

THE FUTURE IS THIS EASY.

PRECISION LINK CONVEYOR SYSTEM

LS LINK COMPACT.

COST-EFFICIENCY AND PRECISION

LS Link Compact is optimally designed for applications with light workpieces and offers a technically balanced combination of precision, dynamics, and cost-effectiveness – for a stable, reproducible, and efficient production line.

PERFORMANCE, PRECISELY SIZED

LS Link Compact is a servomotor-driven linear precision link conveyor system. It complements the WEISS portfolio of linear transfer systems and strategically fills the gap between high-precision, cost-intensive linear transfer systems, and simpler conveyor solutions available on the market.

DISCOVER MORE PRECISION LINK CONVEYOR SYSTEM

01 INCREASE PRODUCTIVITY

The LS Link Compact is designed for lightweight workpieces and combines precision, dynamics, and cost-effectiveness in a balanced system concept – delivering maximum productivity exactly where it is required.

- ✓ Drive concept consisting of a servomotor, precision cycloidal gear, and a well-engineered profile rail system
- ✓ Repeatability of ± 0.1 mm with an exchange time of up to 0.3 sec. for 200 mm
- ✓ Load capacity up to 1.5 kg in both vertical and horizontal orientations

02 LEVERAGE EFFICIENCY

Optimized for assembly automation: a precise, lightweight, and compact system offering weight and cost advantages over traditional three-part guide systems, while providing sufficient rigidity for light workpieces.

- ✓ Fully preconfigured, wired, and precommissioned system – following the Plug-and-Produce principle
- ✓ Unique profile guide system with direct guidance along the frame
- ✓ Motion transmission via durable, low-maintenance precision roller chain

03 INCREASE FLEXIBILITY

The system is based on a compact precision cycloidal gear coupled with a servomotor. In combination with the base frame, this creates a lightweight, stable, and yet flexible overall construction.

- ✓ Configurable stroke lengths to accommodate various machining or assembly steps
- ✓ Highly rigid base frame with low intrinsic weight. A lightweight, robust foundation for long-lasting and precise processes.
- ✓ Modular length adjustment in increments of one chain link, up to a maximum total length of 8 m

04 ENABLE CONNECTIVITY

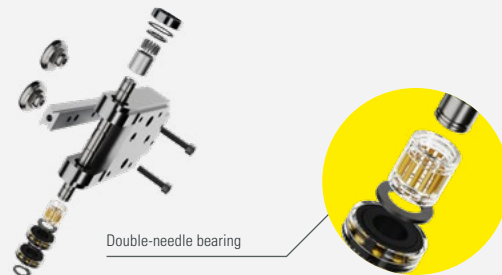
Both in terms of hardware and software, the LS Link Compact precision link conveyor system integrates seamlessly into the overall automated assembly line.

- ✓ Interfaces: EtherCAT, PROFINET, EtherNet/IP, and POWERLINK
- ✓ Simple integration into the overall system
- ✓ LS Link Compact is optionally available with the W.A.S. LS application software



PRECISION IN EVERY CHAIN LINK.

The precision-engineered chain links, combined with high-quality double-needle bearings, ensure consistently accurate and long-lasting positioning of the workpiece carriers in the feed direction. This reliably prevents elongation.



Double-needle bearing

The chain assembly is designed for a lifetime of operation and does not require replacement during its service life, eliminating the need to provide additional accessibility in the design – unlike timing belts or standard industrial chains.

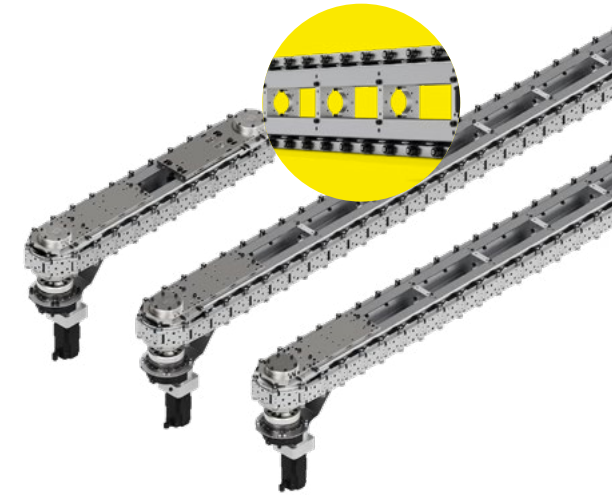
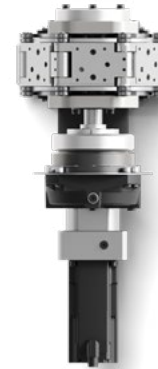
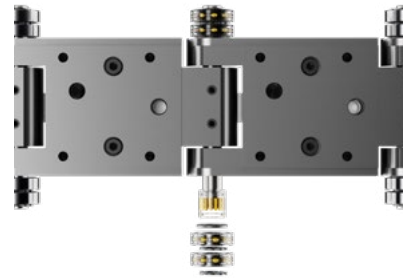
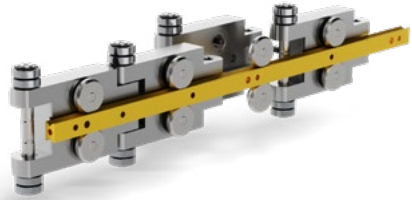
The workpiece carriers are securely and precisely connected to the chain links via a screw-and-pin assembly. Even in crash situations, this connection remains intact, preventing system failure.



PERFORMANCE & COST-EFFECTIVENESS PRECISELY BALANCED.

A SYSTEM CONCEPT CONSISTENTLY DESIGNED FOR EFFICIENCY.

LS Link Compact combines a lightweight, compact design with precise guidance and high process stability. The servo-based precision drive and high-accuracy chain assembly enable flexible strokes, reproducible positioning, and short cycle times. A stiff, modular lightweight frame ensures dynamics and reliable assembly processes.



COMPACT, PRECISE GUIDANCE

The guidance runs directly along the frame via a profile rail, with profile rollers on the chain links guided within it. This purpose-built system is specifically designed for applications with workpiece weights up to 1.5 kg and moderate precision requirements.

BENEFITS

- ✓ Lightweight system, simple setup, conversion, or expansion
- ✓ Less space required and reduced material costs
- ✓ Functionally reliable for workpieces up to 1.5 kg, precise positioning without oversizing

PRECISION IN EVERY CHAIN LINK

The movement of the workpiece carriers is driven by a highly accurate chain assembly. Each chain link is manufactured with tolerances below 5 µm and connected using high-quality double-needle bearings. The workpiece carriers are securely and precisely fastened – even under high process forces or in collision events, their position remains stable.

BENEFITS

- ✓ Slip-free, reproducible feed movement – higher process quality
- ✓ Minimized maintenance – no chain replacement necessary
- ✓ Maximum system uptime – downtime is reduced

PRECISION DRIVE FOR MAX PERFORMANCE

The combination of a precision gearbox and servomotor enables ultrashort cycle times without dead time and flexible feeds – from half a chain link up to any multiple. The lightweight precision gearbox reduces overall weight, increases dynamics, and improves the system's energy efficiency.

BENEFITS

- ✓ Shortest cycle times and maximum production output
- ✓ Flexible adaptation to different processing steps
- ✓ Long-lasting precision and backlash-free transmission throughout its service life

HIGHLY RIGID BASE FRAME

By combining stainless-steel laser-cut sheet metal with aluminum intermediate plates, a frame system is created that is perfectly matched to the low system weight and precision requirements. The aluminum plates define the precise geometry, while the stainless-steel sheets ensure the necessary structural stiffness.

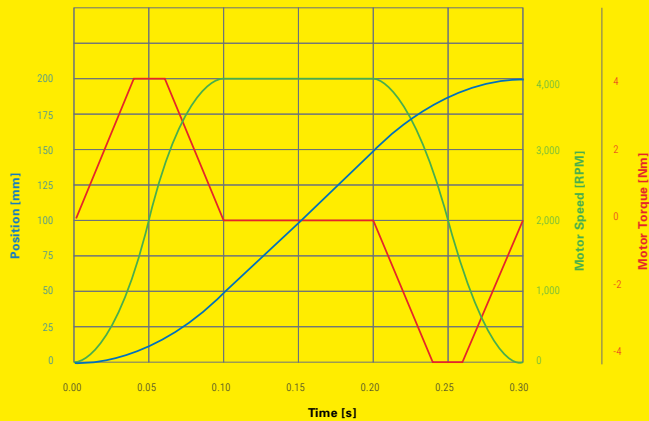
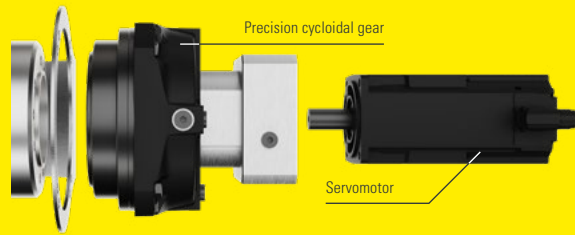
BENEFITS

- ✓ High rigidity combined with economic design
- ✓ Lightweight, robust base for durable and precise processes
- ✓ Easy integration of additional functions and peripherals



PRECISION CYCLOID GEARS PLUS SERVOMOTOR. SHORT CYCLE TIMES. FLEXIBLE STROKE CONTROL.

The drive concept of LS Link Compact enables freely configurable strokes, from half a chain link up to any multiple. Different stroke lengths within a process can be implemented purely through parameter settings – without any mechanical modifications. This allows high cycle performance with consistently backlash-free, precise positioning throughout the entire service life.

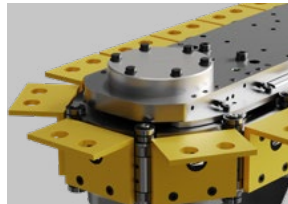


Optimized drive system design: Application-specific validated servomotor system, designed based on application data, enables highly dynamic movements with maximum precision and minimal residual vibration.

UNRIVALED PORTFOLIO. EXCEPTIONALLY UNIQUE.

WEISS provides five linear transfer systems with five different drive types – as fully preconfigured, preparameterized, and commissioned complete solutions. This saves machine builders and plant operators time and resources in design and commissioning. All systems are modular and can be easily integrated into the overall assembly line.

SPECIFICATIONS	LS LINK COMPACT	LS LINK	LS 280	LS ONE	LS HYBRID
Repeatability	± 0.1 mm	± 0.05 mm	± 0.03 mm	± 0.03 mm	± 0.02 mm
Max. Load	1.5 kg	50 kg	4 kg	5 kg	10 kg
Strokes (exchange time)	0.3 sec.	0.2 sec.	0.4–1.2 sec.	–	0.25–0.9 sec.
Process forces	50 N	1,000 N	300 N	300 N	1,000 N



FREELY PROGRAMMABLE
LINK CONVEYOR SYSTEM
LS LINK COMPACT



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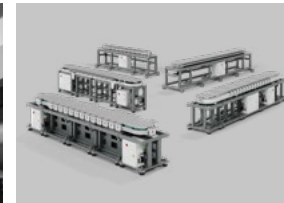
FIXED-CYCLE
LINEAR TRANSFER SYSTEM
LS 280



DIRECT DRIVE
LINEAR TRANSFER SYSTEM
LS ONE



HYBRID DRIVEN
LINEAR TRANSFER SYSTEM
LS HYBRID



UNRIVALED PORTFOLIO.
EXCEPTIONALLY UNIQUE.
LS RANGE

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.

- ✓ CONSULTING
- ✓ PROCUREMENT
- ✓ DESIGN
- ✓ SIMULATION

Contact us if you want to learn more about Linear Transfer Systems from WEISS.



CAD CONFIGURATOR
USE OUR SERVICES
NOW TO CREATE YOUR
CUSTOM DESIGN.

