PLATE CHAIN CONVEYOR SYSTEMS
The modular, rugged and cost-effective interlinking solution for conveyance & assembly

- Flexible transport system for process-oriented interlinking of manual workstations, automatic assembly and testing stations as well as machine tools

- The modular and rugged interlinking solution for conveying, storing, positioning as well as the infeed and outfeed of workpieces and workpiece carriers (WPC) for lines with limited space and minimal control installations
Flexible

Our ALTRATEC chain conveyor systems are based on standardized mechanical modules, that can also be combined with other ALTRATEC conveyor systems to create customized transport systems.

Cost-effective

Since many modules are used across the entire spectrum of the ALTRATEC conveyor systems, we are able to offer appropriate and affordable solutions for every application.

Durable

The proven designs of ALTRATEC conveyor systems have been developed for use in a wide variety of industrial environments and have proven their durability in many applications.

Low-maintenance

All conveyors can be equipped with automatic chain tensioning and lubrication systems.

Thanks to its tight curve radiuses, it is possible to store a large quantity of workpieces / workpiece carriers within a very small area. With almost any angle possible for the reversals, the system can be optimally adapted to existing conditions on site.
Transport media: Plate chains with hardened steel plates in 50 or 80 width
Conveying speeds: up to max. 12 m/min
Workpiece carrier dimensions: L x B = 150 x 120 ... 800 x 600 (other dimensions available upon request)
Workpiece dimensions for transport without WP carrier: Width of up to 40 mm / 74 mm
WP carrier weight including workpiece: up to max. 15 kg (50 mm chain width) up to max. 50 kg (80 mm chain width)
Positioning accuracy of WP carrier: +/- 0.15 mm
Workpiece carrier switchover times: > 6 sec (depending on workpiece carrier dimensions & weight)

**Design of conveyor systems**

The carrier profile of PCC 50 and PCC 80 plate chain conveyors is based on ALTRATEC's aluminium profile system W x H = 70 x 50. It serves as a base element for setting up ALTRATEC transfer systems and is thus integrated with its slot system in the ALTRATEC aluminum profile program. The conveyor chains are guided in rails constructed of high-polymer, conductive plastic.
Module examples

Drive and reversing modules are available for delivery with radiiuses of 97.5 and 128 for both chain widths.

Switch modules are used for connecting individual circuits and thus for setting up complex topologies. The running direction of WP carriers/ parts can be influenced by using a moving switch blade, if necessary.

To facilitate an exact positioning or accommodate machining forces, the workpiece carriers can be pneumatically released and clamped. Extension units are used to increase the circuits if the boundary load of a chain circulating section is reached.
System examples

ALTRATEC plate chain conveyors can be used for set up very extensive interlinking systems thanks to the combination of various modules. And they can also be used to install very compact solutions, especially for loading machine tools.

The workpiece carriers are very flexible and can be adapted to the parts being conveyed.

If necessary, drip trays can also be integrated in the ALTRATEC profile support frames.

All danger zones existing between moving parts are safely covered at manual workstations.

The ALTRATEC conveyor systems can easily be extended at any time by adding workstation equipment based on consistent use of ALTRATEC aluminum profiles with a wide variety of existing profile accessories.
System examples

With ALTRATEC plate chain conveyors, suitable parts can be directly transported on the chain without using any workpiece carrier.

Pick-up elements which are designed for round parts and can thus be equipped with corresponding fixtures to suite a wide variety of parts are used for handling axially symmetrical parts with the aid of a compact workpiece carrier solution. High buffer densities are possible with such parts carriers.