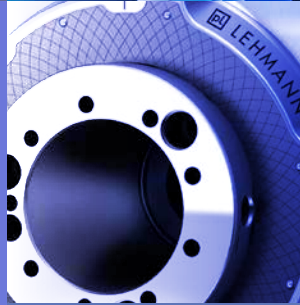
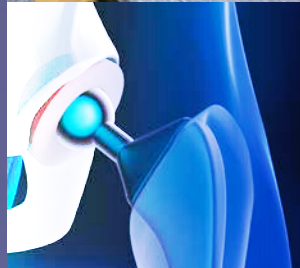


SDD

Rotate economically has a future.



pl

Industries

6/2018 | EN

 LEHMANN®

Swiss rotary table technology

Since 1974

pl LEHMANN is a medium-sized company and, for more than 40 years, has specialized in rotary tables – today, it is present in 25 countries (please see the back of this catalog).

The company is committed to typical Swiss values

- + Product quality
- + Advanced technology
- + Innovation and flexibility
- + Long-term, solid business policy

Other catalogs



Product and Facts



Main catalog



Service – Lifecycle

Since 1974 Swiss Rotary Table Technology

With innovative CNC rotary axes, organized in a standard modular system, we want to meet the international needs for economical production of very small to medium-sized workpieces in the machining industry by satisfying individual requirements with appropriate combinations.

We focus ourselves, our organization, resources and partnerships on this objective, immersed in a lean business system, where we avoid waste of any kind. In this way we make a significant contribution to protecting the environment and conserving valuable resources. Our goal is to take a stance in the manufacturing industry that is long-lasting, sustainable and innovative – unpretentious, reliable and down to earth based on the principle «What may be briefly of interest, but wrong in the long term, will be discarded»

pl LEHMANN CNC rotary tables – genuine SWISS QUALITY

Producing economically – we will support you.

Machine tools that are equipped with CNC rotary tables from pL LEHMANN offer ideal opportunities for machining a variety of different workpieces such as those needed in der automotive, aircraft and watch industries, medical device and dental fields and even in the machinery and tool and die sectors.

These pL LEHMANN rotary table are CNC-controlled rotary axes that are usually mounted on machining centers, grinding, EDM, measuring, engraving and laser machines. Using so-called «on top rotary tables», it is possible to upgrade lower-cost standard machine tools to high-performance productions systems. At the same time, the user is able to respond to changes quickly and cost-effectively by easily converting the production system to meet new requirements. Truly lean production.

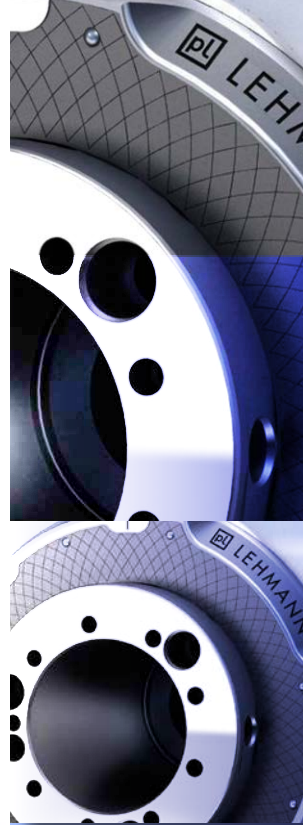


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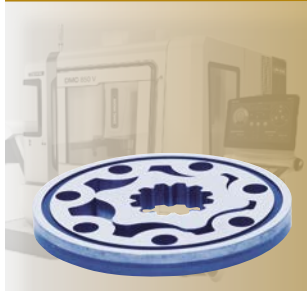
**Watches/
Micro Technology**

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**Aerospace/
Turbines**

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Mechanics

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**Product &
Service**

Automobiles



Trucks



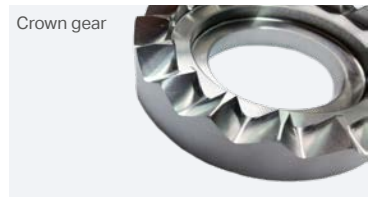
Automotive

Automotive

Automobiles and trucks, building and agricultural machinery

- Gear unit
- Steering
- Braking system
- Motor
- Chassis
- Injection system

Excerpt from typical CNC machines



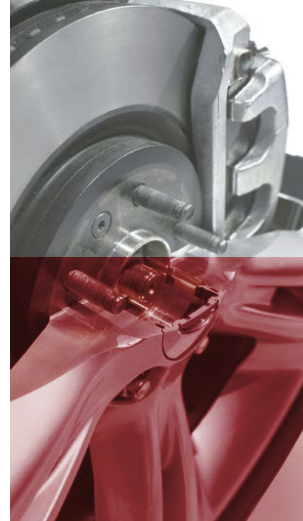
Production requirements

Series and mass production

Unit costs, processing time and availability are the greatest challenges. Long-term accuracy and 24-hour operation. Idle time must be kept to a minimum; if necessary, through exchange of complete units.

Ever-shorter delivery times require standard components (machine, rotary table, clamping means, automation...) that can be combined for a specific need by an application technician. In this way, service also becomes simpler and faster.

Many applications are in demanding use internationally every day on various machines with CNC rotary tables from pL LEHMANN.



Automotive

5

Solutions with pL LEHMANN



EA-510 on Brother



T1-507510 on DMG Milltap



EA-510 on Brother



T3-510520 on Brother



T1-507510 on Brother



T1-520520 on Toyota

Suitable workpiece clampings



Fixture on special machine –
Source: EROWA



Rotary table, PowerChuck and center
clamp – Source: EROWA



Parts of Injection pumps on rotoFIX –
Source: pL LEHMANN



Unknown parts on multiple clamping
device – Source: pL LEHMANN



Unknown parts on special device –
Source: pL LEHMANN



Unknown parts on special device –
Source: pL LEHMANN

Joint and plate

Dental implant



Medical/Dental

Medical/Dental

Implants for humans/ animals, surgery instruments

- Nails/screws
- Plates
- Joints (hip, knee)
- Dental implants
- Instrument parts

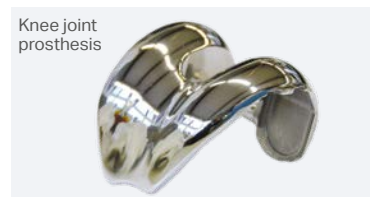
Excerpt from typical CNC machines



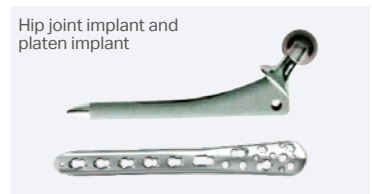
Vertebral implant



Dental implants



Knee joint prosthesis



Hip joint implant and platen implant

Production requirements

Efficiency and process reliability

Although many 5-axis machining centers were used in the medical device sector years ago, this approach has come under review in many plants starting a while ago: instead of bulky 5-axis machines, up to 3 small, compact 3-axis vertical machining centers are in production today in the same space, most equipped with 4th or 4th/5th axis from pL LEHMANN.

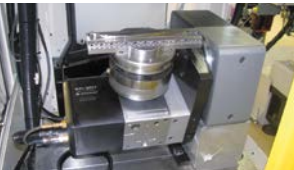
In this way, it was possible to reduce not only the direct, but above all the indirect investment costs significantly: a major increase in production capacity without having to expand production buildings.



Medical/Dental

7

Solutions with pL LEHMANN



TF-507510 varioX on Fanuc Robodrill



TF-507510 vario on Hasegawa



TF-507510 vario spez on Almac



T1-510520 varioX OLL on Fanuc Robodrill



EA-507 on Hasegawa



TF-507510 vario on Kitamura

Suitable workpiece clampings



Source: RÖHM



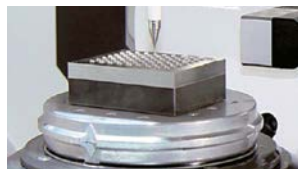
Platen implant, machined from block
– Source: EROWA



Source: SCHUNK GmbH & Co. KG



Knee implants on Magnum Chuck
–Source: System 3R



Optical lens shape on GPS 120 –
Source: System 3R



Dental implants on GPS 120 –
Source: System 3R

Rolex watch



Microscope



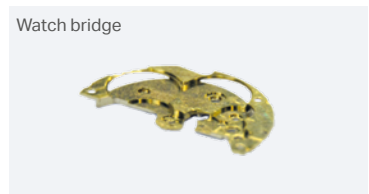
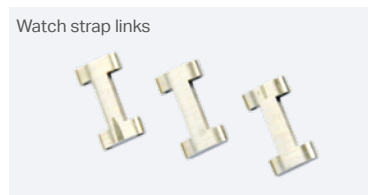
Watches/Micro Technology

Watches/M

Watches, measuring devices, Jewelry

- Watch cases & plates
- Measuring/testing instruments
- Micromec. parts
- Strap links for watches and jewelry

Excerpt from typical CNC machines



Production requirements

Innovation and cost pressure

Precision, innovation and individuality have characterized watches for generations. What was considered out of date in the 1970s is a booming market today: The mechanical wristwatch. Although prices sometimes reach astronomical values, cost consciousness and productivity increases are omnipresent.

New products, manufacturing methods, machines and opportunities continually present the industry with new competitive challenges. If investments were made in perhaps overly expensive production systems here – because it was possible to do so – modern and lean solutions are likely to be in demand in the future. Many applications using CNC rotary table machines from pL LEHMANN confirm that this is not «yesterday's news».



Watches/Micro
Technology

9

Solutions with pL LEHMANN



TF-507510 fix on Awea



TF-507510 vario spez on Almac



TF-510520 vario spez on Willemin



TF-507510 varioX on Haas



T1-520520 varioX ORR on Awea



TF-507510 varioX on Almac

Suitable workpiece clampings



Source: RÖHM



Source: RÖHM



Source: RÖHM



Source: EROWA



Plate on GPS 70 –
Source: System 3R

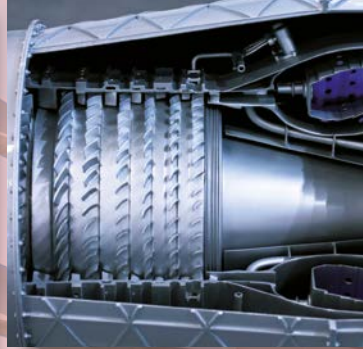


NEW: the ultimate clamping solution
for watch plates. Source: RÖHM

Airbus A380



Gas turbine



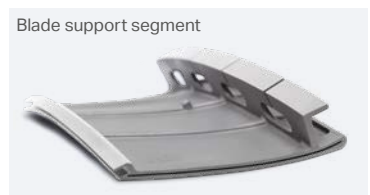
Aerospace/Turbines

Aerospace

Airplanes, aerospace, turbines (energy and airplanes)

- Structural and joint parts (e.g. seats)
- Blade
- Impeller
- Blisk
- Landing gear

Excerpt from typical CNC machines

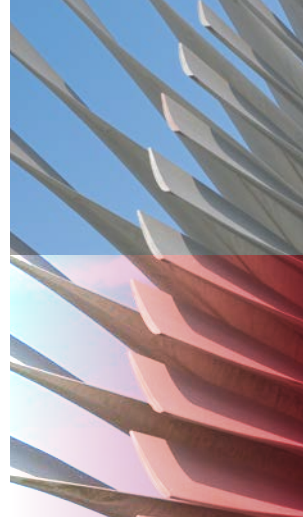


Production requirements

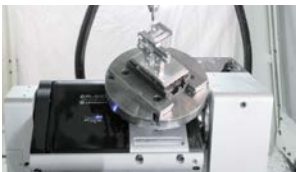
Manufacturing requires reliability

The focus is on safety and reliability. Reliability and quality are essential prerequisites for this. It is not for nothing that manufacturing processes in the aircraft industry are frequently developed and optimized over years.

Selected manufacturing equipment must meet the highest standards. For years, pL LEHMANN CNC rotary tables have been used by internationally active industrial companies, e.g. in engine manufacturing.



Solutions with pL LEHMANN



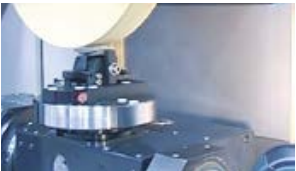
T1-510520 fix on Hurco



T1-520520 varioX on Blohm



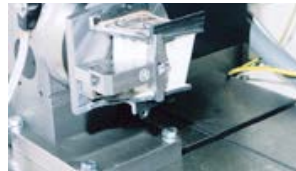
EA-520 on Mikron



T1-410420 on Blohm



T1-420420 on Blohm

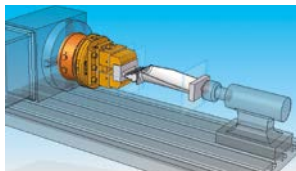


EA-410 on Blohm

Suitable workpiece clampings



Blade clamping parts –
Source: EROWA



3D machining for blades –
Source: EROWA



Source: SCHUNK GmbH & Co. KG



Turbine blade on GPS 240 –
Source: pL LEHMANN



Turbine blade on GPS 240 –
Source: System 3R



Clamping tons profile –
Source: EROWA

Automation

Fluid power technology



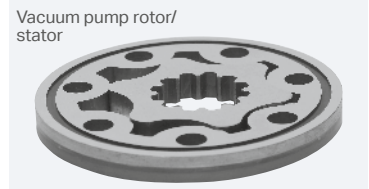
Mechanics

Mechanics

**Mechanical/plant engineering,
Tool/mold making, building and
consumer goods industries**

- Machine elements
- Cutting tools
- Precision molds
- Embossing rollers
- Hydro/pneumatic parts
- Toll manufacturing of any kind

Excerpt from typical CNC machines



Vacuum pump rotor/
stator



Housing



Lock cylinder



Bearing housing

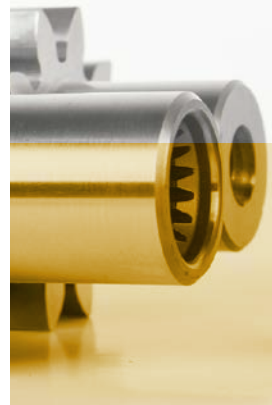
Production requirements

Focus on cost pressures

Whether for machinery or equipment manufacturing, tool or mold making, construction or machinery for the consumer goods sector: machining is a core discipline everywhere. The user must frequently be able to respond very flexibly to changing requirements and workpieces.

This makes the evaluation of production machinery especially demanding. While the 5-axis machine not infrequently appears to be the best solution after cursory consideration, something different is frequently found to be the case upon closer consideration: a 3-axis standard machine complemented with a 4th or 4th/5th axis when necessary.

In this way, the user is frequently not only much more flexible, he can also machine a considerably wider range of workpieces, needs less space and on top of it all pays less. Many solutions using pL LEHMANN confirm this.



Mechanics

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Solutions with pL LEHMANN



TF-507510 varioX on Haas



EA-520 on Unitech



EA-510 on DMG Milltap



EA-507 on Jung



T1-510520 varioX on Awea



T1-520520 varioX on Quaser

Suitable workpiece clampings



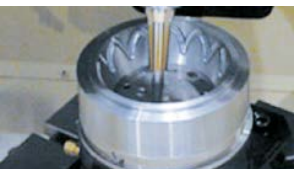
Source: SCHUNK GmbH & Co. KG



Source: SCHUNK GmbH & Co. KG



Mold on LANG –
Source: pL LEHMANN



Mold on Macro Chuck –
Source: System 3R



Machine element on Magnum Chuck –
Source: System 3R



Multiple voltage – Source: EROWA



Product & Service

Products & Services

Services from A to Z

Pre Sales

- + First class literature
- + Application drawings 2D
- + 3D models
- + Example of applications

Sales & Post Sales

- + Specified offers for each machine
- + Wide range of work piece clamping systems
- + Standardized interfaces

Commissioning

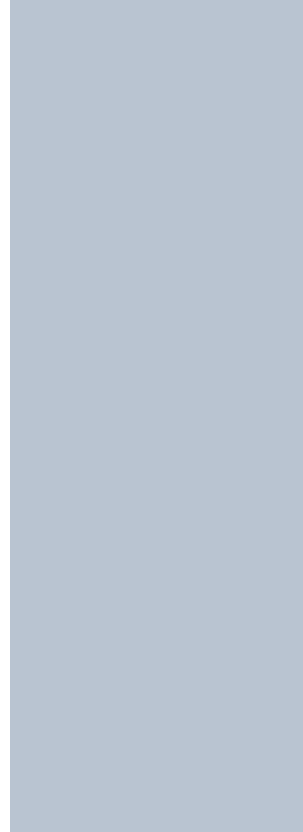
- + Parameter lists
- + Machine specified commissioning instructions
- + User manual
- + Partner Kit
- + On-site support

After Sales

- + Service points in 25 countries PTSE
- + Spare parts worldwide by eShop
- + In-field support by flying doctors



Excerpt from the product range



4th axis

- 1  EA-510.L
- 2  EA-510.OL
- 3  EA-520.L rotoFIX centered
- 4  EA-520.L rotoFIX bottom
- 5  EA-510.L longFLEX RST
- 6  EA-510.L longFLEX GLA

4th + 5th axis

- 7  TF-510520 TIP2c
- 8  T1-507510 TAP1
- 9  T1-510520 TAP2
- 10  T1-507510 TOP1
- 11  T1-510520 TOP2
- 12  T1-520530 TOP3
- 13  T1-510520 TGR2
- 14  T1-520530 TGR3

Multi-spindle rotary tables

- 15  M2-510.L
- 16  M3-510.L

- 17  T2-510520 TOP2c.2
- 18  T3-510520 TOP2.3



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Europe

- Austria
- Benelux
- Czech Republic (vacant)
- Finland
- France
- Germany
- Hungary (vacant)
- Italy
- Norway
- Poland
- Portugal
- Russia
- Slovenia
- Spain
- Sweden
- Turkey
- UK

America

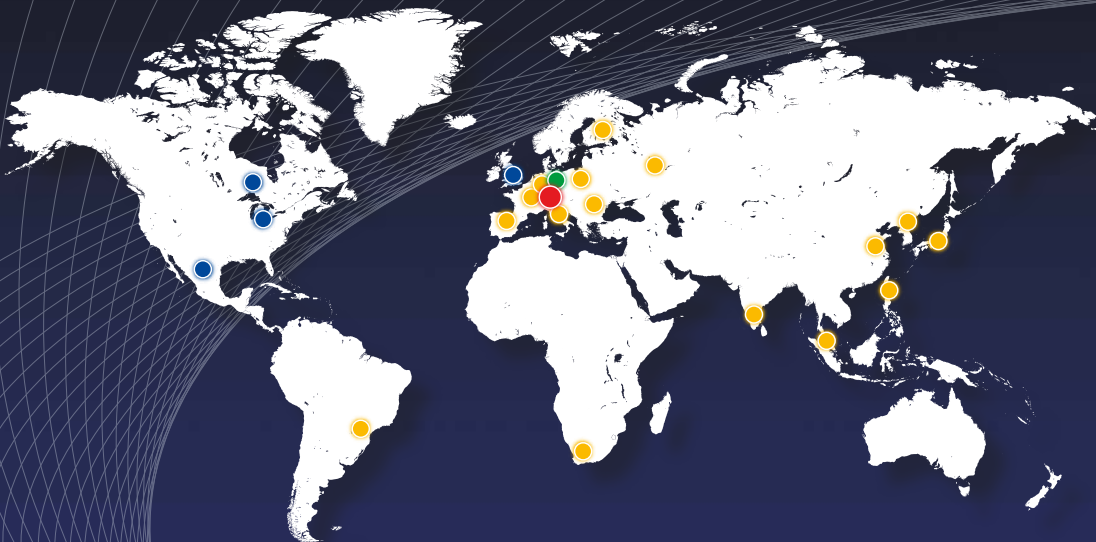
- Brazil
- Canada
- Mexico
- USA

Asia

- China
- India
- Japan
- Malaysia
- Singapore
- South Korea
- Taiwan
- Thailand
- Vietnam

Africa

- South Africa



● Headquarters ● direct sales partner ● pL Solutions® partner ● value added reseller & partner

More information (address, telephone number...) at www.lehmann-rotary-tables.com