

Laserpoint

Wood processing with laser

Flexible, accurate, high-quality cutting kerf

eurolaser customers

Three successful woodworkers

Company & News

eurolaser's office in Southern Germany

2.-6. Mai 2005

LIGNA+

HANNOVER · GERMANY
Weltmesse für die Forst- und Holzwirtschaft
World Fair for the Forestry and Wood Industries

We welcome you on LIGNA 2005.
You will find us in **Halle 020, Stand C34.**

Editorial

Successful customers are our calling card!

The latest edition of our Laser point is devoted to a single topic: Laser technology for wood processing. A market sector where laser technology or rather laser cutting is often met with reservations. Many of our customers have recognised in these reservations an opportunity for themselves. They have systematically made use of the benefits of laser technology to break new ground in the market. Their investment in the future has paid off, bringing growth and job security. We are pleased to be able to present a few of these success stories. Have fun reading them.

Best regards

Laser technology for wood processing

The benefits of laser technology open up new markets for high-quality wood products!

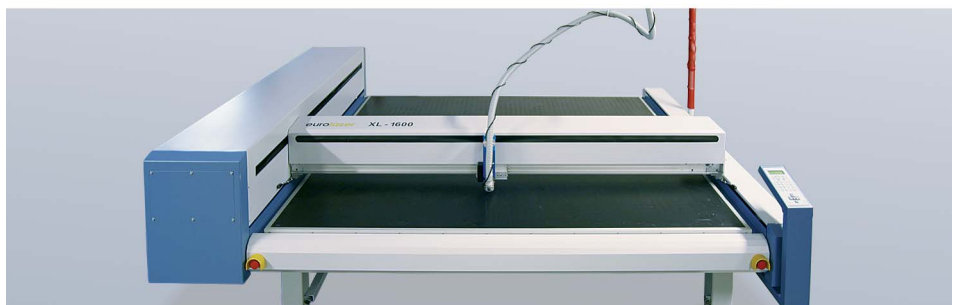
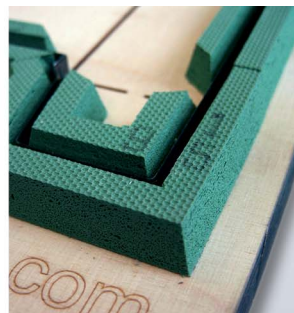
Laser technology is being used far more frequently for the cutting of veneer and wood materials such as multiplex, MDF or natural wood. Flexibility in conjunction with a high degree of accuracy and the quality of the cutting kerf all add up to make the use of this tool particularly interesting for wood machining. The focussed beam of a modern CO₂ Laser cuts the material quickly and accurately and requires no contact or clamping. There is no tool wear and the laser is more or less mai-

ntenance free. Any cutting contours you may desire can be realised in the two-dimensional level.

Come and see for yourself at the Ligna! You will find us in:

**Hall 020,
Stand C34**

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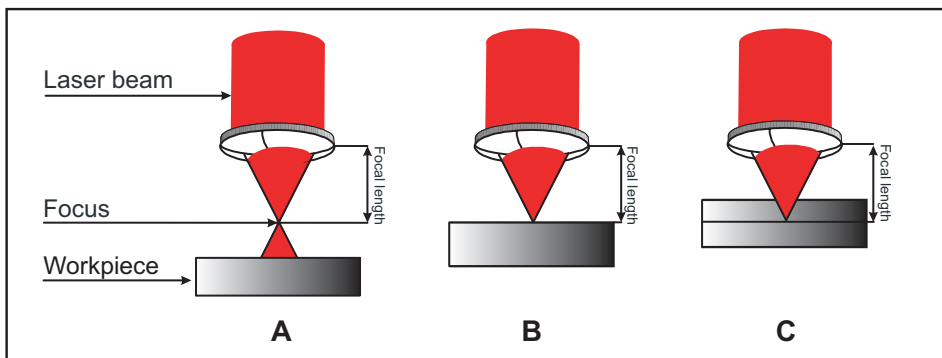


Rules for optimised results with lasercutting!

Potential users are often put off using laser because they are worried about the occurrence of blackened cut edges or smells that might cling to the product. These reservations cannot be completely disproved. The laser cutting process entails cut edges that are brown in appearance. This, however, depends on the

on, focal length and the gas used. The focus position is defined as the position of the focussed laser beam in relation to the workpiece. Depending on the material and its density this should either be positioned directly on the surface of the workpiece (B), above it (A) or in the workpiece (C). Short focal lengths of the (con-

on of laser cutting include veneers for furniture and fittings, wood for craftwork and toys and multiplex for the construction of cutting dies. The users listed below are successful customers of eurolaser GmbH, Seevetal, for whom laser technology has opened up new markets.



consistency of the wood, primarily on its density and hardness. There is hardly any discolouring in the case of soft veneer or balsa wood. Wood with a high density and hard wood both reveal an almost black edge. The glue used for MDF or plywood is also an important factor. High-quality wood is often sold by suppliers as special laser-grade wood, in such cases where the wood has few or no knots and light glues have been used.

Optimised cutting process

Not only the choice of wood effects the cut edge and lingering smells, these can be also be improved by choosing the correct process parameters e.g. focus position,

lens are more suited to thin materials and long focal lengths for thick workpieces. Once the laser system has been adjusted to the specific application, the optimal process parameters can be accessed quickly and easily at any given time. If the optimised cutting process is additionally supplemented with gas (e.g. compressed air), this pressurised gas ensures that the hot carbonised particles are blown out of the kerf and, in conjunction with an exhaust system, effectively captures all emissions. An improvement in both the quality of the product as well as that of the work place can be achieved in this way.

Typical market segments for the applicati-

A laser system - pros and cons

Whether a laser system is the correct solution for a company or not, depends primarily on the required applications. If flexibility in conjunction with accuracy and high quality kerfs are the main criteria, then the choice of laser should always be taken into consideration. Sample cuts can be taken to compare production times and quality. eurolaser systems can be configured individually according to user requirements with respect to variable table sizes, laser power and options.

Ask our sales for further information:

Tel: 04105 - 155-500

E-Mail: sales@eurolaser.com

Successful eurolaser customers

eurolaser customers open up new markets!

Veneer processing at HGM-Türwerken

HGM-Türenwerke produces exclusive interior doors for those who want to live surrounded by wood characterised by modern design. Discreet optical features and selected veneers are the basis for the sophistication and craftsmanship that lie behind the processing of these doors.

Their latest collection "The Art of Veneer" includes such veneer materials as beech, maple and oak that are applied to the doors in criss-cross patterns. This process places high demands on the quality of the veneer cutting and is the reason that HGM has put its faith in laser technology for two years now.

Laser technology facilitates the production of individual and theme-specific moti-

ves as well as the manufacture of all well-known customised products in any heights, widths or depths. The 0.1-0.3mm kerf in laser cutting is relatively small and, in contrast to a blade, does not squash the veneer during cutting. No-contact processing means that the cut edges remain absolutely vertical during machining so that a clean joint with a closed surface is achieved.



HGM door designed in accordance with "Feng Shui" requirements

Mr Hemkentokrax (Head of Veneer, Purchasing and Production):

"We decided on laser technology for our veneer cutting system because it impressed us with such features as accurate and speedy cutting, no wear and tear which means no tool replacement is needed, repeatability accuracy, cleanliness and the large variety of cutting thicknesses with different types of wood. We use the eurolaser system for the processing of veneers, panelling and laminates for doors and furniture. We are breaking new ground in veneer processing with this system."

Wood processing at Artograv GmbH

Artograv GmbH was founded as an establishment for material processing using laser technology in the year 2001. Today the enterprise already has 30 employees and offers its customers an integrated service encompassing wood and plastic processing that includes lettering and a well-equipped laser metal-processing workshop.

The fact that artograv GmbH in Kirchheim has extended its machine park during the course of its expansion so that it now includes two milling machines, two bending machines and diverse shape cutting chipping machines shows that the owner Mr Stecher is well aware of the advantages that laser has to offer in wood processing: "In contrast to conventional technologies, no-contact cutting

means that trouble-free processing of the finest filigree cuts and very thin materials can be achieved with the highest degree of precision. There are no rough cut edges in contrast to milling and chipping is a thing of the past with laser cutting. There is no wear and tear on the tools, noise is much lower than with milling machines and the working environment is cleaner and chip free. The machines are compact and space-saving and there are no worries as far as purchase costs are concerned because one eurolaser machine can achieve more or less the same output per shift as three comparable CNC-milling machines. In as far as precision, fineness and finishing are concerned, many tasks typical for the industry can no longer be mastered without laser technology."

Gunter T. Stecher (Owner, Artograv GmbH):

"The success our enterprise has enjoyed would not have been possible without our eurolaser machines, because we have built our activities around the core competence of laser cutting of plastics and wood. In our company all 3 machines are in operation continuously in a 3-shift system that runs almost all year round. The reliability of the system and the quick response of the manufacturer's service team are of vital importance to us here.."

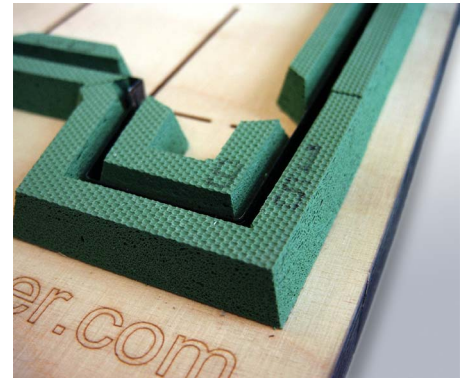


Laser cut craftwork from Artograv GmbH

Steel rule dies in multiplex at Rogalewicz GmbH

15-18mm multiplex steel rule dies for the production of cutting dies have been manufactured successfully with laser technology. Rogalewicz GmbH in Heu-

senstamm has been manufacturing them for over 30 years. The medium-sized enterprise with 8 employees has relied completely on laser technology for the last 6 years. This is the only way to



Steel rule die made of multiplex - cut by laser

achieve the company's competitive edge: speed and highest quality. Customer data can be transferred in a variety of formats and are processed flexibly so that on average 14 working hours is all it takes from receipt of order to delivery of the tool.

Herr Gümblein (Manager, Rogalewicz GmbH):

"Our laser replaces the manual processing of our cutting stencils. Using laser enables us to reproduce our data with absolute precision. Our first laser from eurolaser went into operation 6 years ago in the field of cutting die manufacture and has been working to our full satisfaction ever since."

Being a small manufacturer of cutting dies, the company is particularly reliant on actual machine efficiency and this is where the eurolaser system offers the edge. In contrast to the standard method of manufacturing steel rule dies by cutting at the position where the laser beam has the desired cutting width (see diagram A), the eurolaser system cuts at the optimal laser power position. The required kerf of 2-6 points is achieved by means of a box cut (i.e. a rectangular cut in the appropriate thickness). The system thus manages the task with the same quality but a substantially reduced laser power, which means that investment costs are considerably lower and the operating efficiency of the machine is reached much earlier.

Service worldwide

The "Laser point Service" is our latest tool for the training of technicians worldwide

Our laser systems undergo continuous development. eurolaser works constantly on technical improvements in order to design systems that are even more efficient and/or easier to service.

In order to ensure that our service technicians are kept up to date with the newest developments worldwide, we are planning to bring out the first edition of our service newsletter shortly, the "Laser point Service". The aim of the newsletter is not to just tell you about new developments, but to extend this information with specific instructions or technical support for installation - from new lasers down to software updates.

In conjunction with the service training programmes that take place twice a year, the new "Laser point Service" will help to enhance the professional approach of our service worldwide.

Appointments

19.-22. April, Euro-Reklama in Poznan (P): eurolaser and Printy Poland R. Gardner and Company Sp. z o.o. will demonstrate the benefits of the M-1200 / 250 watt for the processing of acrylic. Come and visit us at our Polish neighbour's!

02.-06. May, Ligna in Hanover (D): The Ligna is the most important trade fair venue for the whole of the forestry and timber industries worldwide. We are exhibiting options for new solutions and products in the wood-processing sector.

31.-04. May/June, Fespa in Munich (D): The biggest global event for screen-printing, digital and industrial printing. Make sure you are there, when the fair opens its doors. We look forward to welcoming you!

07.-09. June, Techtexil in Frankfurt (D): The world market for technical textiles will be on show in Frankfurt under the motto "Focusing on Innovation". We will be demonstrating when you should use laser to cut these materials.

13.-16. June, Laser in Munich (D): A must for all those interested in laser technology. A rendezvous of all the leading suppliers in the market, who will face up to the challenge of rivals on the spot.

14.-16. September, Visual Communication in Paris (F): eurolaser will demonstrate the benefits of the laser system M-1200 / 250 watt in the processing of acrylic. Come and visit us at our French neighbour's!

19.-30. September, Service training at eurolaser (D): Good service is a key factor in our "Concept of Partnership". Attendance is obligatory for all dealers and partners every two years.

29.-01. September/October, Viscom in Düsseldorf (D): We will present the world's biggest raster engraving in acrylic. The design, which measures 3 x 2 m stands in the parliament of Lower Saxony .

Partner News

Matthias Reuter and Fethi Bornaz are the new eurolaser Competence Centre responsible for Southern Germany

Since the beginning of January Matthias Reuter and Fethi Bornaz have been assisting our customers in the Southern German region via their eurolaser's southern office. Austria and Switzerland also fall under their jurisdiction. For many years they have both been working in technical sales and consultation in the field of industrial laser processing. A long-standing relationship as former suppliers also links them to eurolaser.

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