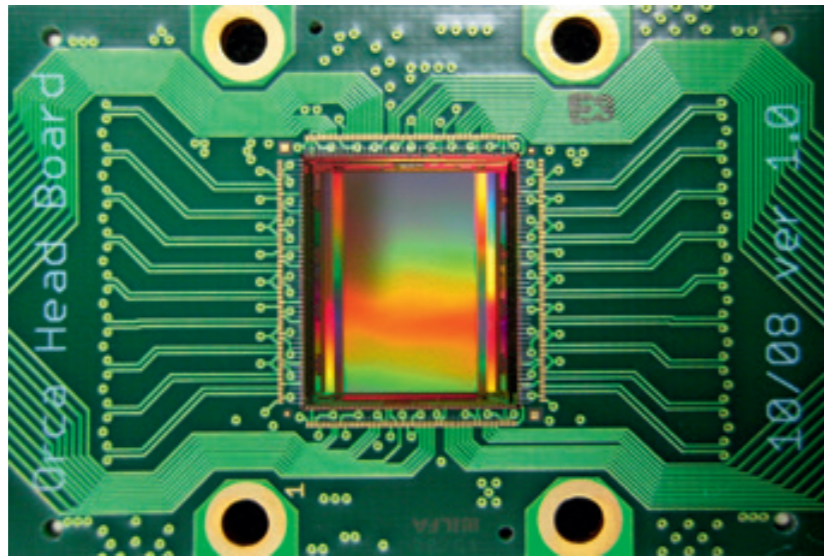
1994

Development of the first scanner for detection of defects on the wood surface



Innovation

The impressive innovative power of our company is driven by the true passion of our engineering team. Microtec can look back at an impressive portfolio of patents and certifications, with new ones continually being added. As a worldwide leader in scanning technology and optimization solutions for the global wood processing industry, Microtec is always a step ahead in providing innovative, accurate and high performance solutions.



1995



Introduction of X-ray technology to support the image process in recognizing knots (Goldeneye)

1996

Development of a high speed image recording system, SHAPE, with up to 400 images per second, installed in conjunction with laser light triangulation technique for measuring the full profile of logs in a high performance sorting system

1997

Development and introduction of the laser scattering effect (tracheid effect) to recognize wood defects by using the characteristics of the wood's fiber direction

1999

Introduction of the first contactless board strength sorting system (Goldeneye 80/1), combining X-ray technology with neural networks

2000

2001
First tests with X-ray computer tomography and development of a radioscopy scanner to recognize the inner features of logs using multiple X-ray projections

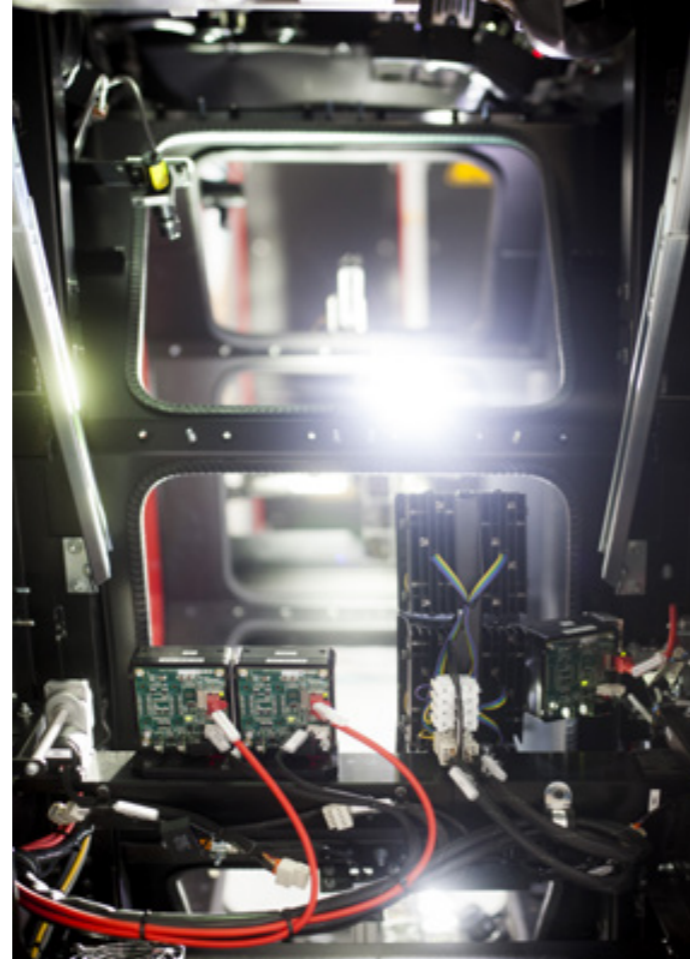
2004

Introduction of the 3D Scanner Discan, which combines laser triangulation, differential shadow-scanning and laser scattering



Service

Microtec is renowned for timely and accurate project implementations. Our team is upfront and onsite to introduce and fine-tune new installations, while providing expert training to the operators. Microtec demands the best from its team and provides ongoing and in-the-field training. What stands out is the common dedication to continuously improve and enhance customer service around the globe. Strong customer relationships mean building genuine and strategic partnerships based on mutual respect, trust and long term cooperation.



«Microtec is on-site until the production line runs smoothly»

2004

Development of Qscan, using pre-calibrated measurement modules in the first quality scanner using the laser scattering process in transverse feeding

2005

Presentation of ID Scan to track lumber at any point of the production line, thanks to its optical fingerprint.

2007

Logeye, presentation of the worldwide new Multi-Sensor Quality Scanner system for logs



The new Goldeneye Multi-Sensor Quality Scanner series



The most accurate scanning results achievable, combined with award winning design and functionality.



2008



At the research and testing institute for forestry FVA in Freiburg, Germany CT Log is officially presented

2009



Red Dot Design Award honorable mention

Goldeneye 500, a compact and high technology quality scanner developed to satisfy requests of producers of wood components

Goldeneye 900 high performance Multi-Sensor Transverse Quality Scanner developed

Crometic: Development of a high performance CMOS Sensor (Generation 1)



CT 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 for logs



2010

2011

Presentation of the first industrial gantry of the computer tomograph, CT Log

Control of the application of glue and finger joints in transverse transport

Incline, a modular marking system to print chop positions, quality marks and for lumber tracking

2012

The Goldeneye 600 series is born and placed on the market as an innovative Multi-Sensor Quality Scanner for rip optimization

2013



Digital Crometic sensors featuring Full HD images at ultra-high speed

New low power X-ray technology for efficient and safe operations

Software and applications are built specifically for 64 bit architecture for faster image processing and optimization results

2014

Goldeneye 800 for high-speed applications up to 1200 m/min

2015

Goldeneye 600 wood panels defect repair solution developed

New generation Maxicut Best Cut View and Interopt Bucking Optimization software based on advanced CT Log defect recognition

Microtec Now

Microtec was founded and still has its head office in Brixen in South Tyrol, Italy, a region where working with wood is a long-standing tradition. Over the years, Microtec has set several technological milestones and has undergone steady growth. Quite simply, there is no aspect of wood processing that cannot be rationalized, sped-up and improved with Microtec systems. The exclusive focus and specialization on the processing of wood has allowed Microtec to achieve continuous product improvements and to develop new and exceptional solutions for customers.

Our vision

We enhance quality and value of the finest natural building material on earth wood by refining, automating and optimizing all phases of wood processing based on non-destructive wood quality analysis and grading.

Our commitment

To treat wood as a valuable, sustainable resource and ensure the best possible application and destination.

Our values

Wood is an organic and sustainable resource that is characterized by its biological diversity. In a world that is defined by exponentially increasing demand and increasingly limited resources, Microtec's goal is to offer the most innovative and technically advanced solutions, which enable our customers to produce quality products at competitive prices.



Dott. Ing. Federico Giudiceandrea
Microtec CEO

«Today Microtec is the technology leader in the field of optoelectronics for the wood processing industry. With a workforce of over 130, and more than 20 engineers employed in research and development, Microtec delivers solutions worldwide.»

World leading wood scanning solutions

Microtec has provided personalized solutions for customers since 35 years. As the consolidated global leader in optoelectronic wood grading applications, we specialize in Multi-Sensor Quality Scanning technologies that include proprietary cameras, lasers and X-ray sensors to optimize, automate and streamline all kind of production processes. Innovation is our passion.

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