ASYS GROUP

VEGO Dynamic AES 06 & AMS 06



Automation Systems

Multiple Magazine Loader AES 06

› high capacity of up to 5 magazines

› automatic magazine exchange

› loading and unloading of magazines on two levels

› automatic magazine clamping

› cycle time: <8 sec.

› magazine exchange: <18 sec.

› Reload new magazine during operation

› no downtime due to empty magazines

› Configuration with integrated bareboard loading system (optional)

› Mixed operation modes: PCB from stack and/or from magazine (option



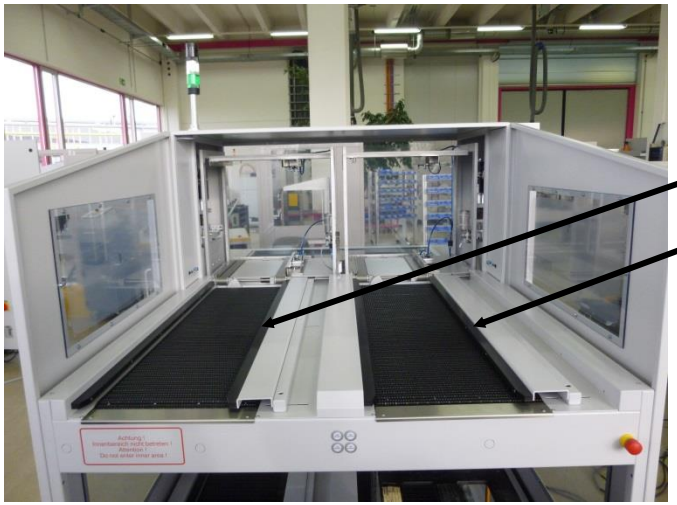
Multiple Magazine Loader AES 06

Technical specifications

Length	2485 mm
Width	1490 mm
Height	1650 mm
PCB width	50 - 460 mm
PCB length	70 - 460 mm
Transport height	850 mm +/- 50 mm (950 mm +/- 50 mm optionally available)
Magazine size (max. L x B x H)	535 x 535 x 568 mm
Magazine pitch	5 - 20 mm
Magazine slots	1 - 50 Slots
Magazine buffer feeding conveyor	4
Magazine buffer unloading conveyor	4

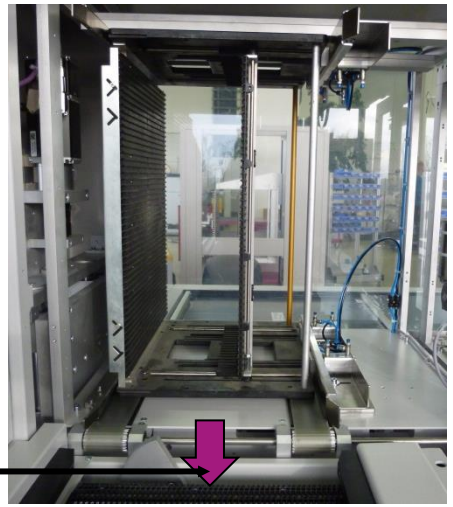


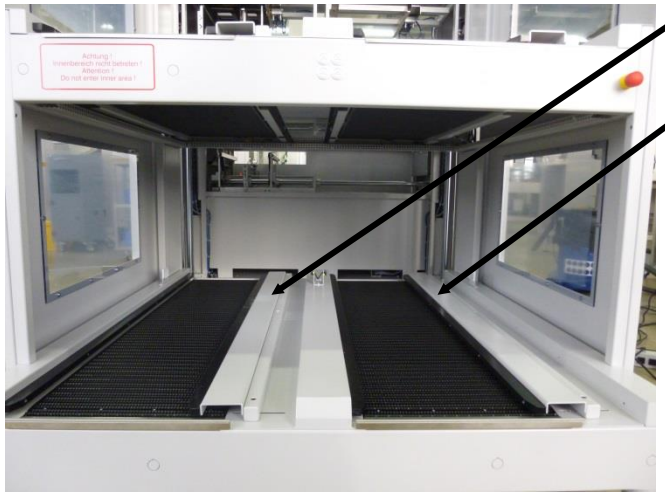
Detail: Magazine



magazines are unloaded on upper level

magazine table is unloading magazine on transport belt





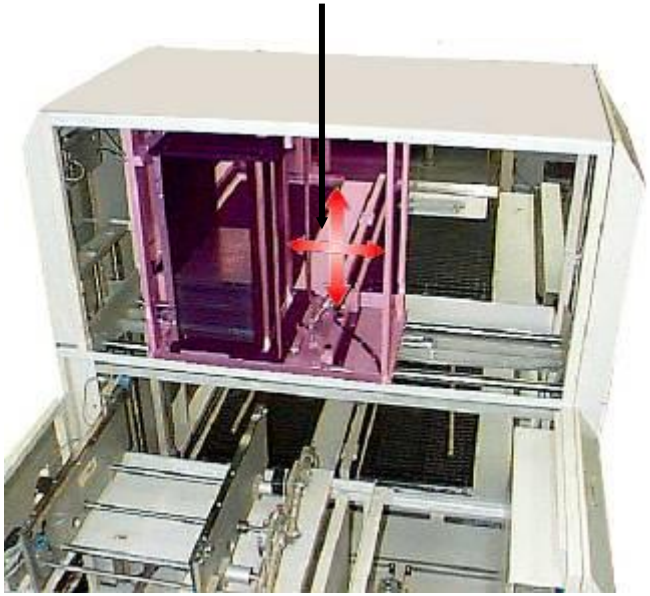
magazine loaded on lower level

magazine is moving to magazine table



Detail: Magazine Table

Magazine table:
› loading full magazines on magazine table until it reaches sensor
› magazine is clamped pneumatically
› table cycles up to first unloading position
› machine is loading the line by unloading PCBs from the magazine





transport belts of the magazine table to load and unload magazines

Detail: Magazine Clamping

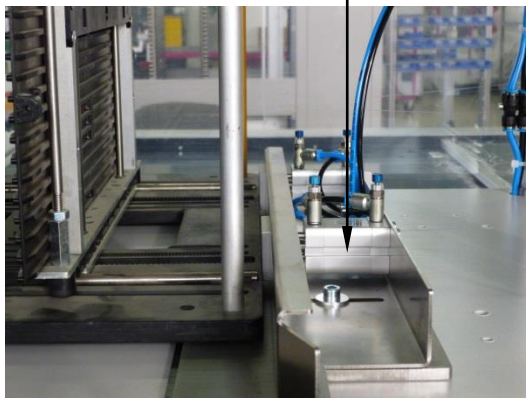


pneumatic magazine clamping, top

magazine table with magazine in working position

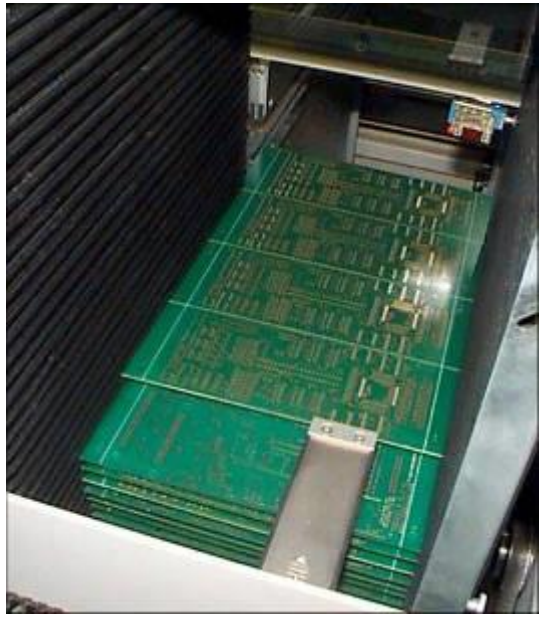


pneumatic magazine clamping, bottom



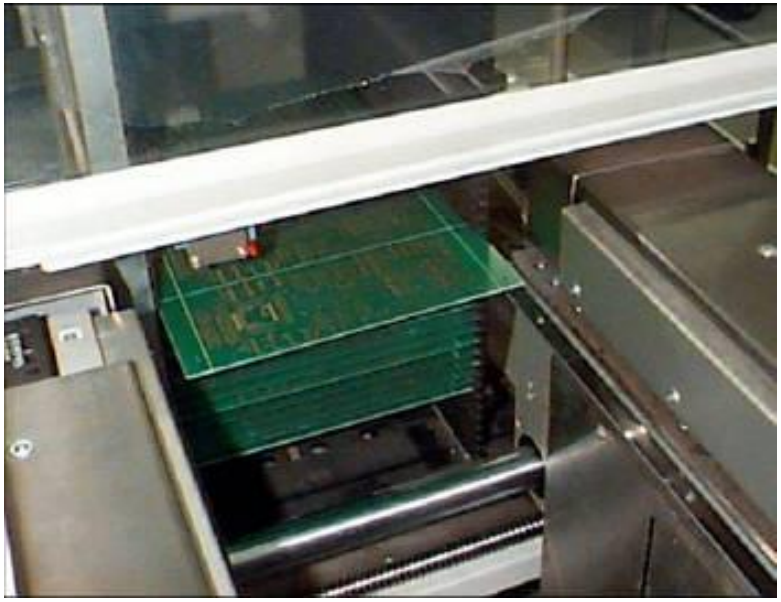
magazine stopper units at the end of supply belts

Detail: Extracting PCBs



Step 1

Magazine cycles to unload position, pusher pushes PCB out of magazine.



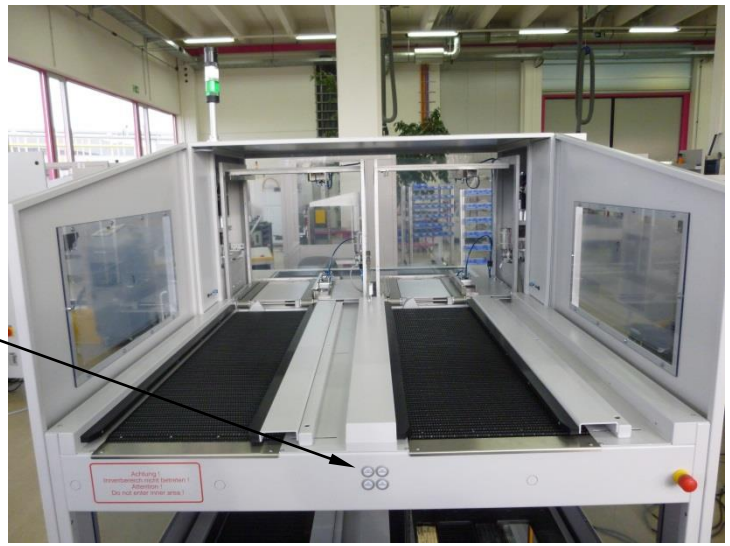
Step 2

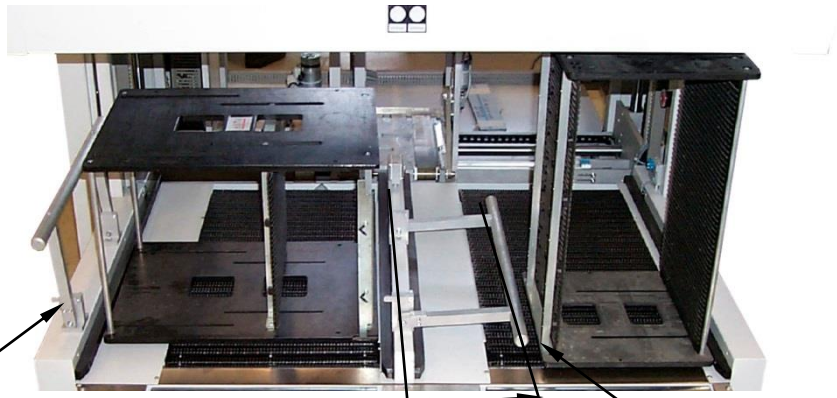
PCB is pushed onto unloading conveyor and ready to be released to downline machine

Detail: Magazine Supply

buttons for the loading and unloading belt at the rear of machine for easy access







wide magazines:
rail is flipped up

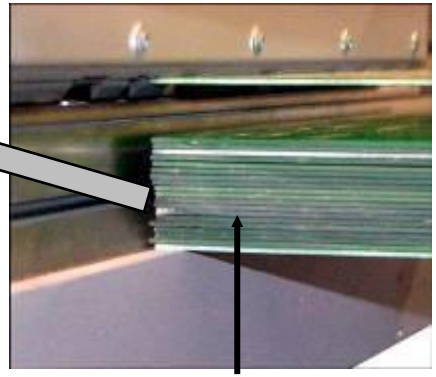
possible gain in floorspace per magazine in narrow version

narrow magazines:
rail is flipped down

Detail: Configuration with Integrated Bareboard Loading System (optional)



Stack processing



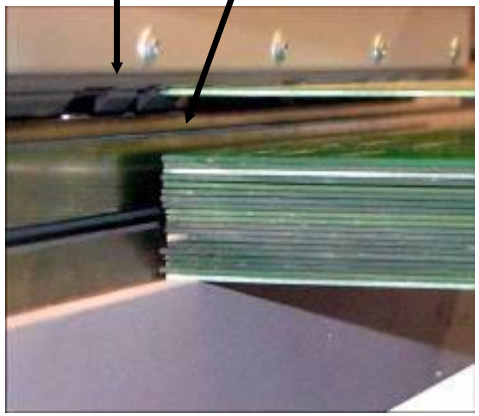
PCB stack

Detail: Stack Processing

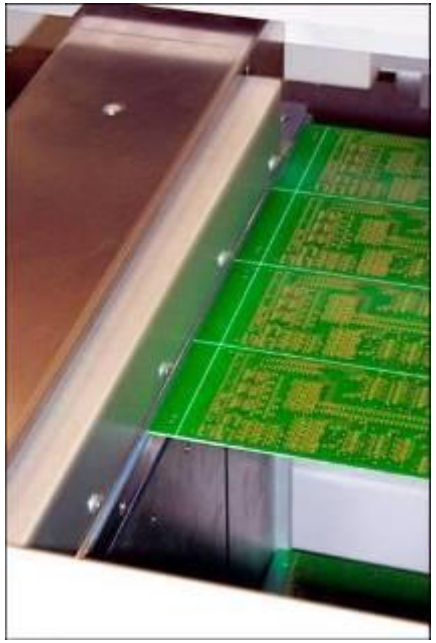


lift table supplied with PCB stack

clamping head conveyor belt



PCB stack is raised and top PCB is clamped. Rest of the stack is moved down.



Guidance belts are moved in and PCB is released to the conveyor. PCB is ready to be released to the downline machine.

Multiple Magazine Unloader AMS 06

› high capacity of up to 5 PCB- magazines

› automatic magazine exchange

› loading and unloading of magazines on two leve

› automatic magazine clamping

› cycle time: < 8 sec.

› magazine exchange: < 20 sec.

› Reload new magazine during operation



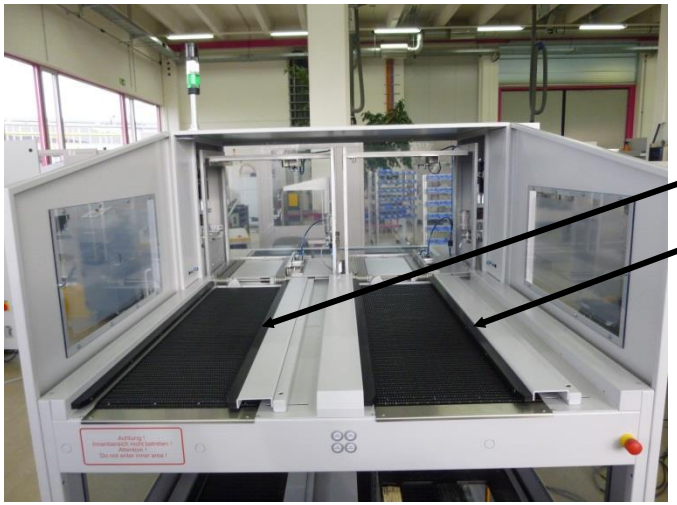
Multiple Magazine Unloader AMS 06

Technical specifications

Length	1880 mm
Width	1490 mm
Size	1650 mm
PCB- width	50 - 460 mm
PCB- length	70 - 460 mm
Transport height	850 mm +/- 50 mm (950 mm +/- 50 mm optionally available)
Magazine size (max. L x W x S)	535 x 530 x 568 mm
Magazine pitch	5 - 20 mm
Magazin slots	1 - 50 Slots
Magazine buffer feed conveyor	4
Magazine buffer outfeed conveyor	4

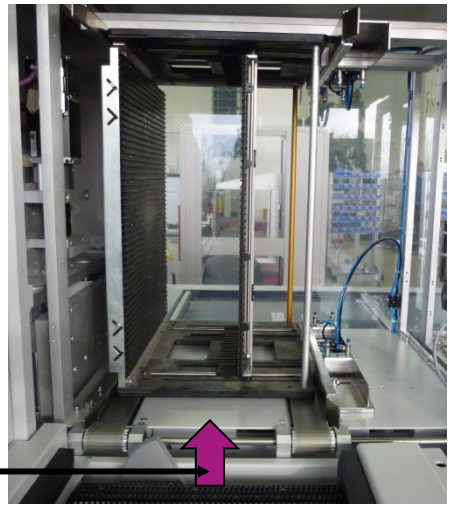


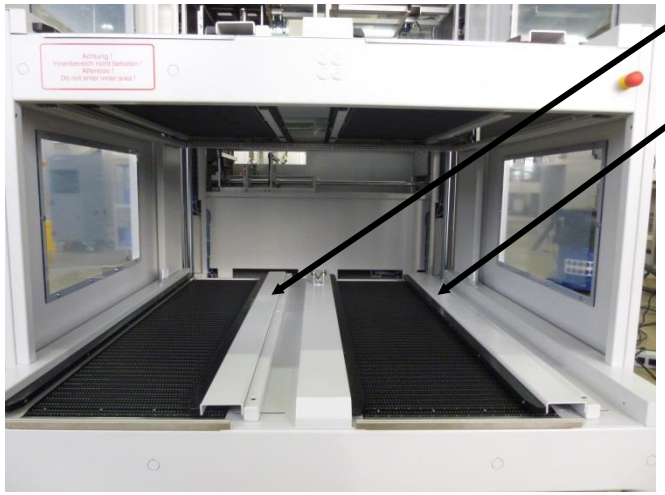
Detail: Magazine Exchange



Empty magazine supply take place on top

Magazine lift table takes over the PCB- magazine





Magazine output take place on bottom.

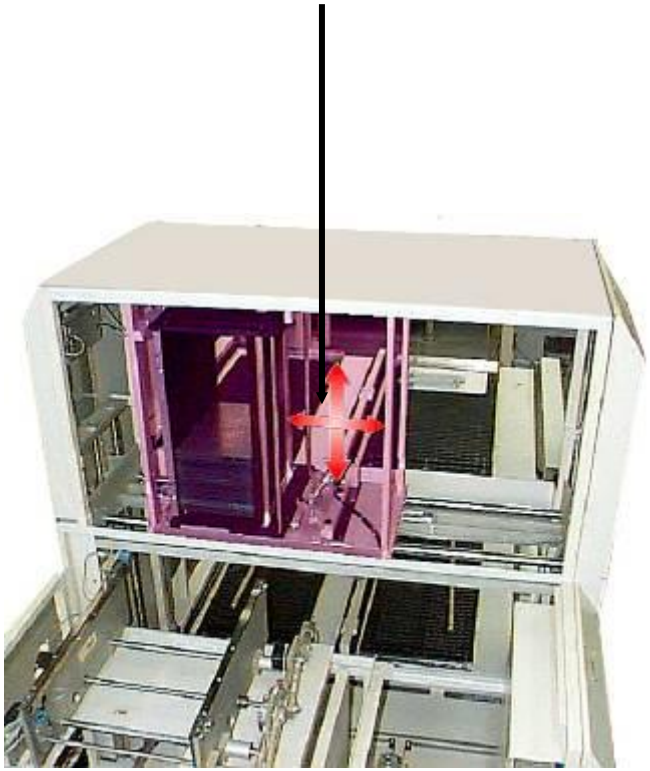
Magazine lift table hands over PCB- magazine



AEYE Automation Systems

Detail: Magazine table

› loading empty magazines on magazine table until it reaches end limit sensor
› magazine is pneumatically clamped
› table cycles down to first loading position
› loading of the magazine begins





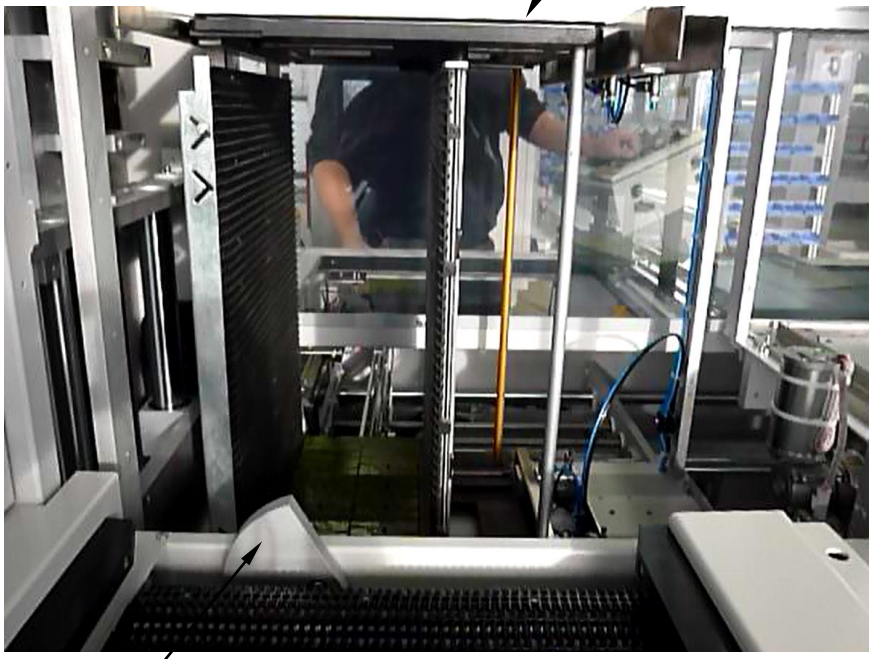
transport belts of the magazine table to load and unload magazines

Detail: Magazine Clamping



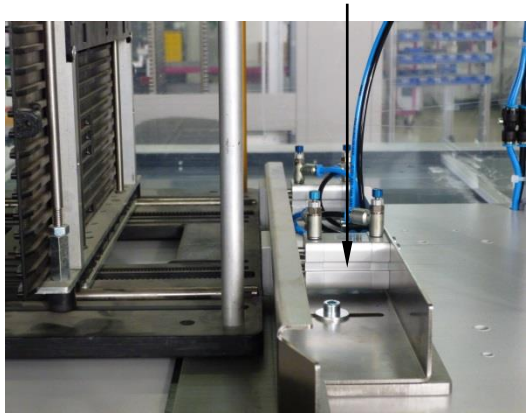
pneumatic magazine clamping, top

magazine table with magazine in working position



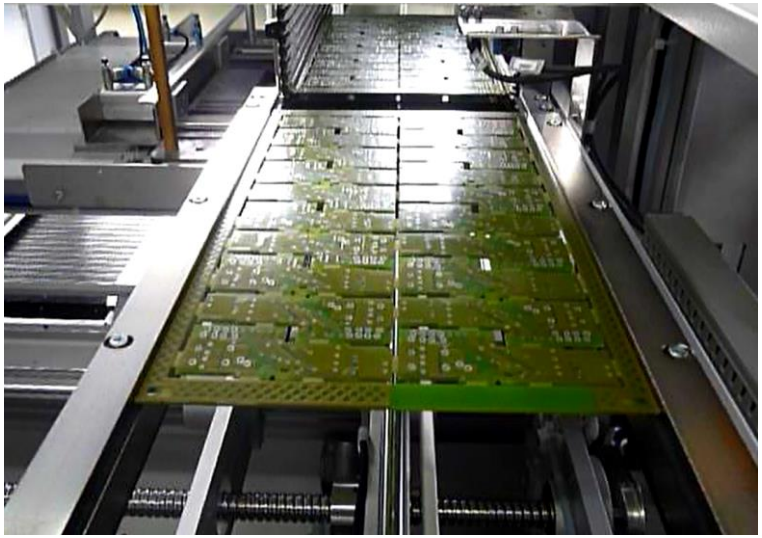
Magazine stopper on feed conveyor

pneumatic magazine clamping, bottom



AEYE Automation Systems

Detail: Work Steps PCB- Loading



Step 1

PCB is taken over from N-1 onto the conveyor belt. Pusher folds up and pushes the PCB into the magazine.



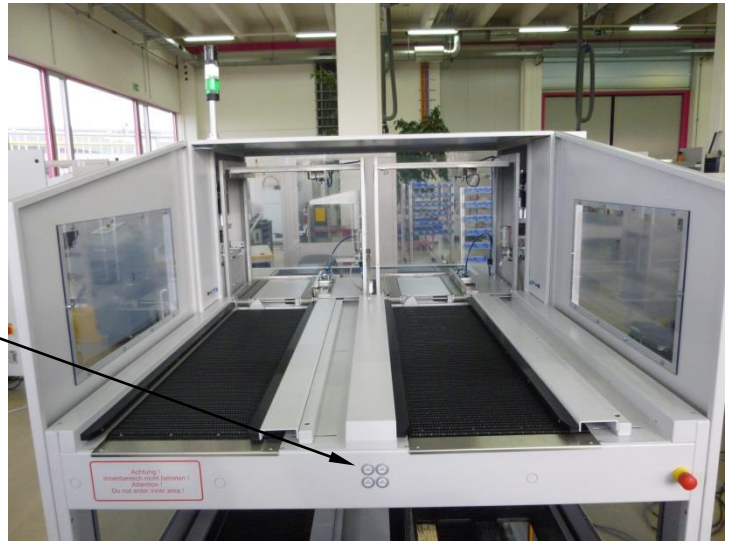
Step 2

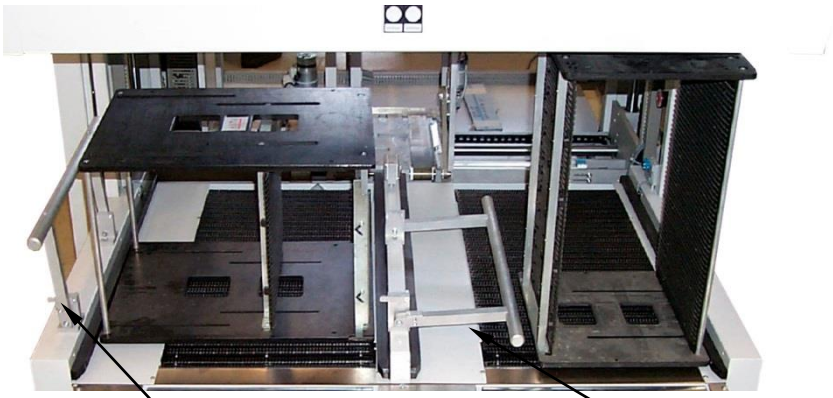
When the PCB is completely in the magazine, the pusher returns and the lift axis moves to the next slot position.

Detail: Operation / Magazine Supply

buttons for the loading and unloading belt at the rear of machine for easy access







wide magazines: rail is flipped up

narrow magazines: rail is flipped down