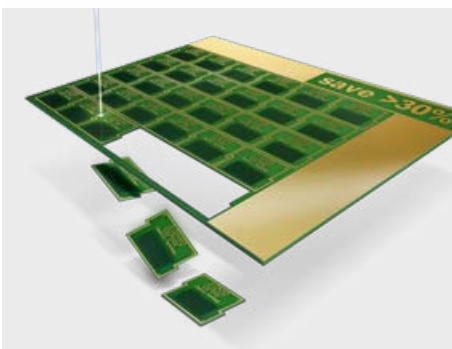


Taking Depaneling to the Next Level

Automation Solutions from LPKF

- Maximum performance and reliability
- Optimum cost efficiency
- Custom scalability
- Tailor-made solutions



Scalable Automation Solutions

For the Smart Manufacturing of the Future

The depaneling systems from the LPKF CuttingMaster 2000 and 3000 platform can be expanded by adding flexible, customized automation solutions. This improves the effectiveness and efficiency of PCB production while offering some cost benefits.

Level of Automation can be Scaled up Retrospectively

New systems can be equipped directly with customized automation solutions. Existing systems that have previously been loaded manually can also be automated retrospectively and easily integrated into a production line or island solution. External automation modules for loading and unloading the system can be added successively.

The systems communicate simply with one another via integrated SMEMA interfaces. The depanelers can also be connected to an existing MES system via a standardized OPC UA interface.

Optimum Cost Structure

Automated handling speeds up the manufacturing process and avoids loading and operating errors. Thanks to structures specially designed for depaneling and the cross-platform use of identical parts, LPKF guarantees an excellent cost-benefit ratio for the systems. In addition, compact designs and minimal footprints ensure efficient use of the space available.

Customized Solutions

Flexible robot systems or high-performance linear axis systems meet the most stringent quality standards. Universal or application-specific carrier and gripper modules make it easier to adapt to the specific product mix and allow a high degree of variability for a wide range of product variants.



LPKF LoadingMaster Systems

The Ideal Solution for all Applications



LPKF LoadingMaster 1000 – Maximum Flexibility

The LPKF LoadingMaster 1000 is the ideal choice thanks to its flexible mode of operation allowing it to process and adapt to a diverse range of products. The scope and degree of automation of the solutions are also scalable, as the modules can be largely freely combined and added retrospectively.

Flexible Gripper Solutions

Different PCB and panel layouts can be handled with a range of especially universal gripper solutions. This allows various requirements due to assembly, size or shape to be met.

Simple Operation and Programming

Thanks to its simple and easy-to-learn operation, the LoadingMaster 1000 offers major advantages, particularly in the case of a high product mix. Moreover, the “no-code” programming allows programs to be set up and adapted quickly.

LPKF LoadingMaster 1000

Range of motion	850 mm
Maximum load capacity	Up to 5 kg (incl. gripper)
Dimensions (W x H x D)	1000 mm x 860 mm x 600 mm
Optional extras	Gripper design, conveyor belts, lift system, magazine loader, work room monitoring

LPKF LoadingMaster 2000 – Maximum Performance

A fast and highly precise axis system allows this LoadingMaster model to load and unload workpiece carriers especially quickly.

All-in-one Solution

The LoadingMaster 2000 systems combine all functions in one housing: loading and unloading of workpiece carriers, packing of individual circuits into blister packs or boxes, and disposal of residual material. Thanks to its fast axis system, this solution is especially suitable for applications with exacting throughput requirements.



Universal Magazines

Depending on requirements, the magazines of the LPKF LoadingMaster can be used flexibly. The system can handle both blister packs and boxes, e. g., in combination with intermediate layers.

User-friendly Software

Thanks to a digital twin, the system can be programmed offline. As a result of the “no-code” programming, processes and/or recipes can be created, adjusted and tested quickly and easily.

LPKF LoadingMaster 2000

Maximum load capacity	Up to 5 kg (incl. gripper)
Dimensions (W x H x D)	2000 mm x 2400 mm x 1900 mm
Optional extras	Gripper design, magazine loader, verification check

LPKF LoadingMaster 2100 – Maximum Performance and Autonomy

The LoadingMaster 2100 is a further optimized variant of the LoadingMaster 2000. An additional box handling facility was added to the system, which offers further benefits in respect of cycle times and autonomy.

The combination of boxes and intermediate layers allows several layers of PCBs to be stacked one above the other.



Compared with the LoadingMaster 2000, the capacity to operate autonomously without user intervention can be increased fourfold. This therefore further increases the level of automation and also offers the opportunity to fully model individual shifts.

Thanks to a fast rotary indexing table and sophisticated lift system, handling and non-productive times can be kept to a minimum.

LPKF LoadingMaster 2100

Maximum load capacity	Up to 5 kg (incl. gripper)
Dimensions (W x H x D)	2120 mm x 2500 mm x 2840 mm
Optional extras	Gripper design, magazine loader, verification check

Increase the Value of Your Products With LPKF Systems

We are fully committed to ensuring that our laser systems and associated automation solutions achieve the best possible results for you. That's why we do everything we can to develop machines with user-friendly and intuitive operation. Our engineers have developed an optimal software solution with all the functions you need to ensure that your production runs smoothly. Feel free to contact us if you have any training or maintenance needs or require any other service options.

With LPKF's hardware, software, and services, you can optimize your depaneling processes and ensure that your products are as flawless and reliable as possible.

LPKF Service

LPKF is known for its globally leading role in the development of high-quality, easy-to-use laser machines specially tailored to customer requirements. From this leading position, LPKF offers you first-class customer support worldwide.

We can provide technical customer service, installations, and training on request. We can also support you in the optimization of your processes.

You can rely on us for support, even over the long term. To this end, we have put together special service packages – Basic, Classic, and Premium – tailored specifically to your needs.



LPKF Service & Support
 LPKF provides worldwide premium customer support. Learn more:
www.lpkf.com/support



Find out more:
www.lpkf.com/depaneling



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