



Smart Mechanical Engineering [Engineered by Lumberg]





## Engineered by Lumberg

[Exclusive Sales by Lutronic]

Since its foundation in 2016, Lutronic has been a sister company to the globally-operating Lumberg Group with its 1,150 employees. Lutronic has positioned itself as a specialist in connectivity and special-purpose mechanical engineering according to your process requirements in automation.

Developed and manufactured by Lumberg Group's mechanical engineering, Lutronic handles the exclusive distribution of this know-how from 175 specialists. Individualized feeding systems, assembly units, inline testing systems, packaging systems or even process development carried out together with you on the basis of over 90 years of high competence in machine and plant engineering – Lutronic is your partner right up to mass production at the highest cycle rates.

Lutronic goes into the details for you – always with the focus on precision and speed in the process: In mechanical engineering, software programming or camera inspection technology, we implement sophisticated solutions for fully automated assembly technology specifically for your workpiece – or even your complete production line.





# Our Know-how Adds to Your Know-how

[From One Expert to Another]

Lutronic's international team helps you to plan the processes surrounding your core production process. We develop, manufacture and optimize your individual feeding processes and – if desired – we also project and realise your core process. Our inline test systems make fault features visible to you, our packaging systems remove your valuable goods from the machine. Of course, our technicians also take care of commissioning, diagnosis and maintenance, service packages and documentation of our components and systems – worldwide.

We focus on quality, costs, output and machine availability, even for particularly delicate components at the promised speed.

Here at Lutronic, we focus on the components you want to produce. To build the right system for your optimum production, we therefore only select proven components from well-known manufacturers. We source metals, plastics, control systems, drives, cameras, sensors, etc. from selected manufacturers and combine these economically with the range of components that we produce in our own mechanical parts manufacturing facility. In this way, we guarantee you an optimum price-performance ratio.

# Our promise to you: All components used are itemized in detail in our documentation.

If a system needs servicing, all it takes is your project number for us to produce, for example, wear parts at short notice at our CNC center, update software or determine which additional attributive inline inspection process can be integrated. All our installed parts carry an internal component number which allows our global support team to identify every single item.

At your request, system acceptance can be performed here with us or directly at your location. Either way, you will be given a full 2D or 3D data package which includes the CE acceptance certificate and safety calculation.



## Customized Drive Technology

[We Find the Best Solution]



In the system shown in the picture above, cam-controlled drives are used to assemble a module at maximum speed and precision. This technology makes it possible to control complex motion sequences precisely and quickly, which is essential for the efficient and precise execution of assembly processes. Cam-control ensures that each individual movement of the drives is optimally matched to the production requirements, which both increases productivity and guarantees the consistently high quality of the assembled modules.

#### **Our Conclusion:**

Regardless of whether you opt for servo drives, pneumatic or cam-controlled drives – we offer you the best solution for your specific production requirements. Through our comprehensive advice and customized selection of drive technology, we ensure that your production becomes more efficient, precise and cost-effective. Contact us to find out more about how we can optimize your production processes!

#### System Layout [Rotary, Linear - or Combined]

#### We build rotary indexers and linear transfer systems – the perfect solution for your production.

As experts in the construction of rotary indexers and linear transfer systems, we offer customized systems to suit your production line. Our solutions increase the efficiency, flexibility and speed of your production. Depending on your requirements, we can also intelligently combine the two systems to optimize your production processes.



#### Advantages of Rotary Indexers

**Compact Design:** Rotary indexers require less space and are ideal for tight production spaces.

**High Production Speed:** Continuous operation enables a very high cycle speed, which leads to an increase in the production rate.

**Parallel Processing:** Several processes can be carried out simultaneously, which enables a high degree of process optimization.

**High Precision and Process Stability:** Rotary indexers offer uniform and consistent product quality with stable production sequences.

**Flexibility:** Ideal for production processes that require a high number of work steps at the same time.



#### Advantages of Linear Transfer Systems

**Simple Operation:** Linear transfer systems can be operated with a single operator side, which makes handling more ergonomic and efficient.

**Space-saving for Linear Processes:** Due to the linear design, lengthwise transfer systems usually require more space, but are ideal for simpler, sequential processes.

**Easy Maintenance:** Due to the linear structure, longitudinal transfer systems are easier to maintain and offer clear fault localization.

**Lower Acquisition Costs:** Longitudinal transfer systems are less expensive to purchase and are particularly suitable for simpler applications.

**Flexibility for Process Adjustments:** The system can be easily adapted to different production requirements without the need for complex conversions.

#### Our Conclusion:

The Right Solution for Your Production

Whether you opt for a rotary indexer system, a linear transfer system or a combination of both systems, we offer you the right solution that increases productivity, saves space and simplifies operation. Let us advise you and find the ideal solution for your specific requirements!

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## Feeding Systems

for Bulk Components

- Spiral Vibratory Feeder
- Linear Vibratory Feeder
- Centrifugal Feeder
- Drum Feeder
- Surface Conveyors
- Untangling Systems
- Bulk Hopper Conveyor
- Robotic Handling Systems
- Bin Picking Systems



#### Linear Vibratory Feeder

F-Line 7130



- Linear vibratory feeder based on vibration technology
- To span segments
- For small to medium outputs rates
- Customized set-up of linear unit to accommodate workpiece geometry and preferred performance parameters
- Output in correct positional arrangement

Spiral Vibratory Feeder

F-Line 7110



- Spiral vibratory feeder based on vibration technology
- Feeding of bulk goods with dimensions of < 1 up to > 140 mm
- Workpiece-specific
- For output rates of approx. 10-400 pieces/min
- For all performance categories, featuring standard integrated compensation of vibration forces
- For small to medium outputs rates
- Individual, CNC-milled feeding bowl reproducible on demand
- Milling optimized to the workpiece geometry and preferred performance parameters

Output in correct positional arrangement



**Drum Feeder** F-Line 7140



- Feeding of bulk goods with dimensions of approx. 2 x 4 mm or bigger
- Workpiece-specific
- For output rates of approx. 100-1,000 pieces/min
- Especially suitable for components which are difficult to feed due to their geometry, e.g.pressure springs
- Optimized to the workpiece geometry and preferred performance parameters
- Output in correct positional arrangement
- High output combined with compact, space- saving design



F-Line 7120



- Feeding of bulk goods with dimensions of approx. 2 x 4 mm or bigger
- Workpiece-specific
- For output rates of approx. 50-3,000 pieces/min
- Extreme precision perfectly combined with centrifugal technology
- Automatic clearance of jamming for minimized line downtime
- Output in correct positional arrangement
- With bus coupler for the PLC of the main machine



F-Line 7160



Feeding of bulk goods

- To stockpile and pour bulk components
- To increase your facility's autonomy, e.g. for unmanned three-shift operation
- Adjustable to the individual size of the feeding elements and required output
- Easy integration of reels, adjustment of height, build-up analysis or filling level control according to requirements

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### Feeding Systems

for Components in Unitized Arrangement

- Reel Decoilers
- Depalletizers
- Separators



# Decoilers as Feeders – Reliability and Efficiency in Production

Reel decoilers are an indispensable element in modern manufacturing processes, especially when it comes to feeding materials into automated production lines. These decoilers are characterized by their reliability, solidity and excellent priceperformance ratio. They offer an efficient solution for the continuous feeding of wire, strip or other materials required for various production steps, especially in combination with welding stations.

**Reel Decoiler, vertical** F-Line 7150 1



- Feeding of components on reel
- To balance varying reel-off and draw-off speeds
- Line buffer reduces or prevents down times when changing reels

- Reel decoiler system, single layout
- Reel-specific details according to requirements

#### Reel Decoiler, vertical, double Reel Decoiler, vertical, quadruple F-Line 7150 2 -Line 7150 3 Feeding of components on reel Feeding of components on reel ■ To balance varying reel-off and draw-off speeds ■ To balance varying reel-off and draw-off speeds Line buffer reduces or prevents down times when changing reels Line buffer reduces or prevents down times when changing reels Reel decoiler system, double layout Reel decoiler system, guadruple layout Reel-specific details according to requirements Reel-specific details according to requirements Can perfectly be combined with an automatic welding station Can perfectly be combined with an automatic welding station for uninterrupted feeding when changing reels for uninterrupted feeding when changing reels

Ideal for systems with two or four production lanes

#### Reel Decoiler, horizontal, single

F-Line 7150 4



- Feeding of primary material from palett/reel
- To balance varying reel-off and draw-off speeds
- Line buffer reduces or prevents down times when changing reels
- Reel decoiler system, single layout
- Reel-specific details according to requirements
- Ideal to uncoil metal strips from paletts

#### Reel Decoiler, horizontal, double

F-Line 7150 5



- Feeding of primary material from palett/reel
- To balance varying reel-off and draw-off speeds
- Line buffer reduces or prevents down times when changing reels
- Reel decoiler system, double layout
- Reel-specific details according to requirements
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## Inline Test Systems

Metrology

- Continuity Tests
- Resistance Tests
- High-voltage Tests
- High-frequency Tests
- Presence Tests
- Force-Deflection Tests
- Crimp Force Tests
- Impermeability Tests



#### Camera Test Systems

#### No Part Escapes – 100% Inline Tested

At Lutronic, we develop state-of-the-art camera inspection systems that are optimized for 100 % inline inspection of your components. Whether integrated into your existing production line or as a stand-alone inspection cell, our solutions guarantee seamless inspection of all parts at maximum speed. Rely on our technology to optimize your production processes with maximum precision, reliability and efficiency.



- Attributive Applications
- Surface Inspection
- Presence Tests
- Metrological application
  - Measuring of Dimensions



# Inline Test Systems Camera Systems

- Surface Inspection
- Presence Tests
- Measuring of Dimensions



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## Assembly Technologies

- Punching/Bending Screwing
- Iron Soldering
- Induction Brazing Placing
- Reflow Soldering Marking
- Ultrasonic Welding
- Resistance Welding
- Laser Welding

- Overmolding
- - Handling and **Treating Cables**
  - IDT Terminating/ Crimping
  - Dispensing/ Potting



#### Inserting Contacts into Connector Housings -Precision through Cam-Controlled Assembly Technologies

The illustration above shows the insertion of contacts into contact carrier housings using a sophisticated cam-controlled system. This technology ensures maximum precision and speed in the assembly of components that are widely used in the electronics, automotive and medical technology industries. The precise placement of the contacts is crucial to ensure a reliable electrical connection and the high quality of the end products.



**Resistance Welding Stations for Maximum Efficiency** 

Our welding stations with state-of-the-art resistance welding technology enable the continuous processing of contact strips (steel/copper strip) as endless strips. This maximizes the autonomy time of your system and allows you to carry out set-up processes without having to stop the assembly system. A decisive advantage for smooth, efficient production in line with lean management.



### Packaging Systems

- Cardboard Packaging for Bulk Goods
- Palletizer Systems
- Magazining Systems
- Blister Tape Systems
- Reel Coilers

#### Modern Packaging Station for Blister Tape Packaging – Where Efficiency Meets Precision

The illustration above shows a modern packaging station for blister tape packaging. This station is specially designed to pack components – particularly from the electronics and automotive industries – safely, efficiently and automatically. The components are inserted into precisely shaped blister belt trays, with automated systems ensuring consistent quality, precise positioning and reliable sealing. This form of packaging plays an essential role along the production and supply chain.

### Before the Product Stands the Project

[from Person to Person]

Production and assembly are highly complex transformation processes. It's good if you have someone at your side who not only control your processes as a consultant, but even from his own production. Who understands your requirements for project planning and process analysis, who can evaluate drive and control technologies, test systems, sensors, fieldbus and Ethernet systems or PLC programming for automation – and who can also build and program this. This includes fault analysis and remote maintenance over the lifetime of your system.

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You Want an Offer from Us? Simply scan, fill in and send it to us!





passion for automation

