

Frame processing



A company of the HOMAG Group



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TORWEGGE – your system supplier for the frame sector

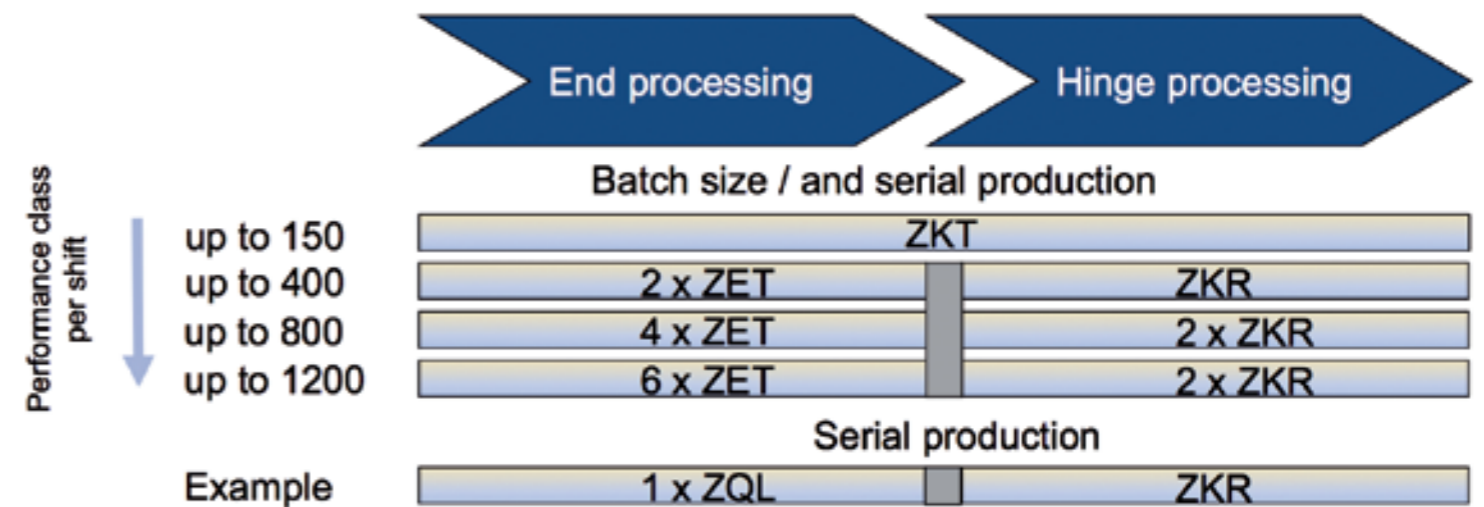
In the process chain for machining jamb and closed frames TORWEGGE offers customized and standard solutions for processing frame ends as well as fittings – from stand-alone versions up to completely automated machinery lines for a large variety of performance classes.

Equipped with modern control technology and a high level of automation depending on the production requirements, TORWEGGE machines and plants economically and precisely execute the required tasks. The process chain includes the complete machining of different frame types, that means all process steps are carried out in such a line, including frame assembly, cutting, frame end and hinge processing as well as rubber seal feeding and and hinge assembly.

Below you see the process chain of the TORWEGGE solutions for processing frame ends and fittings. Starting from individual machines for complete processing to fully automated machinery lines for high capacities with just-in-time production.



Frame processing line



TORWEGGE – your system supplier for the frame sector

For the frame processing TORWEGGE supplies individual machine concepts exactly designed for your demands. Our machines offer a comprehensive range of customized performances and functions for jamb and closed frames. More and more flexibility is required today – TORWEGGE provides this flexibility by tailor-made solutions within the scope of the complete process chain. Moreover, the customer benefits from the perfect consultation and support by specialists of the door and frame industry, from planning to handover. For the customer this means high quality standards and economic, individual solutions from just-in-time to serial production.

Process steps for end processing:

- Mitre cut/straight cut
- Connecting bore
- Plug hinge bore
- Clamping groove cut
- Lamello groove cut
- ...

Process steps for hinge and lock plate processing:

- Cutting lock plates
- Drilling and cutting drill-in hinges, book hinges and hidden hinges
- ...



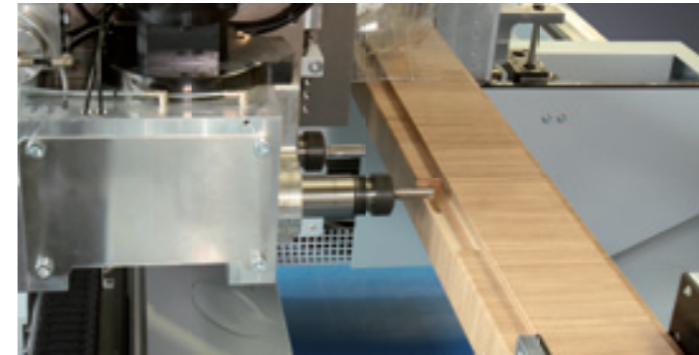
Different versions of end processing at jamb and closed frames

Top picture: Book lock plate
Bottom picture: Book hinge

Top picture: Inlet striker plate
Bottom picture: Hidden hinge

ZKT 300 – Frame processing for highest demands

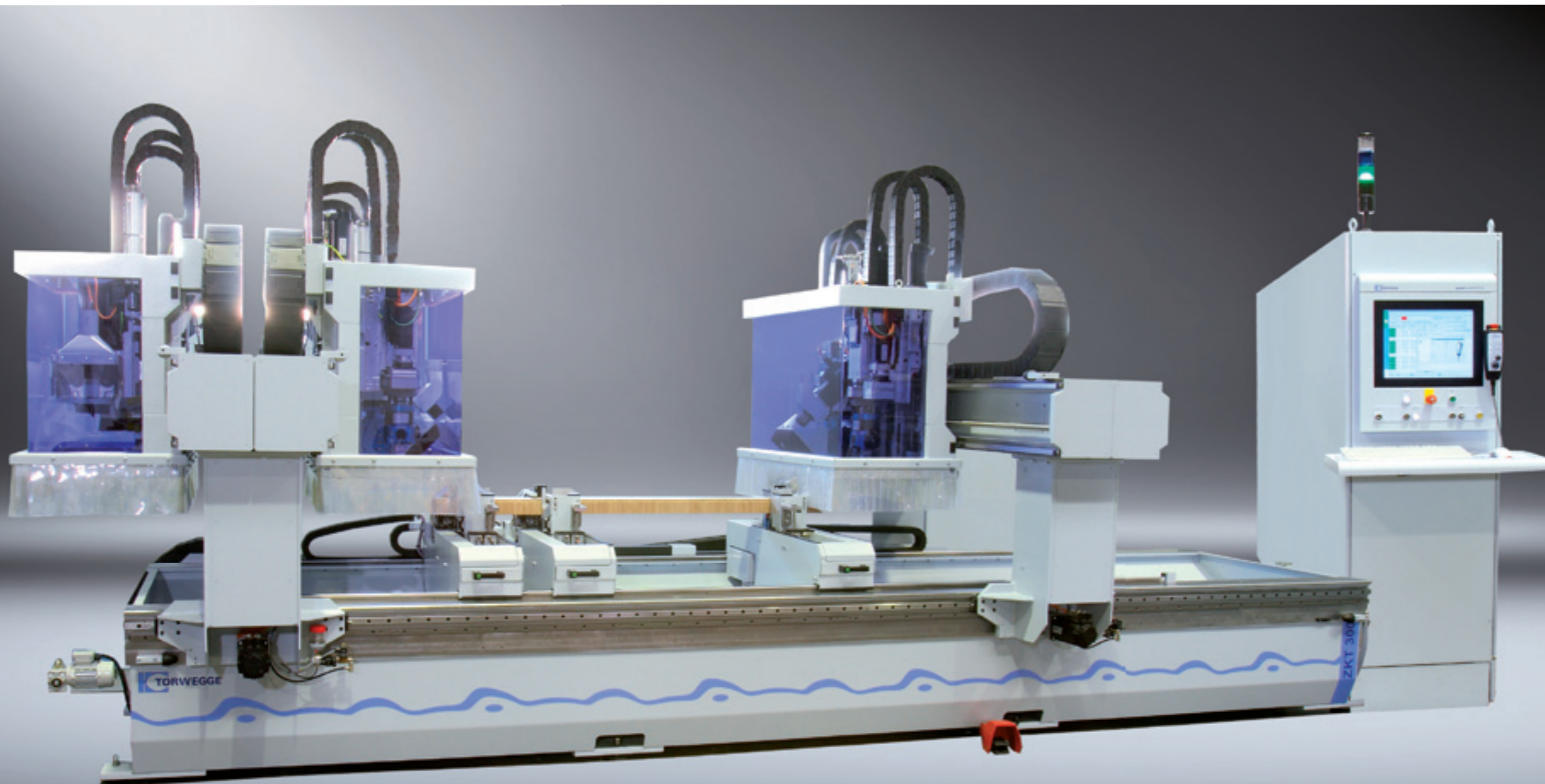
The ZKT was designed for processing door frames for small and medium batch sizes. By the equipment of the columns with a saw unit, the end processing can be carried out with a surrounding saw cut under 45° or 90° without any tear-outs. The modular design of the ZKT 300 guarantees constructive milling and drilling operations for all required corner connections for frames. Moreover, it is possible in one clamping process per frame element after the end processing to carry out the milling resp. drilling processing for fittings on the one hand and the milling processing for lock plates on the other hand. The clamping of the frame with visible side at top guarantees an optimum machining without any damages.



Lock plate processing



Clamping units and plug hinge drilling unit



Fields of application and technical equipment:

- for jamb frames
- for closed frames
- flexible equipment of columns
- all required milling and drilling operations
- complete processing of frame elements in one clamping
- integrated safety concept
- intelligent dust extraction system (resources efficiency)
- tiltable saw unit
- graphic operator interface

Technical data ZKT 300	
Jamb thickness	12 - 30 mm
Face trim	60 - 120 mm
Frame length	600 - 2.700 mm
Rebate height	max. 15 mm
Rebate width	max. 30 mm
Frame width	75 - 400 mm
Working height	ca. 1.000 mm
Electrical connected load (depending on equipment)	ca. 76 - 96 KW
Dust extraction (depending on equipment)	ca. 5.200 m³/h, 32 m/sec
With energy-saving package	ca. 2.900 m³/h, 32 m/sec
Compressed air (depending on equipment)	ca. 140 NI/min

Technical data are not binding in every detail. We specially reserve the right to modifications in the course of further developments.

Special dimensions on demand.

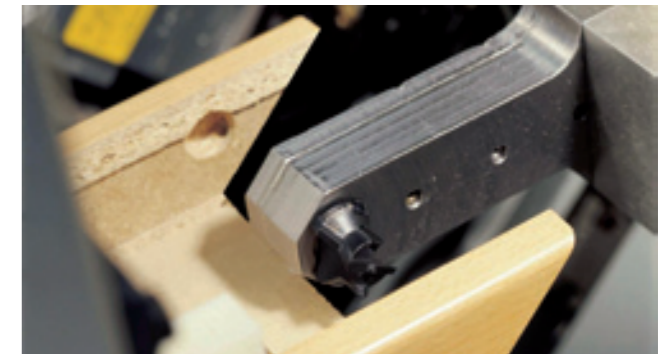
Frame end processing machines

ZET 110 - ZET 510 - ZQL 520

Whether jamb frame or demanding closed frame – the models ZET 110, ZET 510 as well as ZQL 520 convince with highest accuracy. The special concept of these machines: the tiltable saw travels around the workpiece in synchronous rotation and allows saw cuts without any tear-outs. Apart from mitre cut saws, the ZET 110/510 also allow plug hinge and connecting bores as well as lamello and clamping groove cuts. These machines can also process frames just-in-time: in best quality and up to 5 times faster than with conventional methods. Thus, you are well prepared for the complete processing of frame ends.

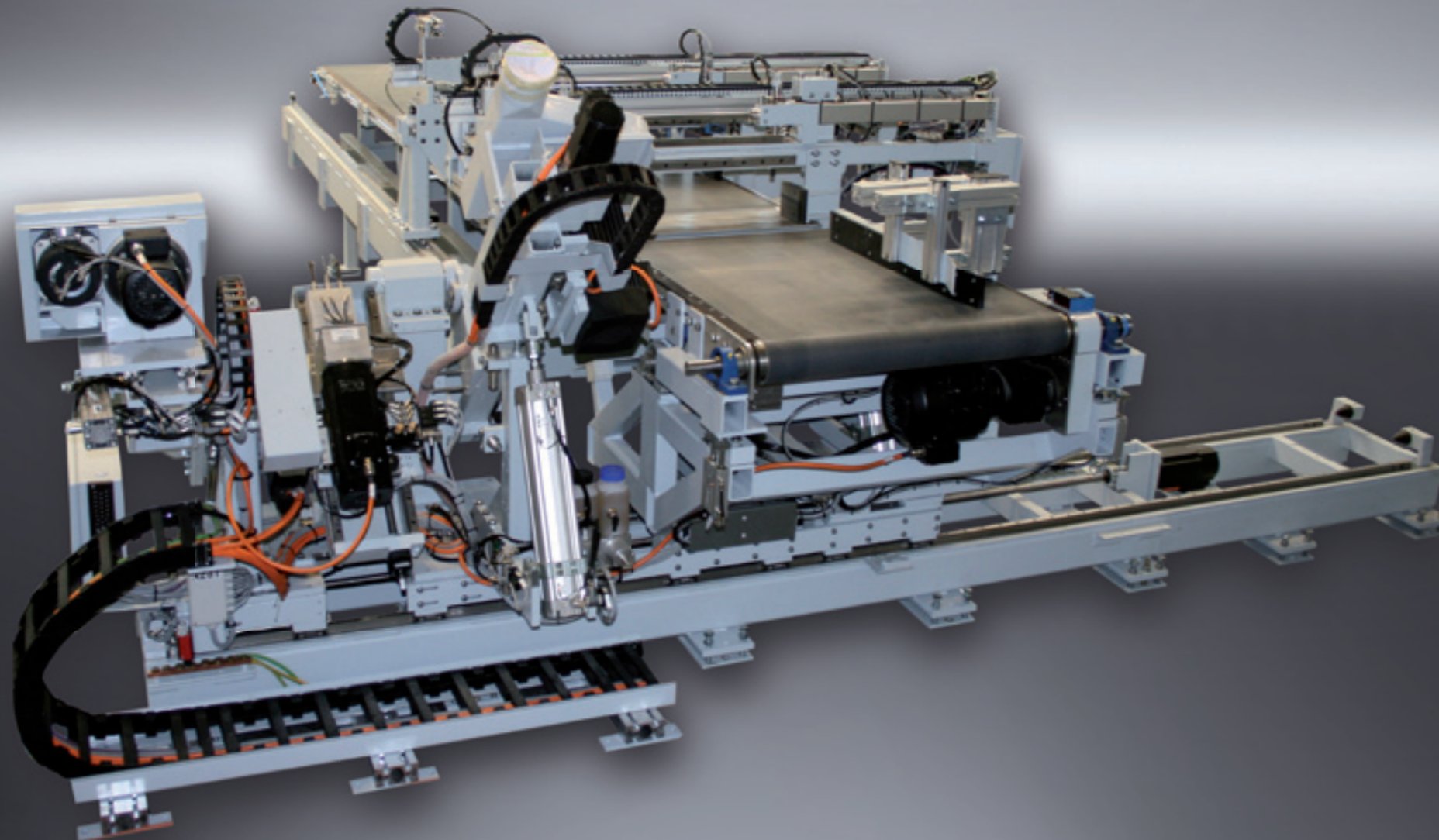


Saw unit in operation



Plug hinge bore

Frame end processing machine ZET 510 for workpiece processing in lengthwise operation



The ZET 110 as stand-alone version is supplied as manual feeding machine. The ZET 510 can be integrated in automated processing lines in lengthwise operation.

The ZQL 520 offers the efficient parallel frame end processing in crosswise operation starting from batch size 30, in order to execute the complete end processing in one clamping, such as 45°/90° cut, connecting bores, plug hinge bores etc.

Fields of application and technical equipment:

Technical data ZET 510	
Jamb thickness	20 - 50 mm
Face trim	max. 120 mm
Frame length	590 - 3.000 mm
Frame width	85 - 600 mm
Working height	ca. 1.000 mm
Electrical connected load (depending on equipment)	23 - 28 kW
Compressed air (depending on equipment)	ca. 70 NI/min

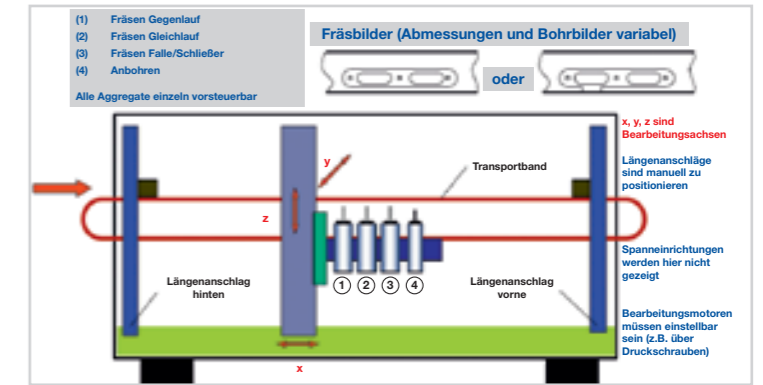
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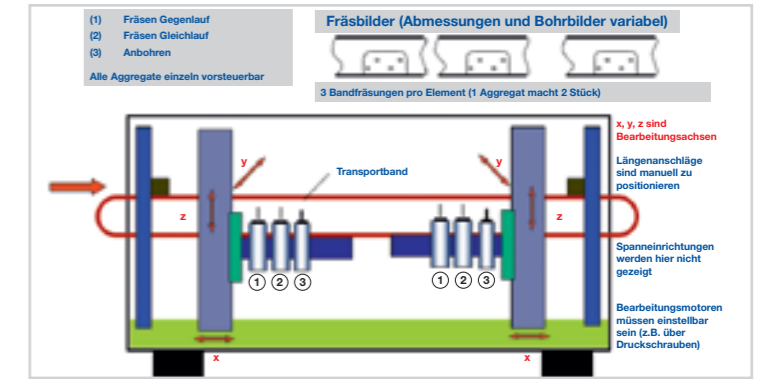
ZKR 510 – Frame processing machine

The ZKR 510 is a frame processing machine for milling lock plates and hinges with different shapes and contours. To achieve high quantities, this throughfeed machine can be equipped with a second unit carrier for parallel processing. This all-rounder feels comfortable in the stand-alone sector as well as in automated throughfeed lines. The modular design of the ZKR 510 guarantees customized efficient and dynamic operations.

Frame processing machine ZKR for combined processing of lock plate and hinge



Lock plate processing



Hinge processing



Fields of application and technical equipment:

- for jamb frames
- for closed frames
- large variety of fitting processing by use of servomotors
- unit carrier for up to 5 motors
- horizontal and vertical use of motors
- precise dimensional accuracy by processing of visible side from bottom
- complete processing in one clamping
- machine can be integrated in production lines
- noise reduction and safety concept
- combined solution for hinge/lock plate processing

Technical data	
Jamb thickness	20 - 50 mm
Face trim	max. 120 mm
Frame length	1.500 - 2.500 mm (optional 3.000 mm)
Frame width	85 - 400 mm (option 600 mm)
Working height	ca. 1.000 mm
Electrical connected load (depending on equipment)	16 - 33 kW
Compressed air (depending on equipment)	ca. 115 NI/min.

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Special dimensions on demand.