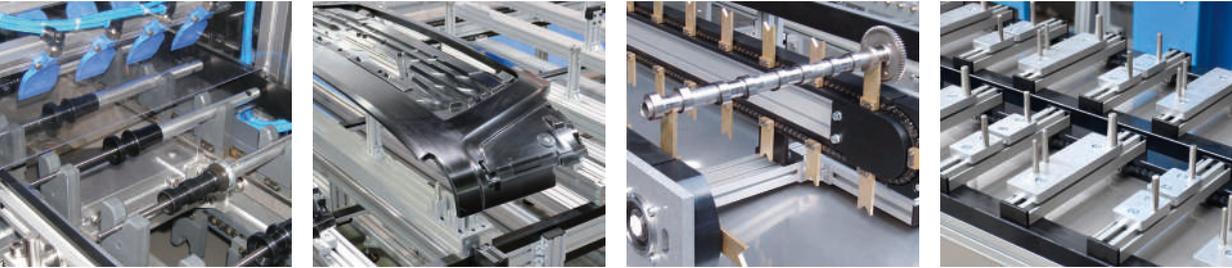
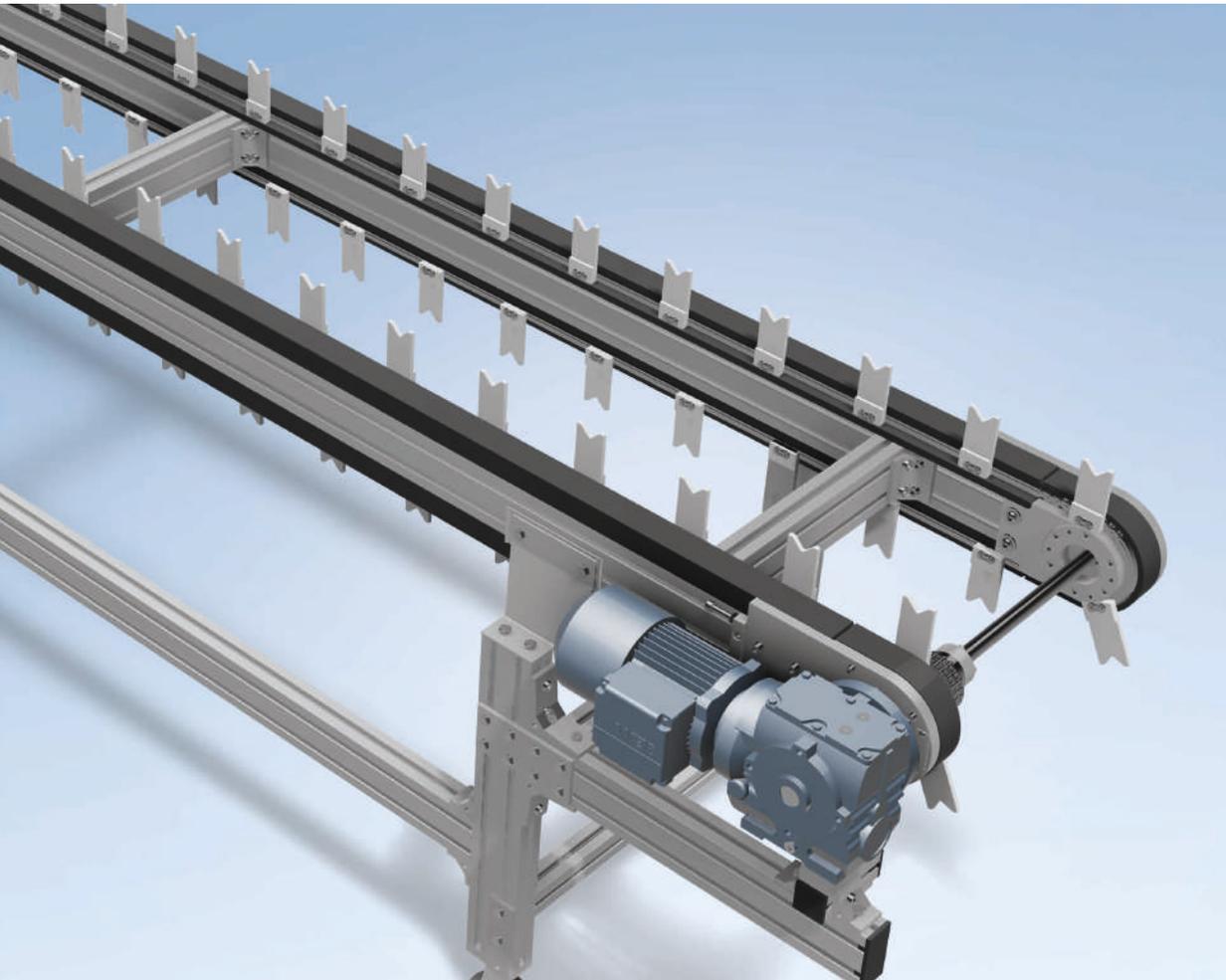




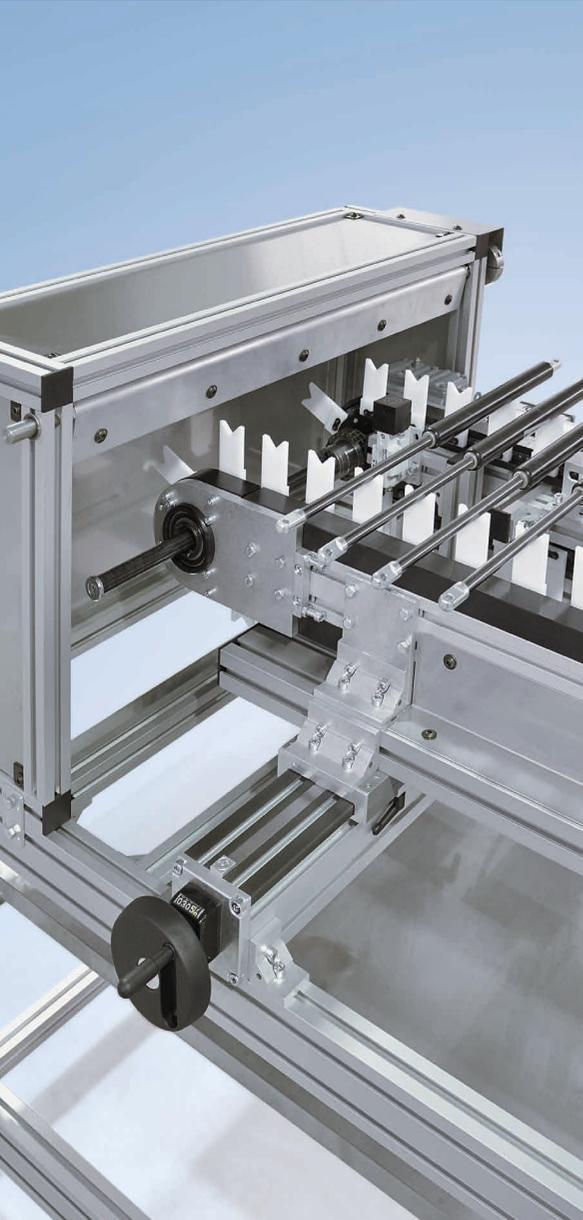
Indexing Chain Conveyor System TKU 2040



Supply. Interlinking. Fixed-cycle operation.



Indexing Chain Conveyor System TKU 2040



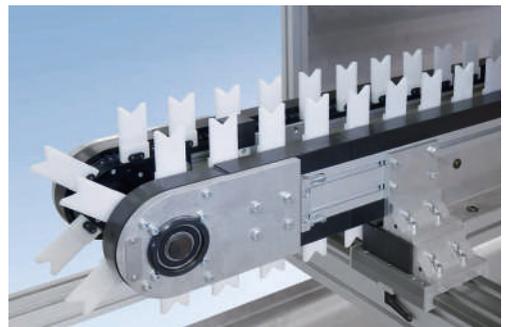
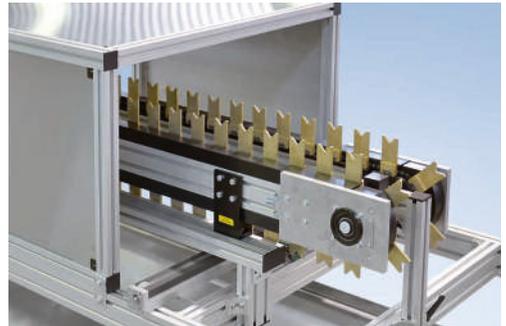
» Interlinking
Machining Centres. «

The TKU 2040 chain conveyor system is especially well suited for cycled, defined and position-oriented supply and removal as well as for interlinking machines and machining centres. The system's timing can be individually configured to a fixed cycle. The system can be used in the machine tool and plastics industries, throughout the automotive sector and in many other industries.

The TKU 2040 is based on the mk profile system and is modularly constructed, compact, flexible and extremely robust. It is constructed from a timing chain conveyor with 2 roller chains, which permits a total load of up to 700 kg. The conveyor frame consists of two profile sections with gliding assemblies for the chain and the workpiece fixtures. It is available in designs with a predefined width or with an adjustable width. The width adjustment mechanism allows you to transfer workpieces of various sizes.

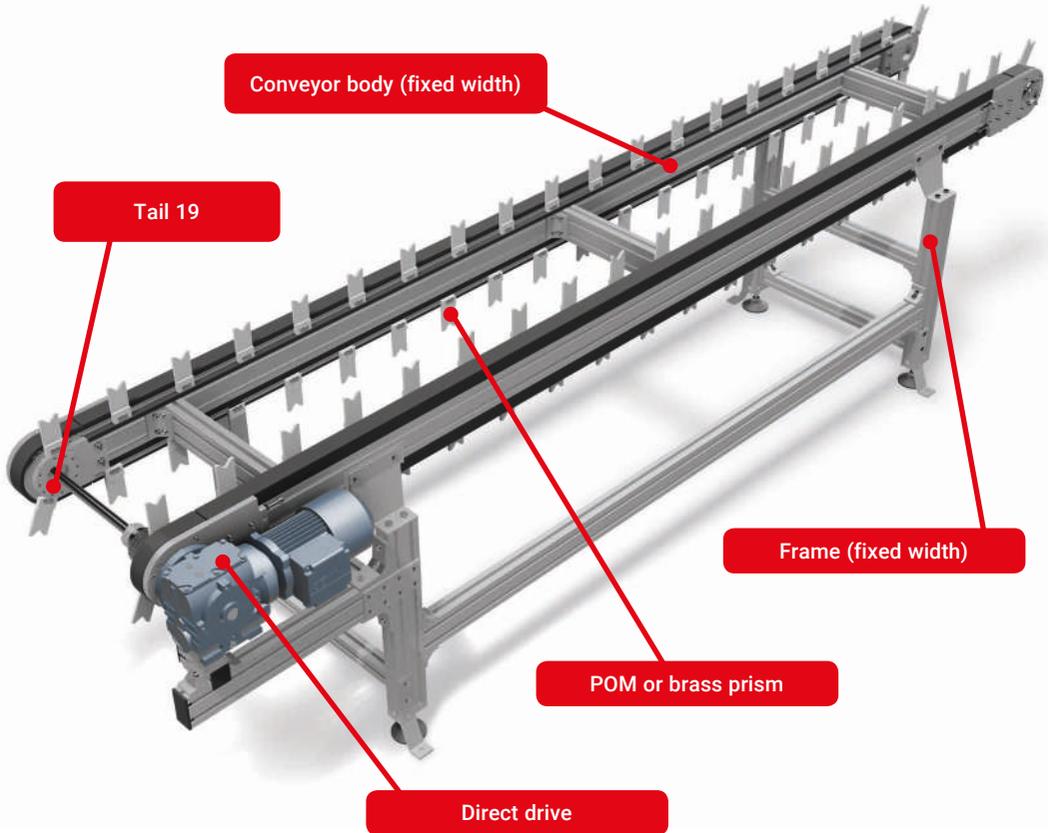
Benefits of the TKU 2040

- Cost-efficiently interlink machining stations
- Sturdy system has a load capacity of up to 700 kg
- Loads of up to 6/10 kg (prism) and up to 20 kg (profile workpiece carrier) per workpiece
- Compact construction
- Flexible modular design
- Widths between 195 mm and 1500 mm on adjustable models
- Sturdy construction means low maintenance and wear
- Conveyor speed up to 18 m/min
- Repeatability of ± 1 mm possible



Versions

Fixed width



Adjustable width



Technical data

Conveyor length L Tail end to end	1000 to 8000 mm
Conveyor width W Outside edge of conveyor body	195 to 1500 mm
Height H Top edge of conveyor body	variable, by request
Distance between prisms	2" to 20" (50.8 to 508 mm) in 1" steps
Drive location	discharge end, left/right
Drive and speed	2 to 18 m/min depending on cycle
Load capacity	max. 20 kg/workpiece max. 700 kg/conveyor

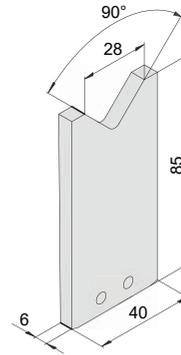
Modules



Prisms/pallets

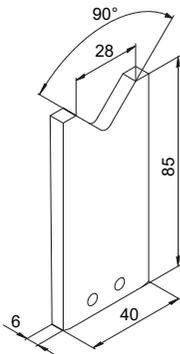
POM prism

- Ideal for round workpieces
- POM construction
- Transports workpieces without damaging them
- Permits loads up to 6 kg/workpiece



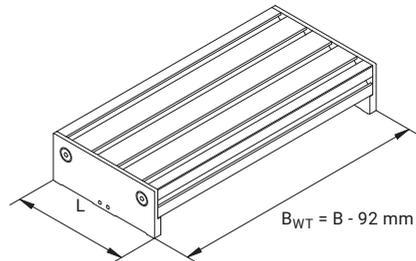
Brass prism

- Ideal for round workpieces
- Brass construction
- High strength and heat resistance
- Permits loads up to 10 kg/workpiece



Profile pallet (WT)

The profile pallet, which is constructed from profiles from the 40 series with 10 mm grooves, is available in variable widths (within the limits of the system) and supports loads of up to 20 kg. The profile pallet can be used only with fixed-width conveyors.



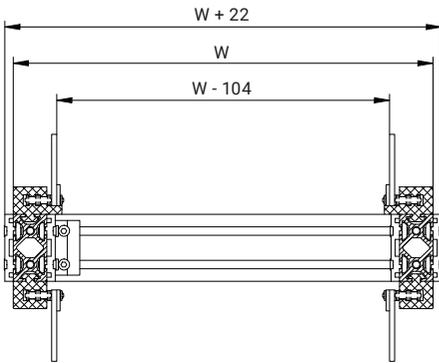
Name	Grooves	Length L (mm)
WT 80	2	80
WT 120	3	120
WT 160	4	160

Modules

Conveyor body

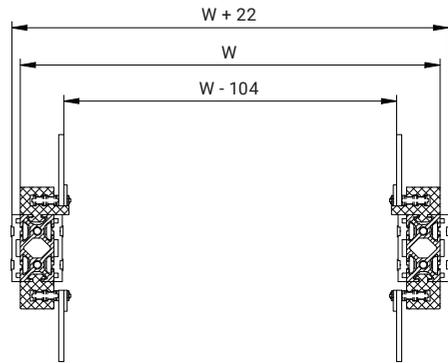
The conveyor body consists of two profile sections with gliding assemblies for the chain with the attached workpiece fixtures.

Conveyor body – fixed width



This conveyor body has perpendicular traverses that give the conveyor body high intrinsic stability. It can therefore be integrated into a lighter stand system.

Conveyor body – adjustable width



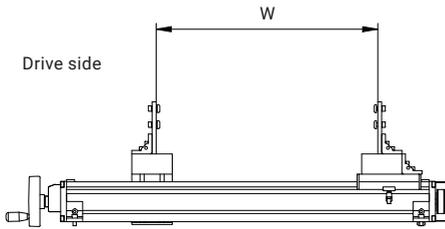
This conveyor body is installed in a width adjustment mechanism designed specially for the system, which is fixed in place on a support frame.



Adjustment units

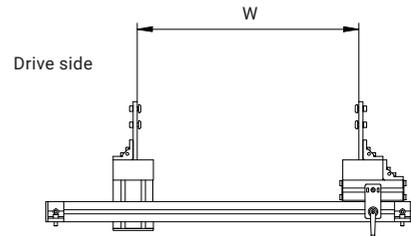
On adjustable models, adjustment units are used to change the conveyor width. This allows the conveyor to accept workpieces of different sizes. The width adjustment range depends on the limits of the system.

Semi-automatic adjustment unit

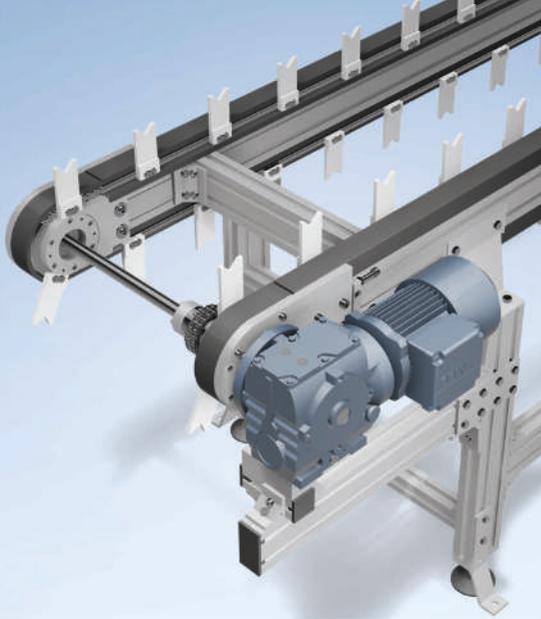


You can adjust the position of the non-driven chain by turning the handwheel, which lets you conveniently vary the distance between the chains. A digital gauge shows the displacement.

Manual adjustment unit



You can manually adjust the non-driven chain by loosening the clamping handles on both gliding assemblies, which lets you conveniently vary the distance between the chains. A dial indicator shows the displacement.

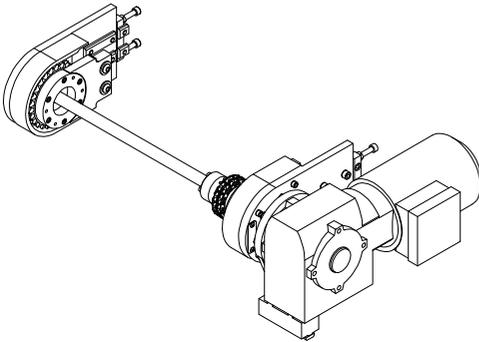


Modules

Drive

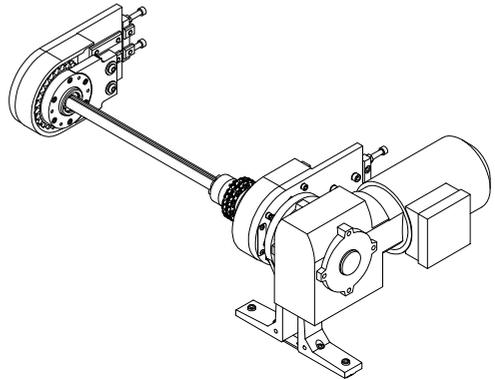
A direct drive is used as the drive. It is particularly compact, exhibits low backlash and requires little maintenance. This drive is particularly well suited for fixed-cycle operation because the motor is connected directly to the application. The motor is positioned outside the conveyor body so that there are no obstructing edges that would block travelling prisms or profile pallets.

AF direct drive – fixed width

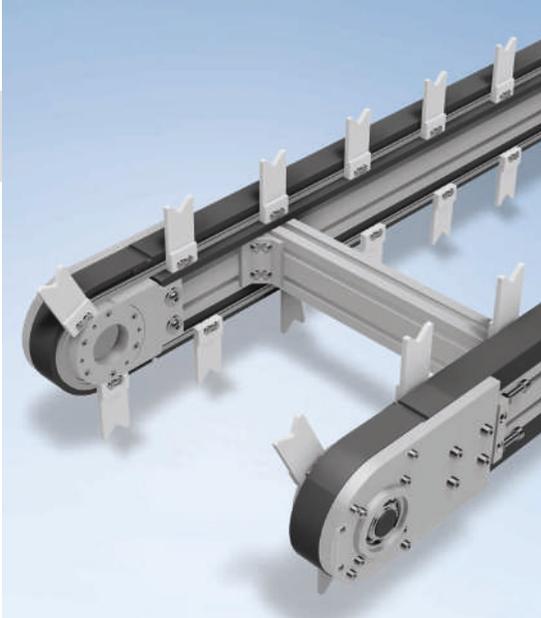


The drive is dimensioned according to the specified conveyor width. The torque arm has a bracket for attachment to a lighter stand system.

AF direct drive – adjustable width



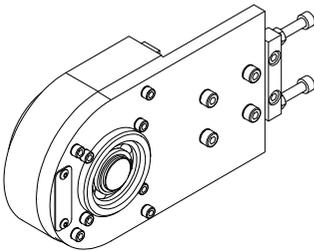
The adjustable drive has a special shaft with a ball bushing that lets you easily adjust the width. The motor's torque arm has a bracket for attachment to a sturdy base frame.



Tails

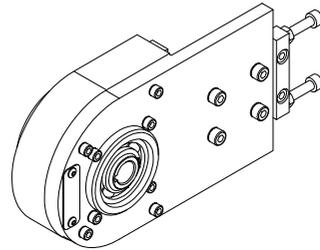
The tail contains sprockets that reliably move the transport chain. Tensioning units in the tails let you adjust the chain tension as necessary.

Tail 01



Tail 01 is the standard tail in the TKU 2040 system. It can be used in conveyors with both fixed and adjustable widths.

Tail 19



Tail 19 has the same design as tail 01. However, it is equipped with a $\varnothing 20H7$ hollow shaft that can be attached to an insert shaft with a feather key for coupling drives or for connecting a rotary encoder. It can be used in conveyors with both fixed and adjustable widths.

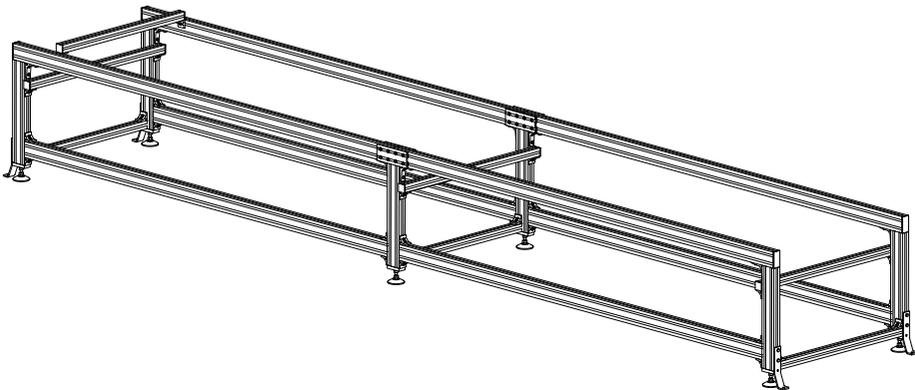


Modules

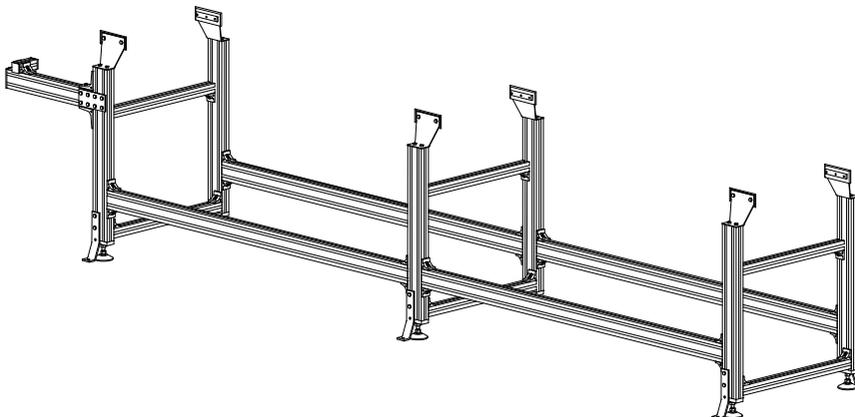
Frame

The base frame ensures that the system is stable and secure, and it can be ordered in various working heights. The frame is also available with optional panelling (sheet metal or Makrolon) or as a mobile version with castors.

Frame – adjustable width



Frame – fixed width



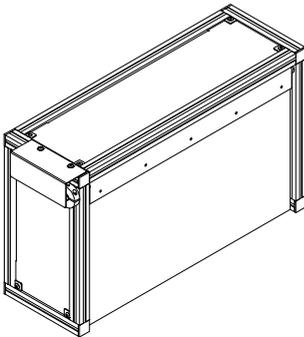
Accessories



Protective device guard

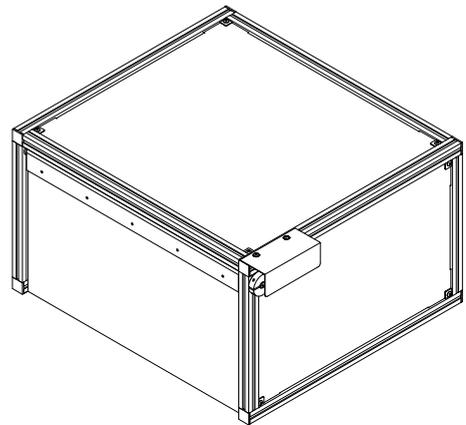
The protective device guard prevents anyone from reaching into the system during operation and reduces the risk of injury. The rotary lock is triggered when moved and stops the entire system. It is adapted to the contours of the particular product so that the product itself does not trigger the lock.

Protective device guard for drive/tail



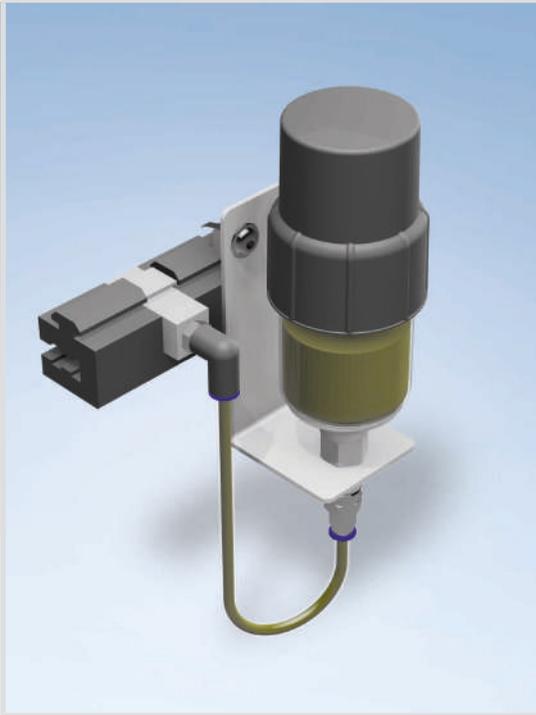
Individually designed protective device guard for the infeed and/or discharge end, adapted to the particular conveyor system, the local environmental conditions and the contours of the product to be transported.

Protective device guard for track



Individually designed protective device guard for the track area, adapted to the particular conveyor system, the local environmental conditions and the contours of the product to be transported.

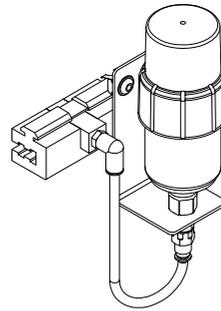
Accessories



Lubrication station

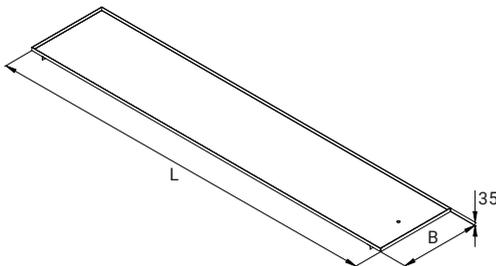
Installing the optional lubrication station means that you do not have to manually oil the chain.

It can be retrofitted into existing systems. A decentralised design with cartridges and a battery-powered drive is also available, as is a central lubrication station that is controlled by pulses from a PLC.



Drip pan

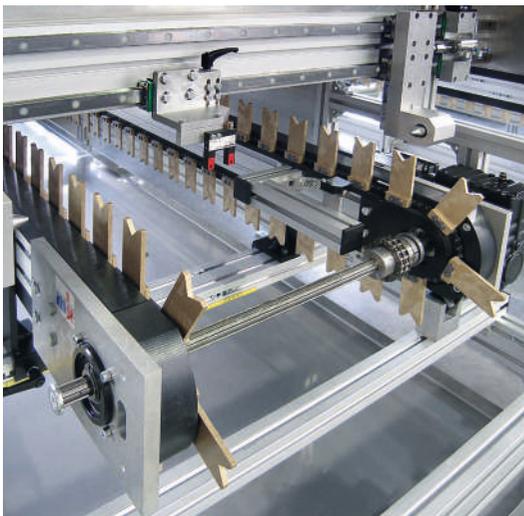
The drip pan is made of stainless steel. It is individually designed according to the particular conveyor system, the local environmental conditions and the contours of the product to be transported. It is equipped with a drain nozzle with an R 3/4 thread that can be connected to the drain lines. Typical applications include conveying products that are lightly coated in oil.



Sample applications



TKU 2040 with special adjustment unit for adjusting the distance between the chains



TKU 2040 with a manually adjustable chain and a lifting/turning unit



TKU 2040 for transporting camshafts with a spiraled cover as a protective guard on the connecting shaft

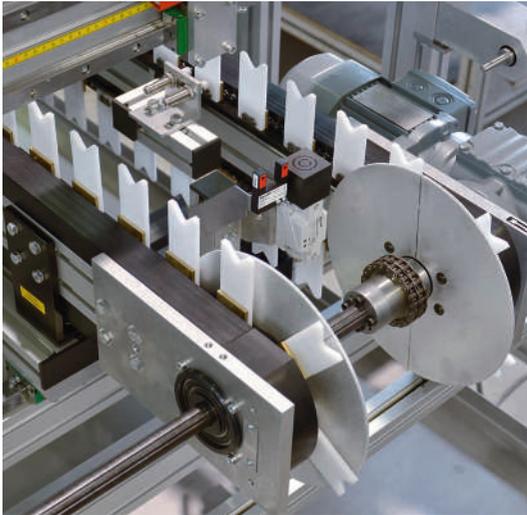
Sample applications



Double-conveyor system with order-specific profile pallets and fixtures



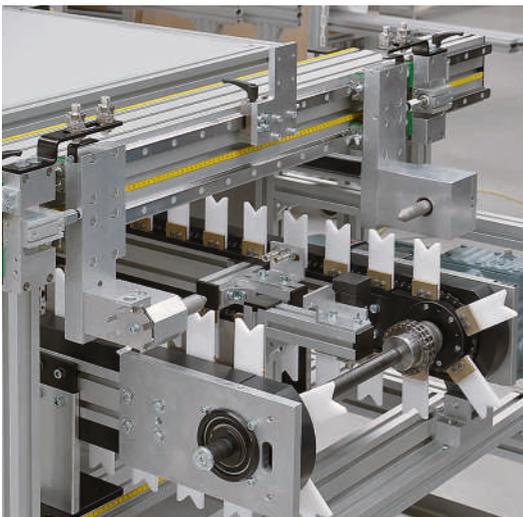
TKU 2040 with extractor unit and conveyor for rejected pieces



TKU 2040 with protective guard around the drive



TKU 2040 with custom workpiece fixtures and centring elements for the automotive industry



TKU 2040 for transporting camshafts with positioning sensors



Customer-specific TKU 2040 with 20° inclination and transport of workpieces through a cleansing bath



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