

WE LOVE TECHNOLOGY

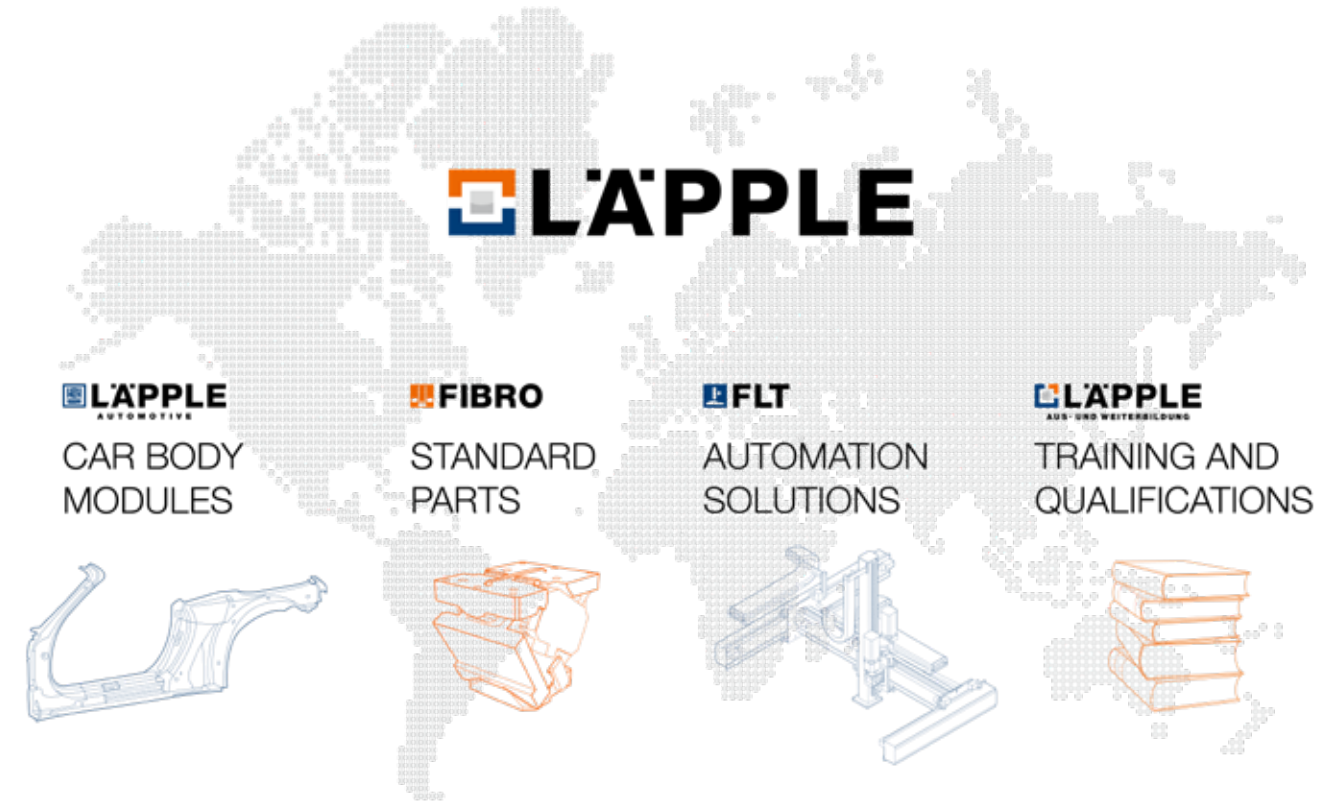


WE ARE YOUR SYSTEMS PARTNER
FOR AUTOMATION SOLUTIONS

MEMBER OF THE LÄPPLE GROUP



FIBRO LÄPPLE TECHNOLOGY MEMBER OF THE LÄPPLE GROUP



Together we make the world more successful

As a family-run group of companies, LÄPPLE offers high quality products and solutions in the industrial supply chain worldwide. The high-performance and innovative range of products from these specialized companies includes forming and bodywork technology as well as the automation plant and tool construction.

With a wide range of expertise and many years of experience, LÄPPLE is a reliable partner close to its customers interests and marketplace developments. Around 2,100 employees develop, produce, sell and support a wide range of innovative products in the world's industrial regions.

CONTENTS

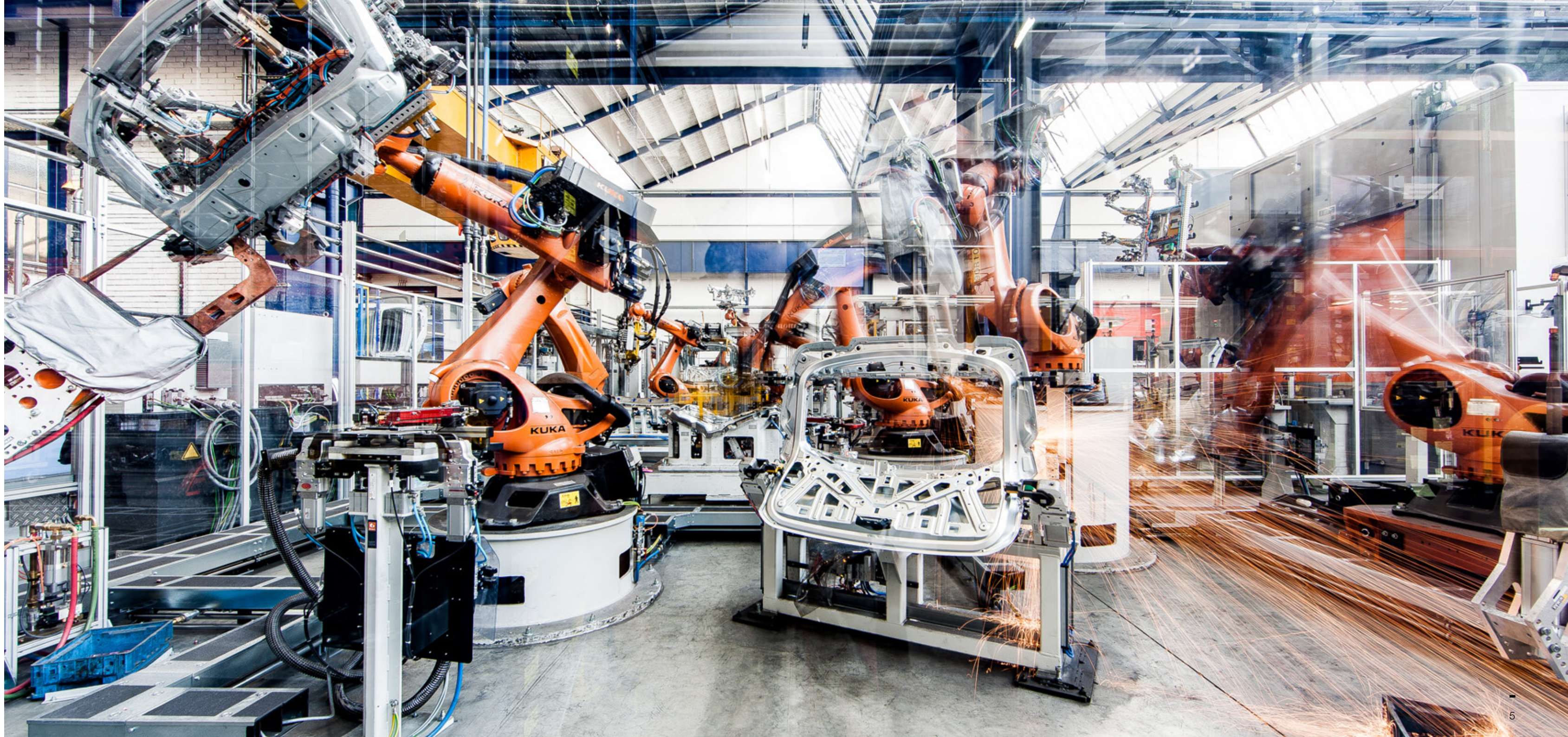
The LÄPPLE Group	3
FIBRO LÄPPLE TECHNOLOGY	4
Our business sectors	6
Modular axis- and gantry system	8
Linked systems	10
Process cells	12
Mechanical components	14
Aftersales services	16
Our locations	18

WE MAKE THE **WORLD MOVE**

High process stability, extended plant efficiency, long service life—FLT develops, produces and installs intelligent automation solutions for customers worldwide. The expertise here lies in developing industrial applications for handling, transport and assembly sequences in the automotive, aerospace and general industry sectors.

The product portfolio is designed to be modular, and in addition to standard components and axis- and gantry systems, also includes complete process cells and linked systems. For the best possible results, the integral parts are combined in a needs-oriented way to develop made-to-measure solutions that meet individual customer requirements.

FLT supports customers throughout the entire product creation process and supplies everything all from one source: consulting, planning, design, implementation and service. The foundation for the quality of our products is our staff. With significant expertise, our employees ensure optimum project implementation and are always ready to respond.



GLOBAL PARTNER IN A WIDE RANGE OF SECTORS

WE OFFER NEEDS-BASED SUPPLY SERVICES FOR A HUGE RANGE OF INDUSTRIAL SECTORS

- Automotive industry
- Aerospace industry
- General industry

WE SPECIALIZE IN AUTOMATED MOVEMENT WITH A FOCUS ON

- Handling technology
- Machine fitting and interlinking
- Workpiece transport
- Process technologies

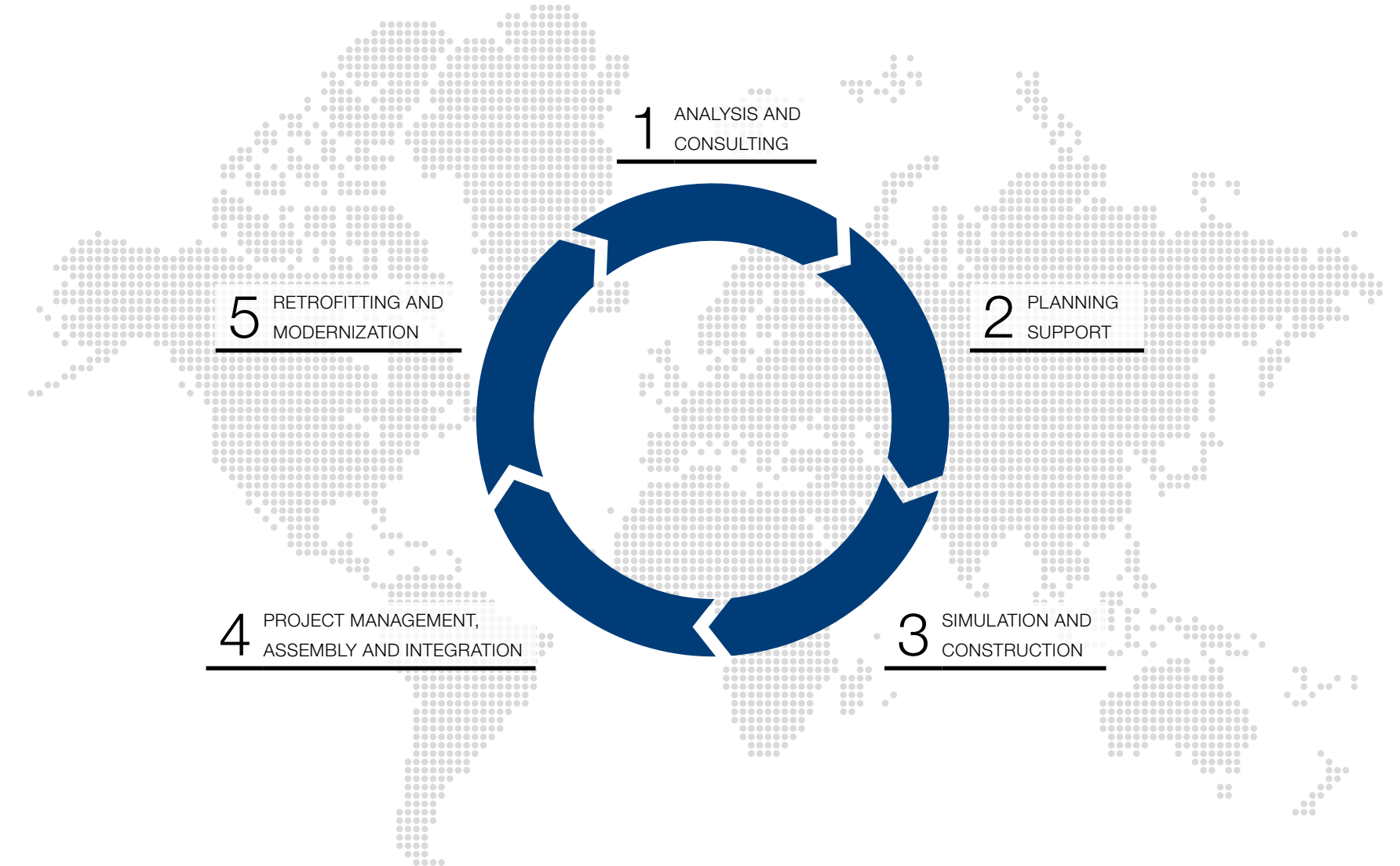
WE DELIVER OUTSTANDING SERVICES WHEN IT COMES
TO QUALITY AND FULFILL THE HIGHEST POSSIBLE SAFETY STANDARDS

To achieve this, we are also certified to:

- DIN EN ISO 9001:2008
Quality management systems–Requirements
- VDA 6.4:2005
QM in the automotive industry: “System audit QM production facilities”
- DIN EN ISO 14001:2009
Environmental management systems–Requirements with instructions for use



WE SUPPORT YOU THROUGHOUT THE ENTIRE PROJECT DURATION



HIGH LEVELS OF STANDARDIZATION, RELIABILITY AND PRECISION

MODULAR AXIS- AND GANTRY SYSTEM

Thanks to the modularity of the components, they can easily be used as a single-axis system or combined to create multi-axis systems. The basic unit of the systems are linear axes with moveable carriages to which further axes, grippers or rotary units can be attached. This provides the greatest possible degree of flexibility depending on the design needed.

Depending on requirements, this makes it possible to create large travel routes for especially heavy loads, for example, or to find the best solution for small workspaces.

The modular FLT axis- and gantry system provides the perfect basis for applications ranging from the loading and unloading of individual machine tools to the transfer of machined parts, fixtures and tools within large manufacturing and material handling systems.

- A variety of sizes covers payloads up to 3,000 kg
- Dependent on type and payload: horizontal travel routes over 100 m and vertical strokes up to 3 m
- Speed and acceleration: horizontally up to 4.5 m/s – 6 m/s² and vertically up to 2 m/s – 4 m/s²
- With or without control
- Standalone solutions or inline integration



LINEAR GANTRY ROBOT LGR

- Stroke up to 40 m per carriage, overall axis length > 100 m
- System made from aluminium and steel axes with transport payloads up to a maximum of 1,500 kg
- For loading and unloading machines as well as for handling workpieces



LINEAR FLOOR AXIS LFA

- Stroke up to 40 m per carriage, overall axis length > 100 m
- Aluminium and steel axes with payloads up to a maximum of 6,000 kg
- Can be used to transport equipment and as 7th robot axis
- Also available in a separate drive unit and transport carriage version

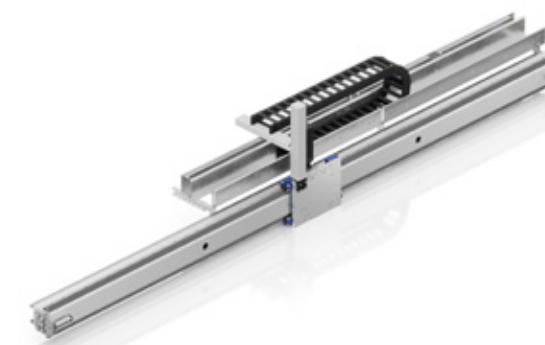
AREA GANTRY ROBOT AGR

- Stroke up to 60 m with spans of approx. 12 m
- System made from aluminium and steel axes with transport loads up to a maximum of 3,000 kg
- For the handling and transport of workpieces and pallets across large areas



LINEAR HORIZONTAL AXIS LHA

- Stroke up to 40 m per carriage, overall axis length > 100 m
- Aluminium and steel axes with payloads up to a maximum of 1,600 kg
- Can be integrated into systems as an additional axis or used as a suspended robot axis
- Axes can be used as a single axis for integration or mounted usage



AREA GANTRY CANTILEVER AGC

- Stroke up to 40 m for cross arms of approx. 3 m
- System made from aluminium and steel axes with payloads up to a maximum of 600 kg
- For the handling and transport of workpieces and pallets in a compact construction space



LINEAR VERTICAL AXIS LVA

- Stroke up to approx. 3 m
- Aluminium and steel axes with transport loads up to a maximum of 1,500 kg
- Can be used as a stroke axis or for vertical fitting of plants and devices



CONNECTING A WIDE VARIETY OF REQUIREMENTS

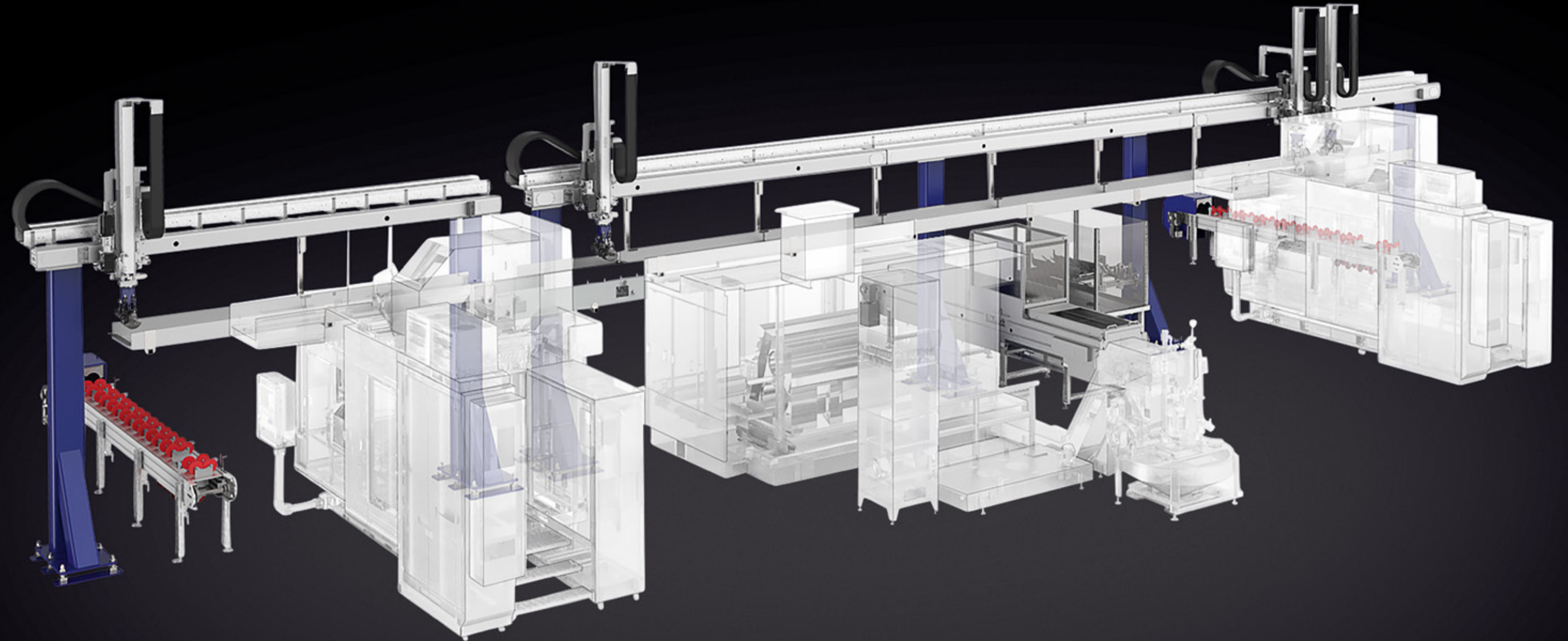
LINKED SYSTEMS

Thanks to intelligent system interlinking, FLT connects different processes and machining stages of workpieces. This means that output can be increased, quality raised, capacities adjusted flexibly and the level of automation expanded.

In the technology-based interlinking of individual production process stages, FLT utilizes its product, solutions and process expertise to configure the individual requirements of the relevant applications by optimally combining all individual modules and system components to create a complete plant.

Here customers profit from a wide range of services from a company that is able to offer both individual components and turnkey plants.

- From two gantries operating in sync
- With or without control
- Including all peripheral technology
- Individual interlinks or complete system options
- Entire product creation process is carried out in-house: project management, construction and simulation, control technology and commissioning
- Extent of supply available as a complete package, including CE markings, safety technology and legal protection



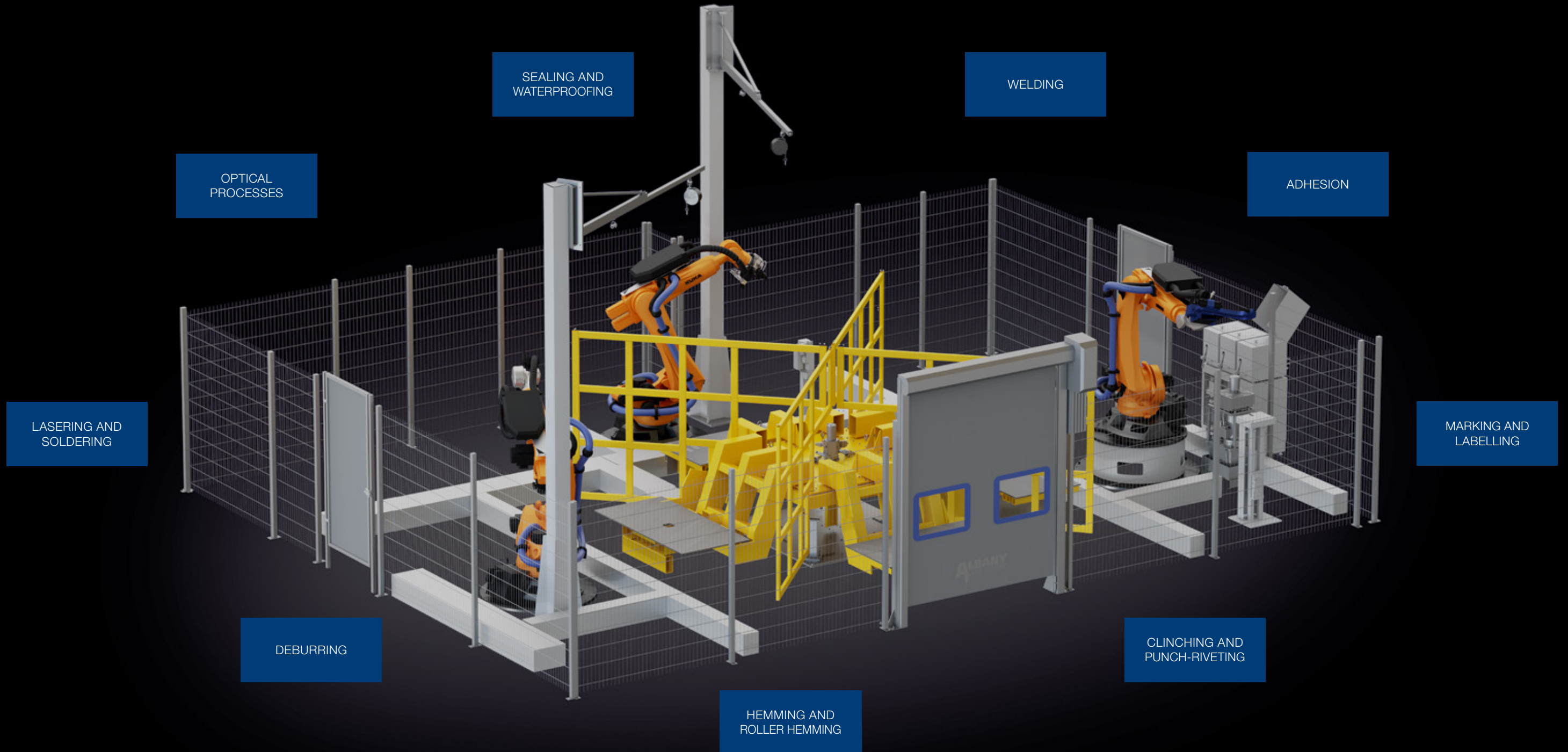
FOR MAPPING OPERATIONS **PROCESS CELLS**

Virtually all sectors of industry demand custom solutions for creating automated processes using robot technology. FLT responds to these demands in production with machining cells. These have a modular design, with space-saving configuration options and offer flexible solutions for assembly processes.

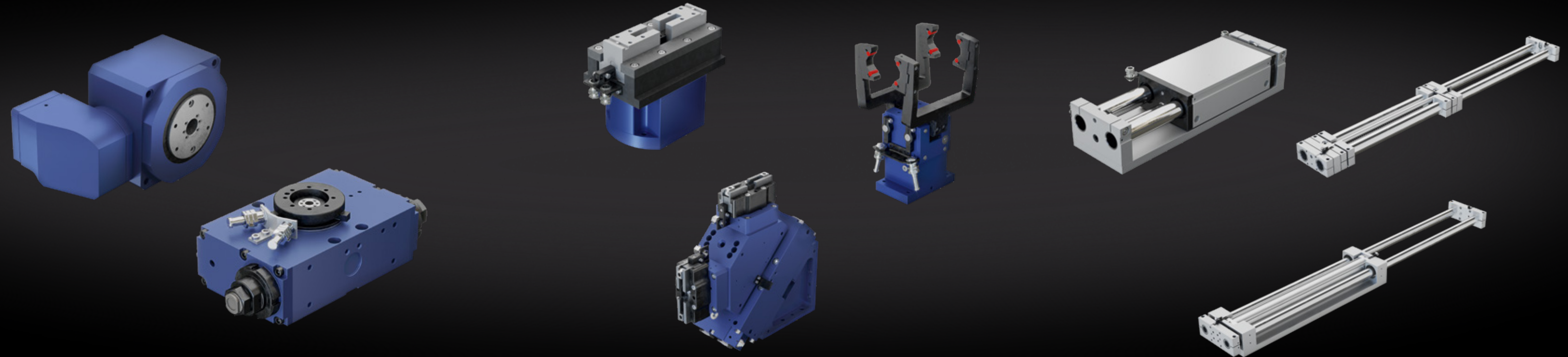
Optimum solutions for complex conceptual formulations can be created via custom programming. The different process sequences are interlinked via the machining stations.

The FLT machining cells can be used as flexible standalone cells or integrated into an inline system.

- Maximum flexibility
- Including control and technology processes
- Customer-specific solutions
- Wide-ranging expertise for a large number of processes
- A wide range of applications can be integrated
 - Spot applications
 - Rail applications
 - Measurement applications



MECHANICAL COMPONENTS



STANDARDIZED MODULES FOR INDIVIDUAL SOLUTIONS

For automation we offer carefully conceived, individually designable module solutions in a wide variety of industries. Transport and logistics, as well as installation and handling are the most important areas of application.

Our modules for translation, rotation and gripping can be used as individual modules or combined in a wide variety of ways with a host of devices and systems—from simple pick-&-place units to multi-axis robots. The modules are available either with or without electrical, pneumatic or hydraulic installation.

ROTATION MODULES

Our high-performance rotation modules for pneumatic, hydraulic and electrical applications offer a high level of quality. The electrical modules are normally driven by servo motors, achieving high performance levels with high acceleration and speed with optimum positioning accuracy. The pneumatic rotation modules offer a compact, integrated damping system that permits optimum end position damping to be achieved with a short cycle time in just a few steps.

GRIPPERS

Our standard range of grippers on parallel and angle grippers is comprehensive and features high product quality and precision. The optimally graded series include sizes to cover a wide spectrum for transporting workpieces with weights of up to 440 kg. For rapid tool changeover we also offer you a pivoting twin gripper with two integrated gripper modules in an angled layout, combined with a rotation module with rotary guide.

LINEAR MODULES

We offer you compact modules with different performance levels such as short-stroke modules and translation modules for loading and unloading machine and for use in assembly areas as well as linear axes. These are driven either hydraulically and pneumatically via a cylinder with end position damping or electrically via servo motors. This design ensures optimum speed and positioning accuracy.



FOR THE ENTIRE
PRODUCT LIFE CYCLE
AFTERSALES SERVICES

TELEPHONE HOTLINE

With our telephone hotline we are at your disposal for any queries relating to our production systems.

REPAIRS

Our service personnel is available internationally and can quickly be on site for repairs.

SPARE PARTS

We keep supplies of standard spare parts on hand in our spare parts warehouse meaning we can offer you high availabilities and a speedy spare parts service.

COMMISSIONING

During the construction process we offer you services tailored specifically to your needs. All our plants are built and commissioned by our specialized personnel. In the process we provide instruction for your personnel at any early stage and at a high quality level.

PRODUCTION SUPERVISION

To ensure high plant availability, we conduct an additional startup supervision service. Your plant operators are trained in the plant technology so that they can respond quickly and appropriately in the event of a fault.

TRAINING COURSES

We offer individual training concepts on-site at your location or at the FLT site so your employees are optimally prepared for operation.

INSPECTION

We test and monitor your plants in line with the relevant directives and guidelines, and analyze their condition, avoiding production downtimes.

MAINTENANCE

We offer you comprehensive, individually customised maintenance concepts for your production plant.

RETROFITTING AND CONVERSION

We provide concepts for modernizing or expanding your existing plants and implement them accordingly. In the case of changes in production, we are also happy to provide support for extending or rebuilding your installations.

COMPETENT STAFF AT THREE LOCATIONS

WITH OUR THREE LOCATIONS WE OFFER YOU OUR SERVICES NOT JUST FROM OUR HEADQUARTERS IN GERMANY BUT ALSO INTERNATIONALLY. OUR QUALIFIED SERVICE TEAM IS AT YOUR DISPOSAL WORLDWIDE, MEANING OUR PERSONNEL CAN WORK DIRECTLY ON YOUR PRODUCTION SYSTEMS TO ACHIEVE FOR ALL YOUR REQUIREMENTS AND EVERY CHALLENGE A MADE-TO-MEASURE, HIGHLY EFFICIENT SOLUTION WITH MAXIMUM BENEFIT EACH AND EVERY TIME.



FIBRO LÄPPLE TECHNOLOGY GMBH

August-Läpple-Weg
74855 Hassmersheim
GERMANY

T +49 6266 73-0

info@fibro-laepple.de
www.fibro-laepple.com



FIBRO LAEPPLE TECHNOLOGY INC.

1750 E Lincoln Ave
Madison Heights, MI 48071
USA

T +1 (248) 591-4494

info@flt-us.com
www.ftt-us.com



LÄPPLE (TAICANG) INDUSTRIAL TECHNOLOGY CO., LTD.

Bldg. No. 15, Industrial Park, No. 103 Chenmenjing road,
Chengxiang Town, 215400, Taicang, Jiangsu Province
P.R.C.

T +86 512 8060 7979

info@fibro-laepple.cn
www.fibro-laepple.cn





WE LOVE TECHNOLOGY