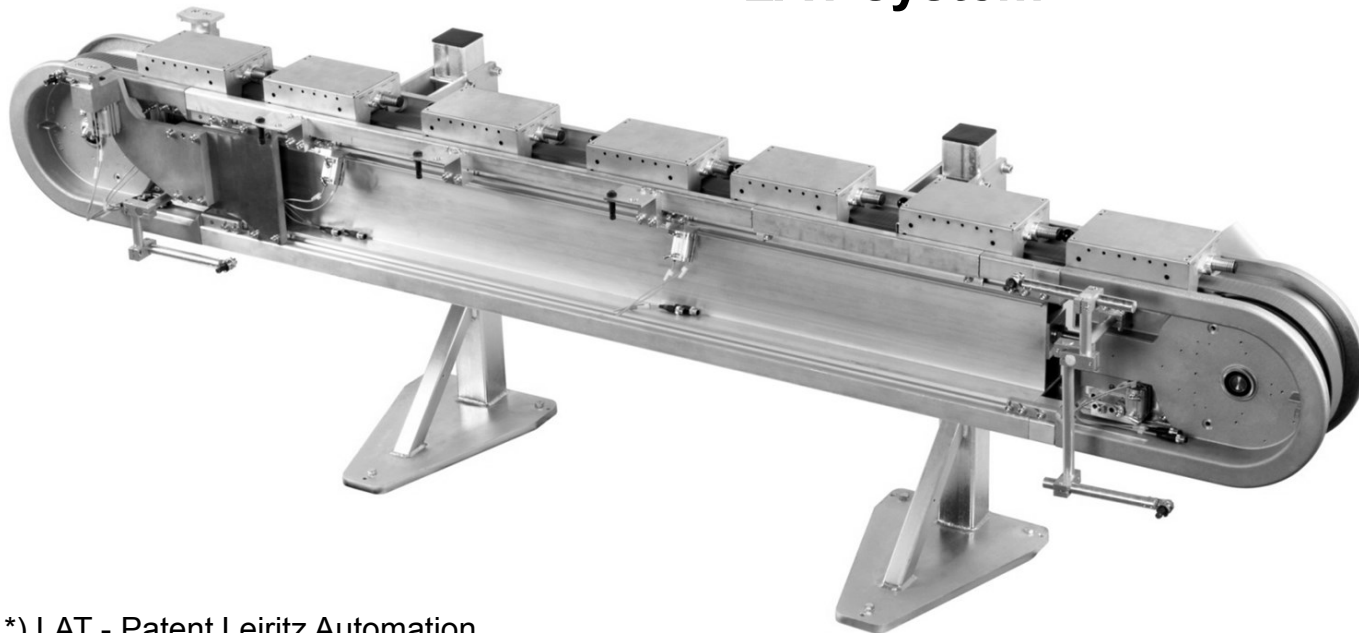


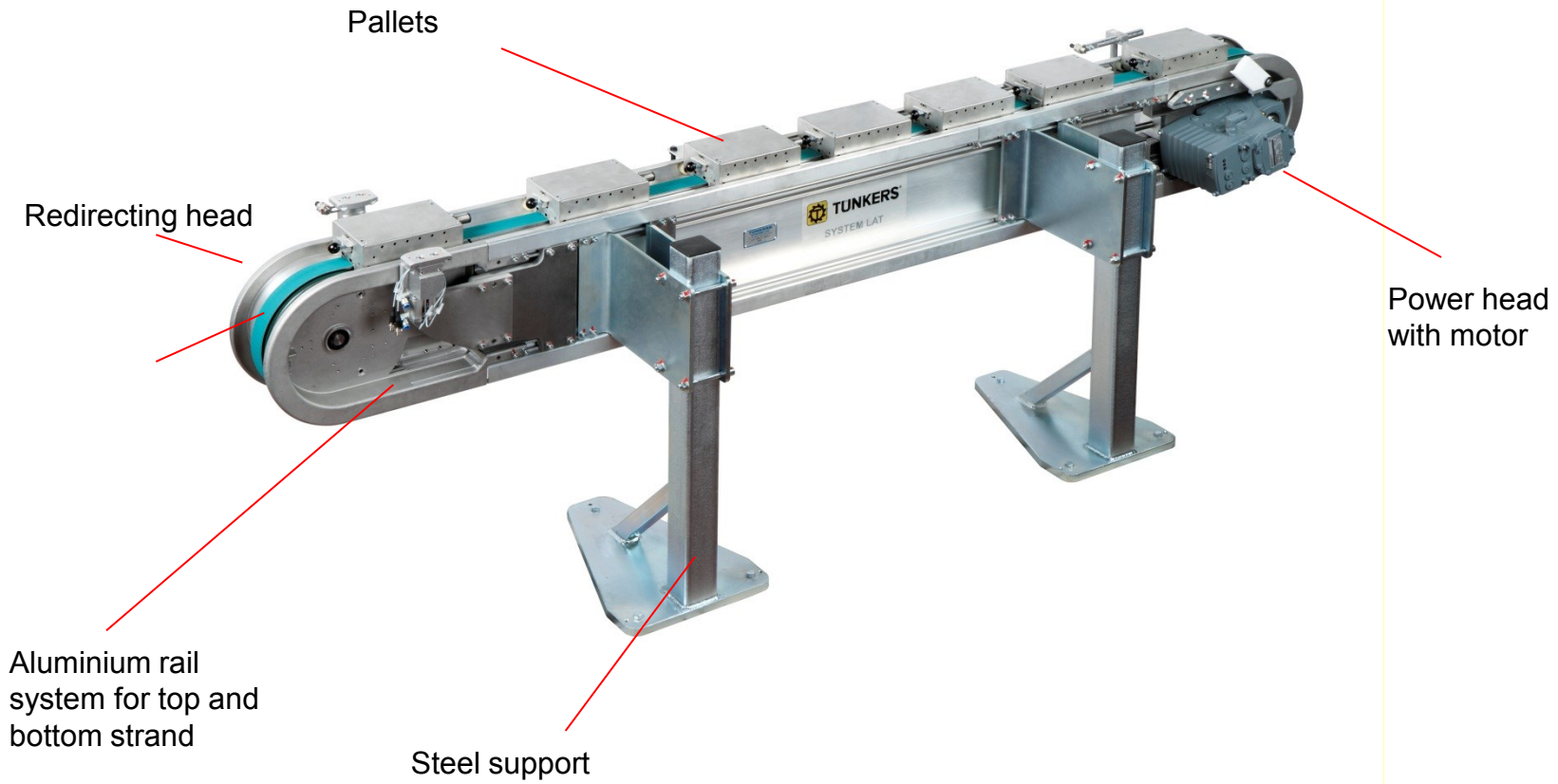
# Pallet accumulating belt conveyor system LFS\*

LAT system



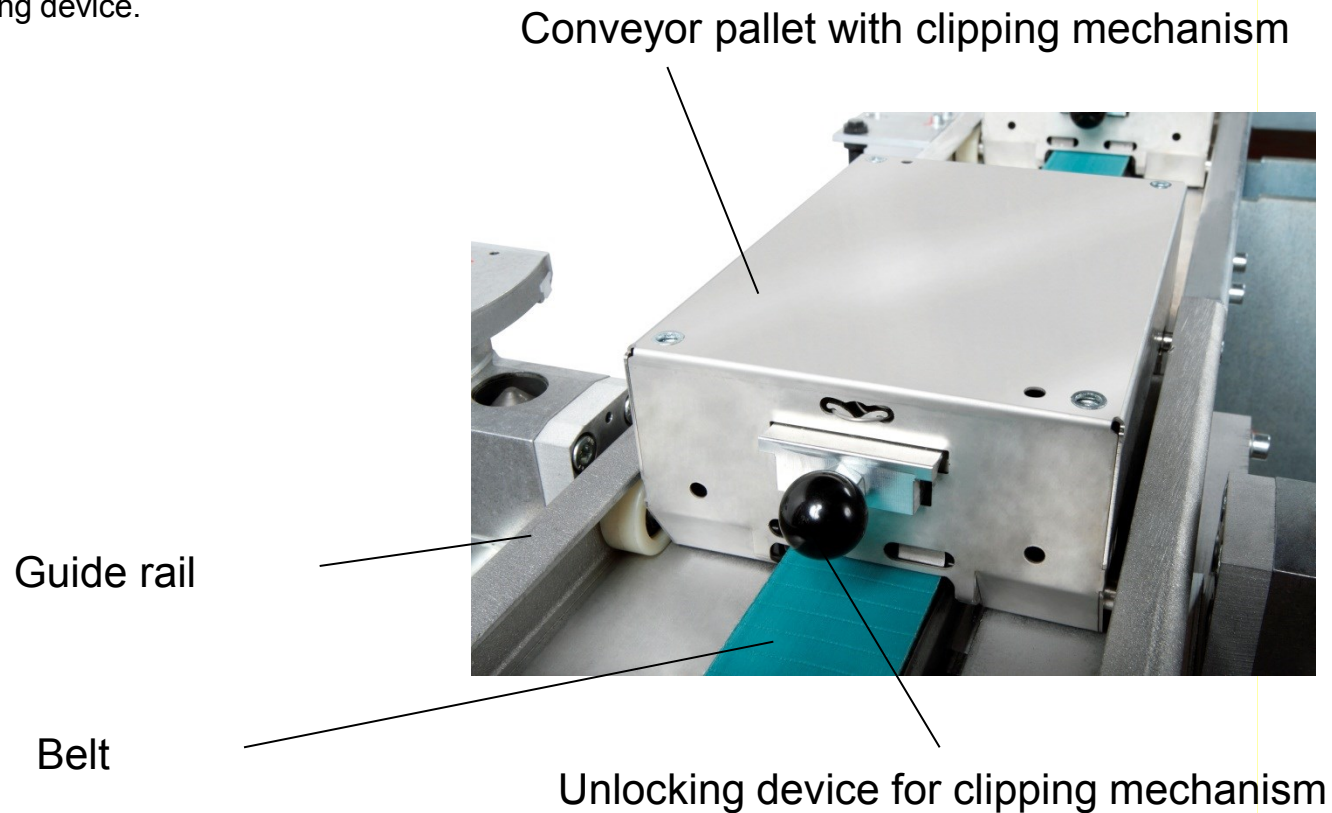
\*) LAT - Patent Leiritz Automation

In this conveyor system, the pallets are conveyed by a belt instead of a chain.

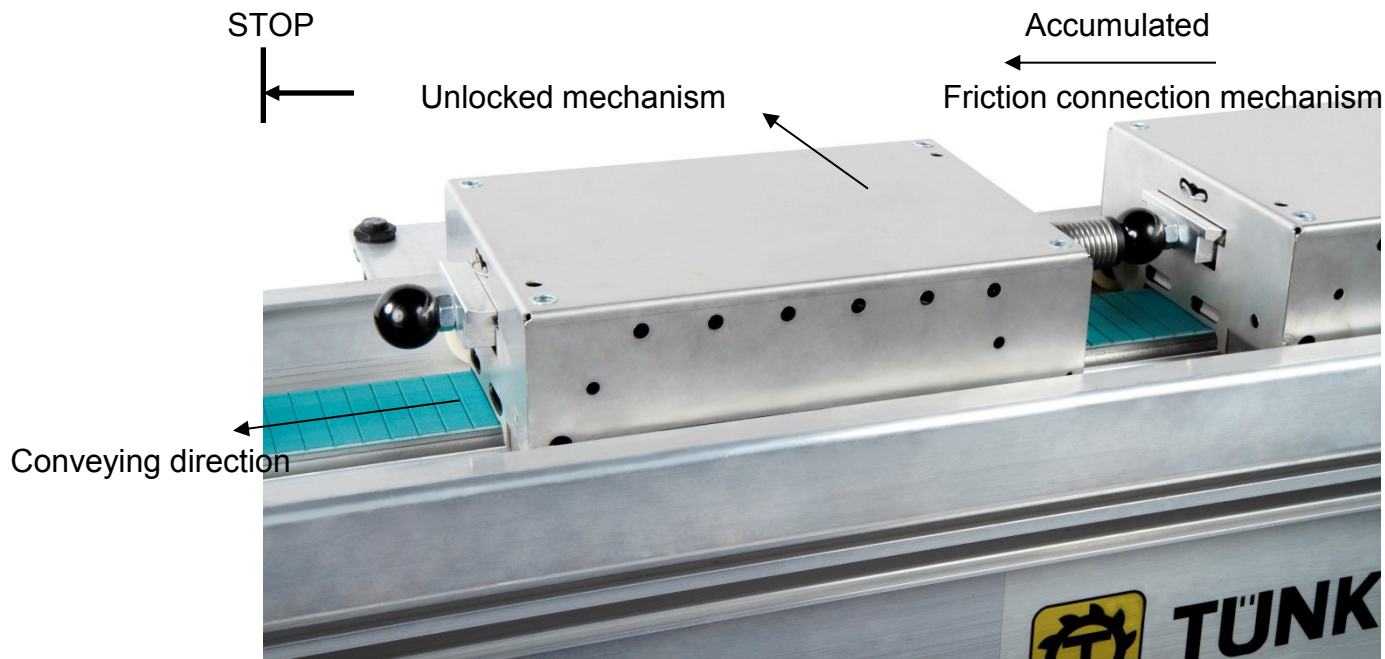


Principle of operation:

- The pallet is clipped to the belt by a prestressed mechanism.
- Frictional connection instead of form closure.
- The clipping mechanism is released by the unlocking device.



- When pallets are accumulated, the clipping mechanism of the front pallet is unlocked. Only the last of the accumulated pallets has a frictional connection to the conveyor belt.
- The motor output must be specified to the frictional power of one pallet only even if several pallets have been accumulated.

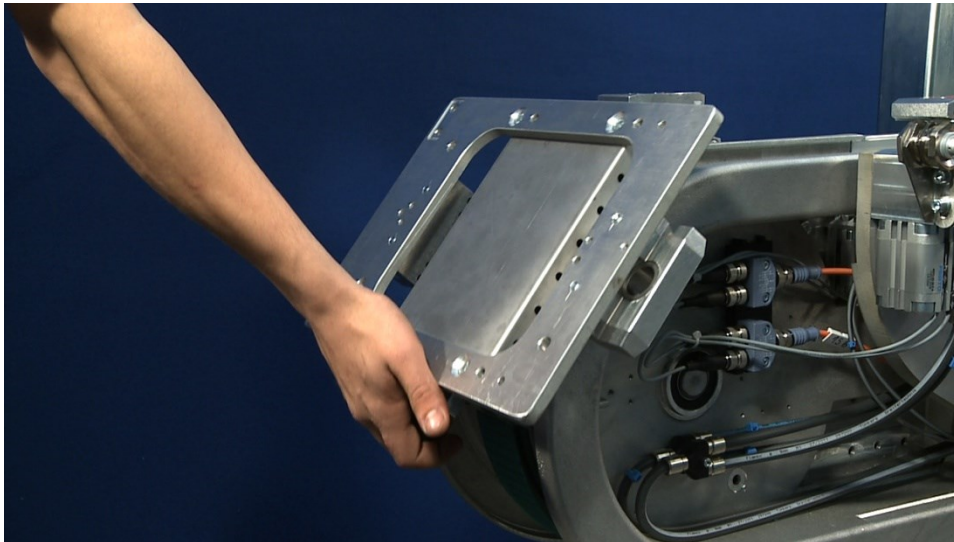


The pallet is lifted by two ISO standard cylinders which secure the final position in x-y-z.

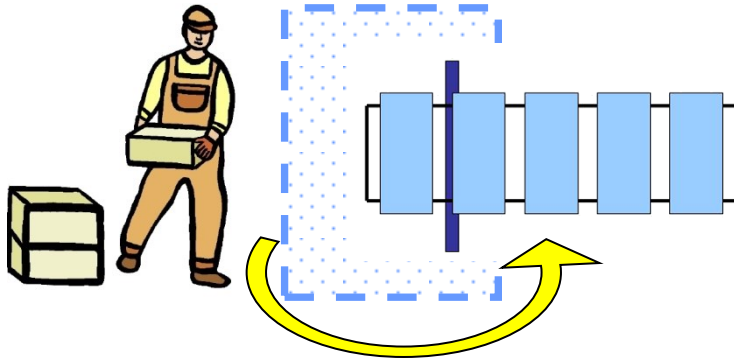


# Benefit: Standard worker protection thanks to belt principle

- In contrast to conventional conveyor systems, pallets are conveyed by a belt ⇒ frictional connection instead of form closure
- During directional change, the frictional connection is precisely adjusted to the weight of the pallet and work piece carrier.
- This means that the pallet may be stopped by the worker in any position.
- No need for special protective measures such as housing, light grids or safety mats.

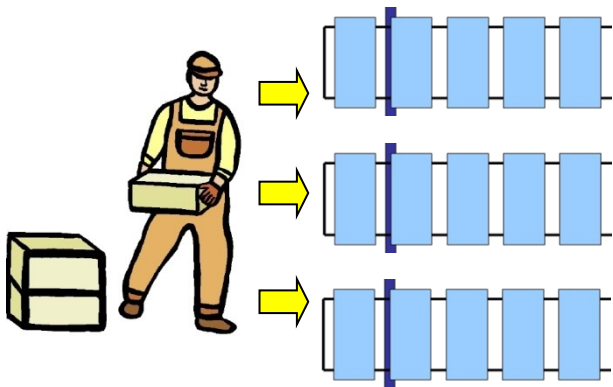


- Loading from the side



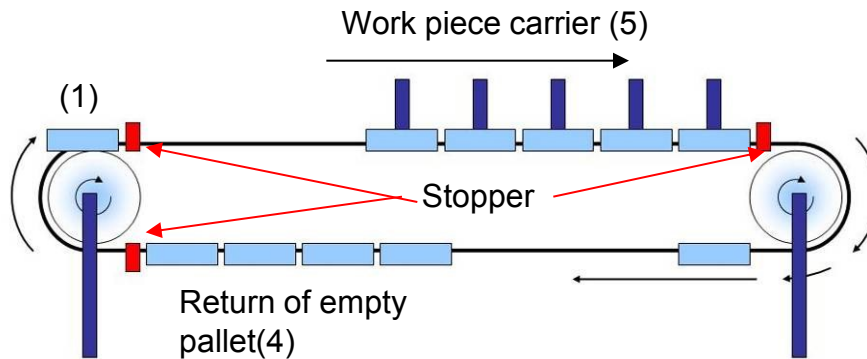
Necessary for conventional accumulating belt conveyor systems, requiring a lot of space and thus reducing the conveyor length

- Loading from the front



When using the TUNKERS belt conveyor with space-saving battery arrangement

- **Conventional accumulating belt conveyor: energy eaters!**  
Each pallet has its own friction.  
The motor power must be specified according to the total of pallet frictions accumulated in front of the stops.



- With the TÜNKERS belt conveyor, the pallets are conveyed mechanically by the belt with only one pallet per stop remaining in friction connection

- Motor output specified for  
= 1 + 5 + 4 pallets  
= 10 frictions
- Accumulation length limited to about 10 pallets
- Motor output specified for 3 pallets  
(ca. 150 N = Watt)
- No limitation of accumulation length



- Worker protection provided in every position as there is no form closure between the powertrain and the pallet.
- Loading and unloading from the front.
- No protective housing or specific worker safety devices required.
- Space-saving arrangement of the conveyor systems loaded from the front.
- Little space required.
- Low, constant power consumption of the motor, as it is always one pallet that is in frictional connection with the conveyor belt

# Application example 1

## Multi-strand system loaded from the front



LFS-LAT conveying system

# Application example 2

## Conveying pallets with rows of three



LFS-LAT conveying system

# Application example 3

## System with pallets arranged laterally



LFS-LAT conveying system

# Application example 4

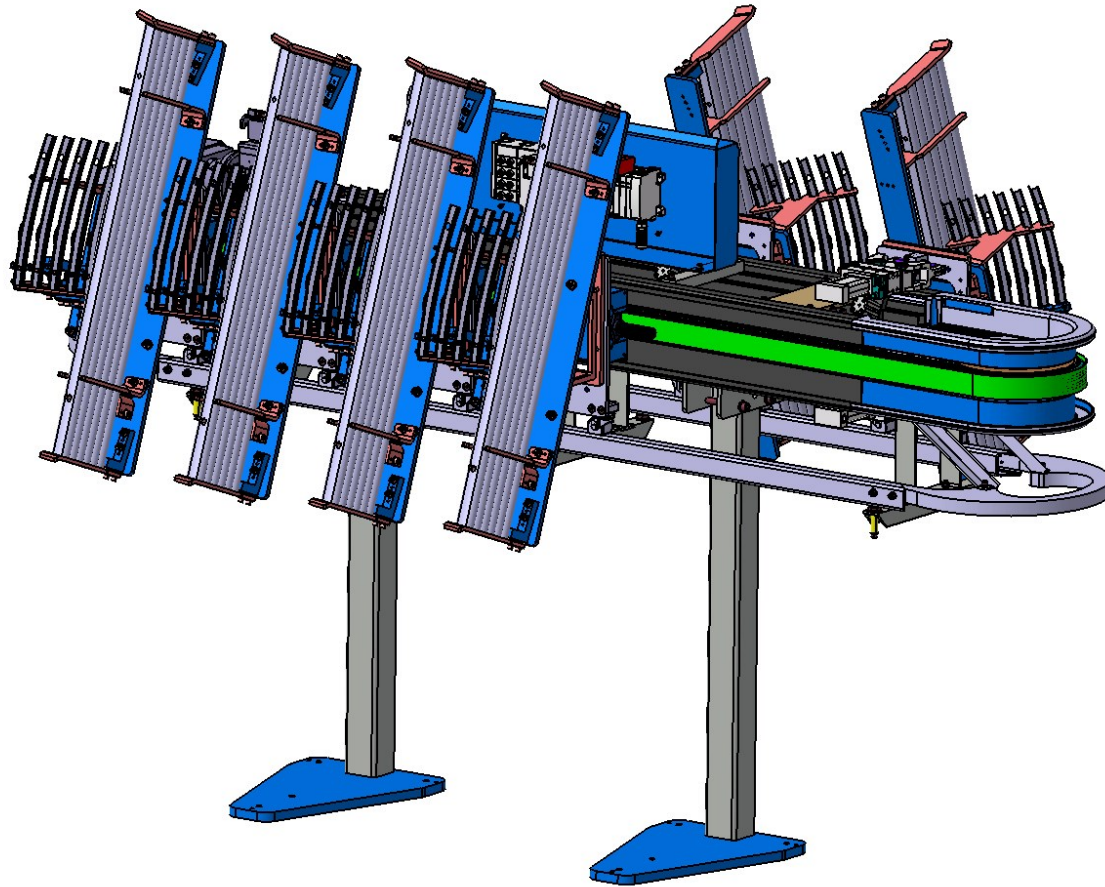
## Conveying of stacking column systems for several pieces



LFS-LAT conveying system

# Application example 5

## System with pallets arranged laterally



# Application example 6

## Front-end loading with lateral support



LFS-LAT conveying system

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