THE FUTURE IS THIS EASY. LS LINK, THE LINK CONVEYOR SYSTEM FROM WEISS.

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SPEED AND PRECISION

LS Link, the link conveyor system, does what other link conveyor systems can't: it combines speed in motion with precision in workpiece positioning.

EFFICIENCY IN LARGE-SCALE SERIES PRODUCTION

With a motion time of under 0.2 seconds, LS Link is fast and efficient. Typical tasks for the link conveyor system including mounting, inspecting and labeling workpieces.

01 INCREASE PRODUCTIVITY

The link conveyor system LS Link combines speed and precision, which increases output.

- Precision drive concept consisting of servo motor, planetary gears and well-designed guide concept
- 🧭 Vibration-damping design
- Workpiece carrier can be loaded with up to 50 kg in vertical alignment
- ♂ High process forces of up to 1,000 N

2 LEVERAGE EFFICIENCY

LS Link enables easy, fast start-up and short transport times during assembly.

- Four link lengths support easy integration into assembly lines
- Over 90 percent of motor rating converted into motion energy

PLC communication module reduces start-up time

03 INCREASE FLEXIBILITY

Thanks to its modular design, LS Link supports a high level of flexibility in assembly line design.

- ✓ Various link lengths
- ⊘ Divisible transport chain
- Machining stations in the redirection module possible
- ✓ Variable installation position
- **Room for media feed-through** and attachments

04 ENABLE CONNECTIVITY

The hardware and software of the LS Link integrates into the higher-level automated assembly line.

- Prepared PLC communication module
- **Pre-configured software**
- Easy design in terms of the overall system



LINK CHAINS

Users can select among link lengths of 80, 100, 125 and 150 mm, which increases their process design flexibility.



INSTALLATION POSITION

LS Link can be integrated into assembly processes both horizontally and vertically. This way, workpiece transport optimally adapts to the production process.



GUIDE CONCEPT

The chain links can be guided in both the drive module and the redirection module. This makes it possible to realize additional process stations.



Up to 15 m

CHAIN LINK LENGTH

The maximum axis distance between the drive and redirection module is 15 m. The transport chain can be divided, which makes transporting and assembling it easier.



LINK CONVEYOR SYSTEM LS LINK. IN DETAIL.



DRIVE SYSTEM

In conjunction with the high-precision drive system, a guide system based on rolling elements and harmonized link pretensioning result in a stable system without reverberation.



GEAR UNIT

The robust planetary gear with a strong main bearing and clever system for wear compensation remains highly precise over the entire service life. The positioning accuracy is $\pm 50 \mu$.



WORKPIECE CARRIER

alignment is also possible.

The workpiece carriers can be loaded

with up to 50 kg in a vertically aligned link

conveyor system. The absorption of high

process forces of up to 1,000 N in vertical

GUIDE CONCEPT

The guide concept is pre-tensioned and free of play in all directions (x, y and z). The chain can be divided, if desired, and the links can be guided in the drive module and redirection module.



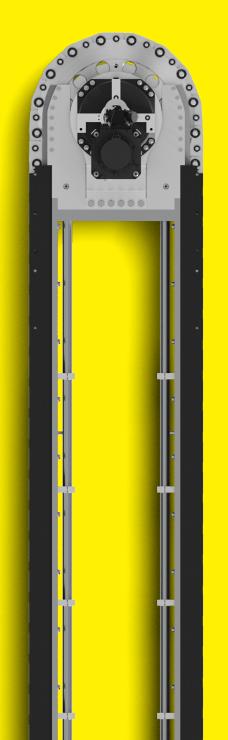
SERVO MOTOR

Thanks to the servo motor, any position and any feed can be approached. All conventional servo motors and frequency converters can be used.



BASE FRAME

The base frame is the stable foundation of LS Link. Regardless of the link length, the frame width is a standard 454 mm for all variants.



THE STRENGTHS OF THE LS LINK



LS Link has a positioning accuracy of $\pm 50 \mu$. This is due to the planetary gear, which also features a strong main bearing and a clever system for wear compensation.

HIGH CYCLE RATES

With a motion time of under 0.2 s, LS Link is very fast. The vibrationdamping design ensures stability. It absorbs high forces and guarantees a running behavior that is extremely smooth.

LONG SERVICE LIFE

The link conveyor system is designed for 24/7 continuous operation and, depending on the application, is completely maintenance-free.

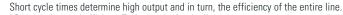


LS Link is available as a pure timing chain, with or without a drive system and, upon request, with a customized base frame.



USE CASES. LINK CONVEYOR SYSTEM LS LINK.





LARGE-SCALE SERIES AND MASS PRODUCTION

LS Link is fast and efficient. Typical tasks for the link conveyor system are mounting, inspecting and labeling workpieces. They are used in a wide range of sectors: from the electronics and plastics industry for clipping components, in the cosmetics industry for filling containers up to filling construction chemicals like sealing foams into cartridges.



TASKS WITH HIGH FORCES

During the manufacture of plugs and when punching recesses, workpiece carriers are subjected to high forces. The links of LS Link are designed for such forces. The drive wheels and eight bearings per chain link ensure zero backlash in all directions (x, y and z). Because the load capacity of workpiece carriers with vertical alignment of the link conveyor system is consistently 50 kg, both small and heavy components can be processed.



TASKS WITH HIGH PRECISION

When metering liquids, welding components or performing tests run for quality assurance, a high degree of accuracy is important. Thanks to the zero-backlash planetary gear, LS Link delivers a positioning accuracy of $\pm 50 \mu$. Due to a strong main bearing and clever system for wear compensation, the gear units are very precise over the entire service life. During the entire life cycle, they achieve a torsional backlash of less than 0.1 angular minute. A 22-bit position encoder for absolute position measurement at the output of the drive train ensures this high positioning accuracy.







EASY TO COMBINE. EASY TO INTEGRATE.

The automation components from WEISS can be easily combined to create functional sub-systems. Whatever the application. Whatever your needs. When you select and design your sub-systems, our application engineering team will support you. And during start-up on site, digital features and our service team will support you.





HP PICK & PLACE MODULES

HP pick & place modules can be used for very fast and precise motion. Short handling times increase the productivity in assembly automation. Thanks to their compact design, the HP modules save space when integrated into process flows.

DR DELTA ROBOTS

The delta robots in the DR series are built for repositioning, packaging, mounting and sorting, making them the ideal choice for pick & place tasks. Above all, the robot solutions from WEISS show their strengths in applications that require high dynamics, repeat accuracy and high loads.



GANTRY SYSTEMS

WEISS combines its linear motor axes to create high-precision gantry systems that are customized to fulfill customer requirements. The applications range from medical technology and life sciences to all areas where metering tasks or high-precision micro assembly processes are required.

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CHANGE IS NOT THE QUESTION. IT IS THE ANSWER. THE FUTURE IS THIS EASY.

We support you personally or digitally with comprehensive services in order to accelerate your progress. Tools such as design software, configurators and ordering wizards simplify your processes - regardless of which phase you are in, be it product design, procurement or operation.



Contact us if you want to learn more about LS Link. the link conveyor system.



