

# Unique & highly efficient – the Log Shuttle



log de-palletizing  
log loading onto  
stream feeders  
for 4-10 feeders  
up to 100 logs/h  
fully automated

## **Project Specs**

### **Automatic feeding of bindery lines**

Log feeding onto stream feeders

### **Products handled**

Logs for perfect binders / saddle stitchers

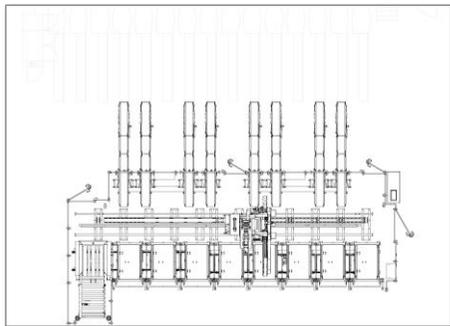
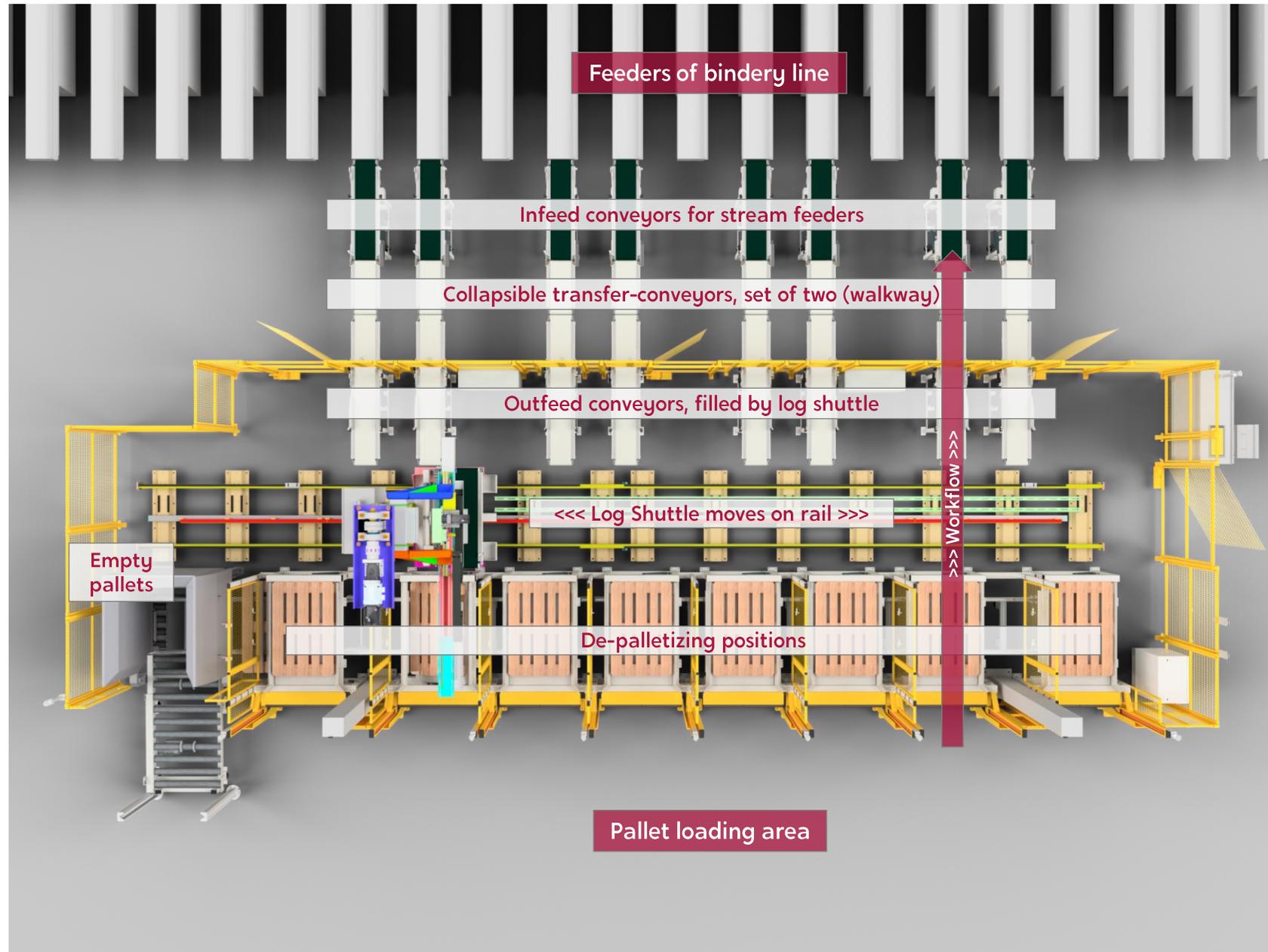
### **Configuration log shuttle**

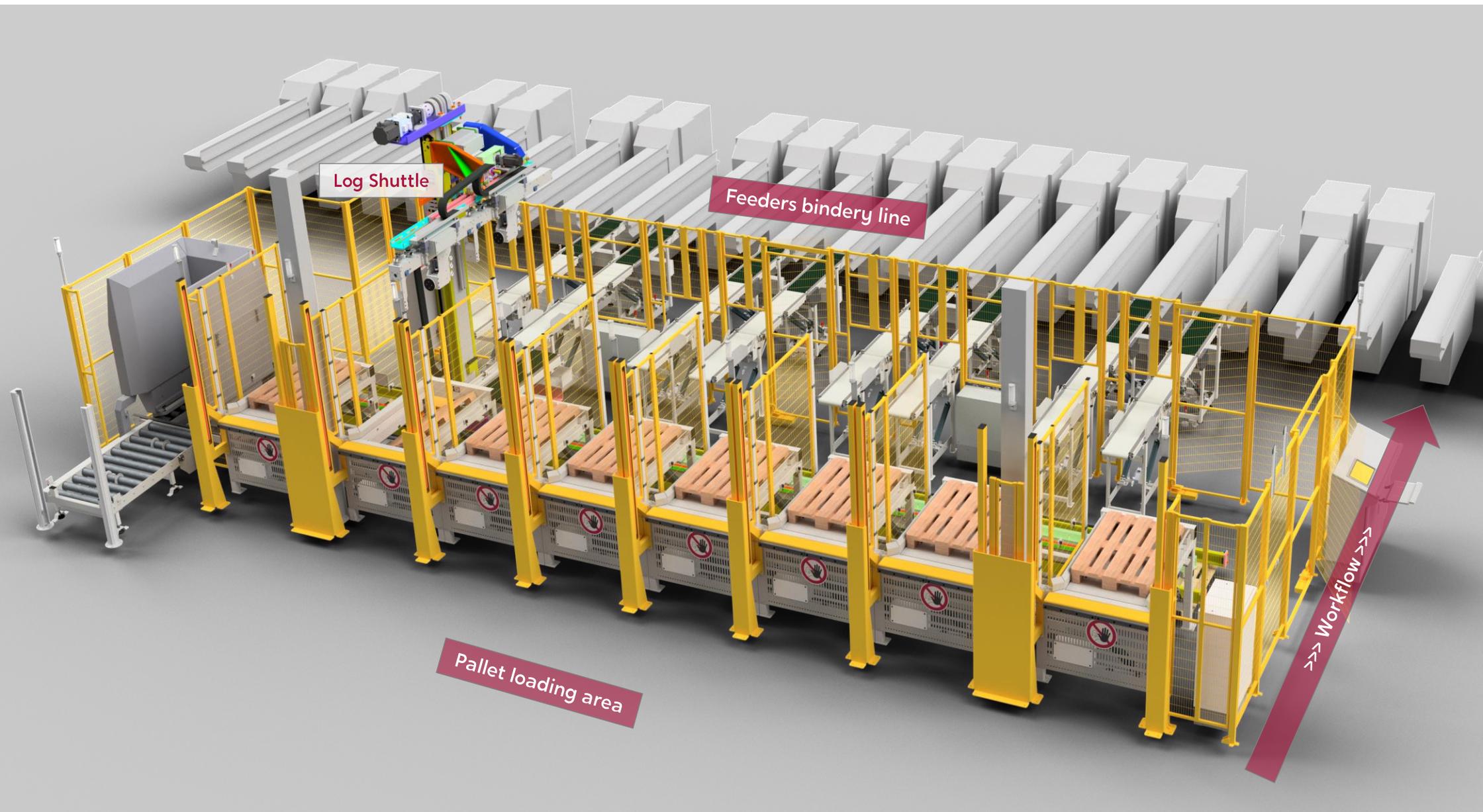
Complete system, fully automated including:

- ▶ infeed position for full pallets
- ▶ automatic log clamp on a shuttle
- ▶ log conveyor on a shuttle
- ▶ log delivery on stream feeder
- ▶ magazine to collect empty pallets
- ▶ magazine to collect slip sheets
- ▶ up to 100 logs/hr

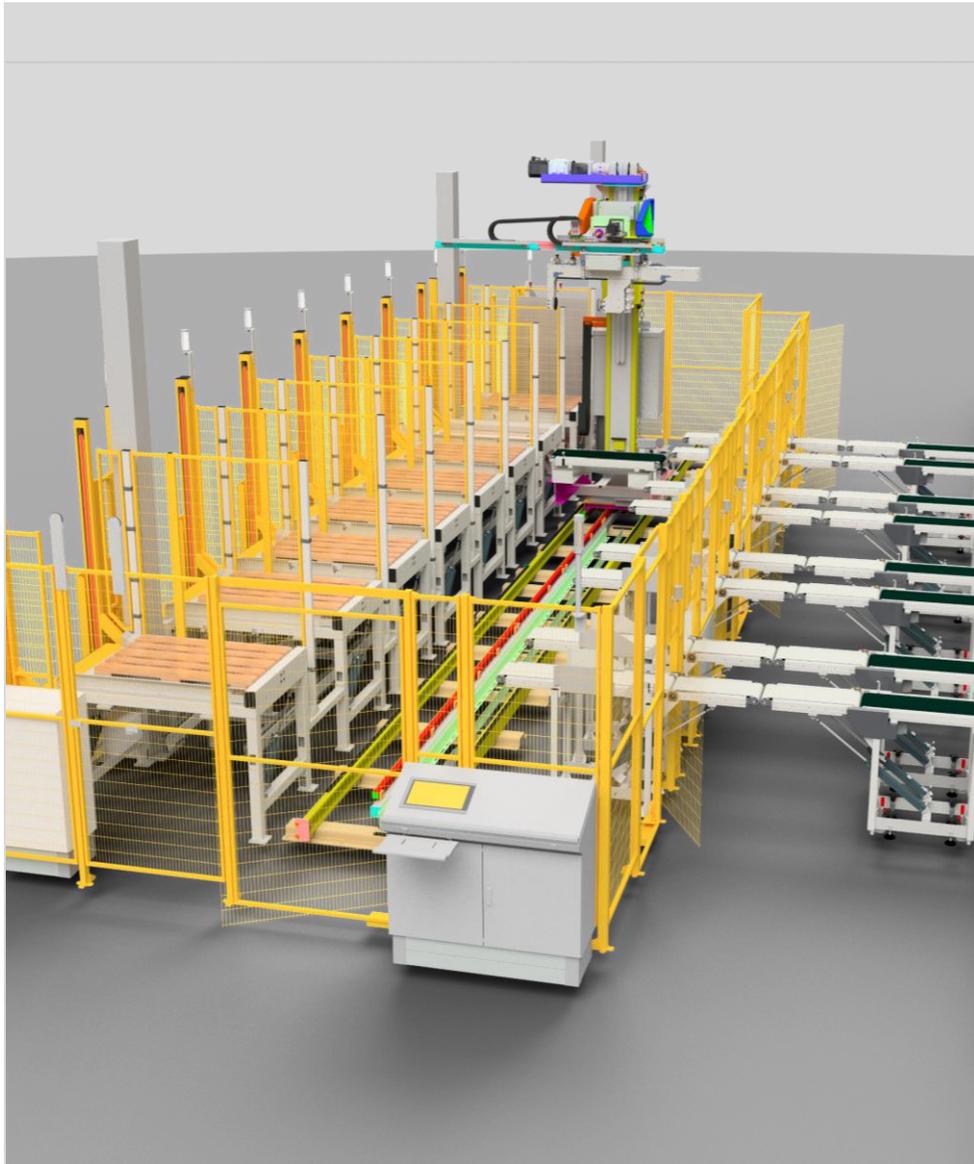


►  
Top view – a shuttle mounted on rails picks up the logs from eight de-palletizing positions (South), places them on the log conveyor of the shuttle and ejects the log onto the correct stream feeder.





▲ Infeed view of the log shuttle with 8 positions for full pallets. At the far left the magazine which collects the empty pallets which are automatically ejected onto a pallet conveyor underneath the de-palletizing position.



▲ A shuttle with a log clamp & a log conveyor travels between the de-palletizing positions (left) and the outfeed log conveyors (right)



▲ Infeed side: magazine for empty pallets & de-palletizing for 8 pallets



▲ The outfeed log conveyors between log shuttle and stream feeders are collapsible - operator can move around safely and easily.



Loading of the full pallets into the de-palletizing positions.

In this configuration eight pallets can be loaded for automatic de-palletizing and automatic log loading onto the stream feeders.

The number of de-palletizing positions is customizable and generally ranges between 4-10





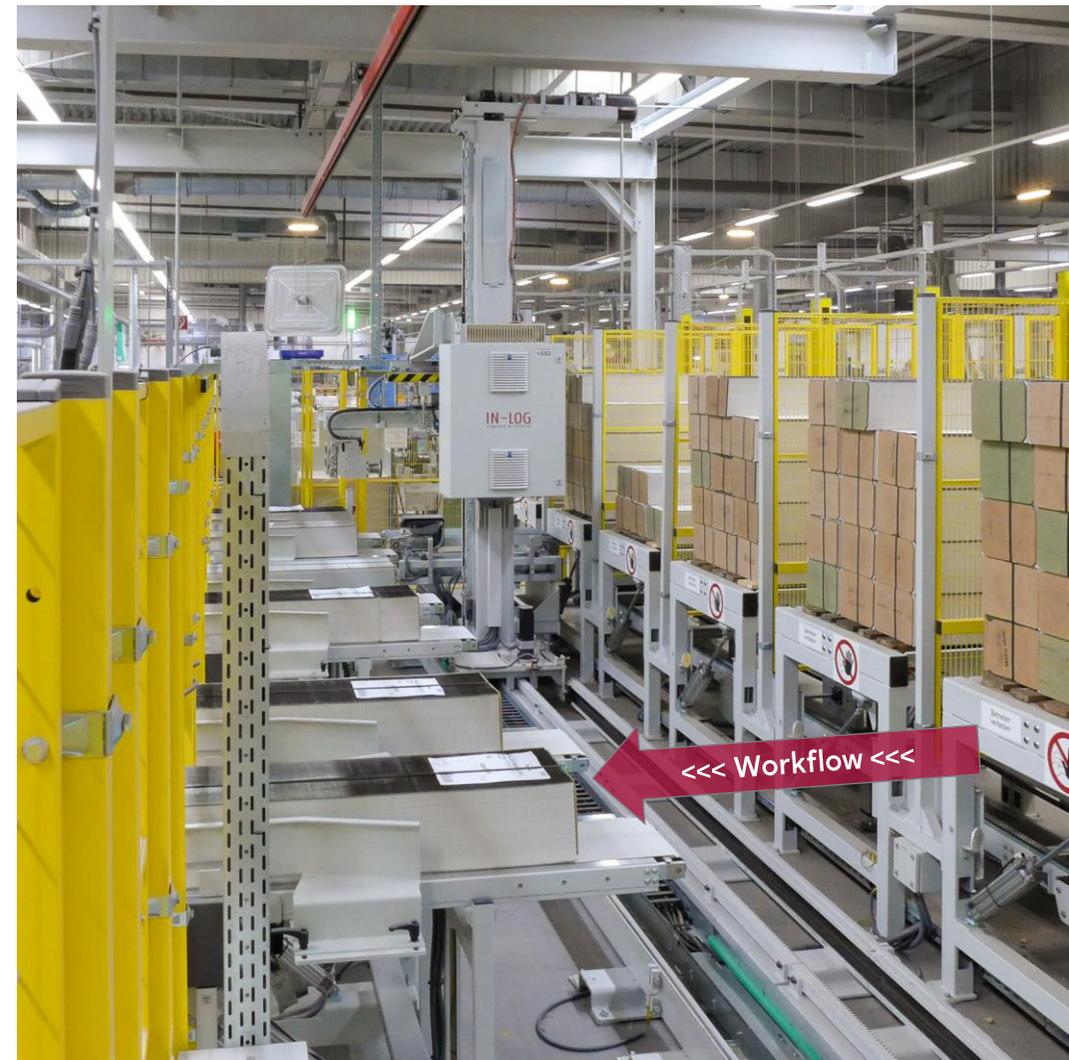
▲ View of the outfeed section with the collapsible log conveyors and the log conveyor in front of the stream feeder

►  
The log shuttle integrates a log clamp and a log conveyor. Logs are picked-up, placed onto the log conveyor of the shuttle and conveyed to the outfeed conveyors of the correct stream feeder.

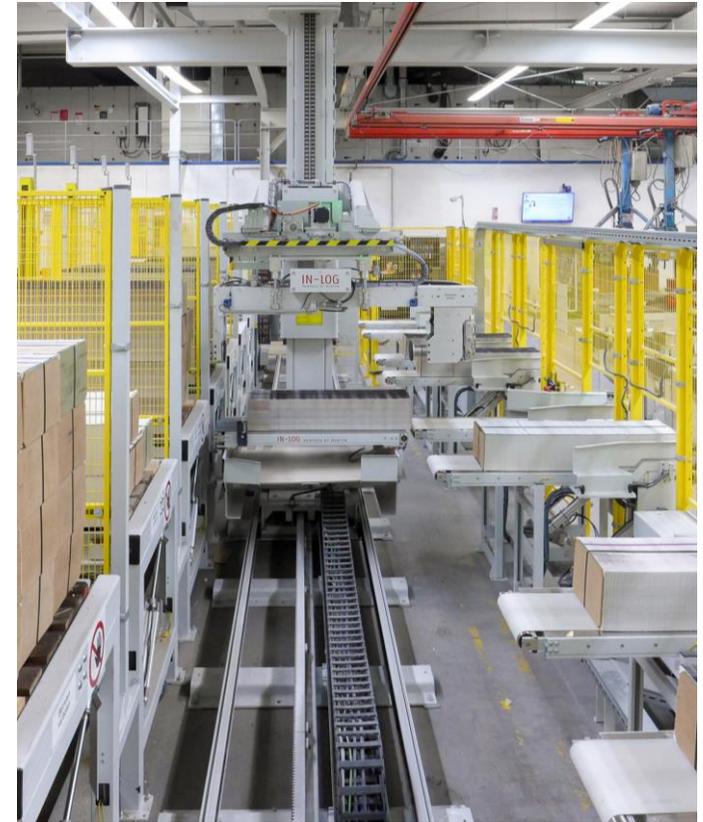
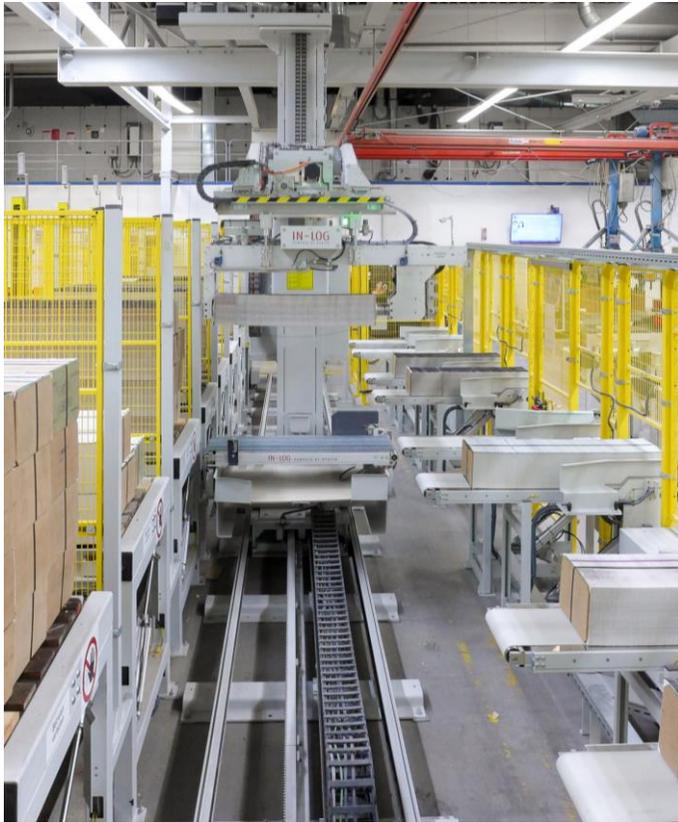




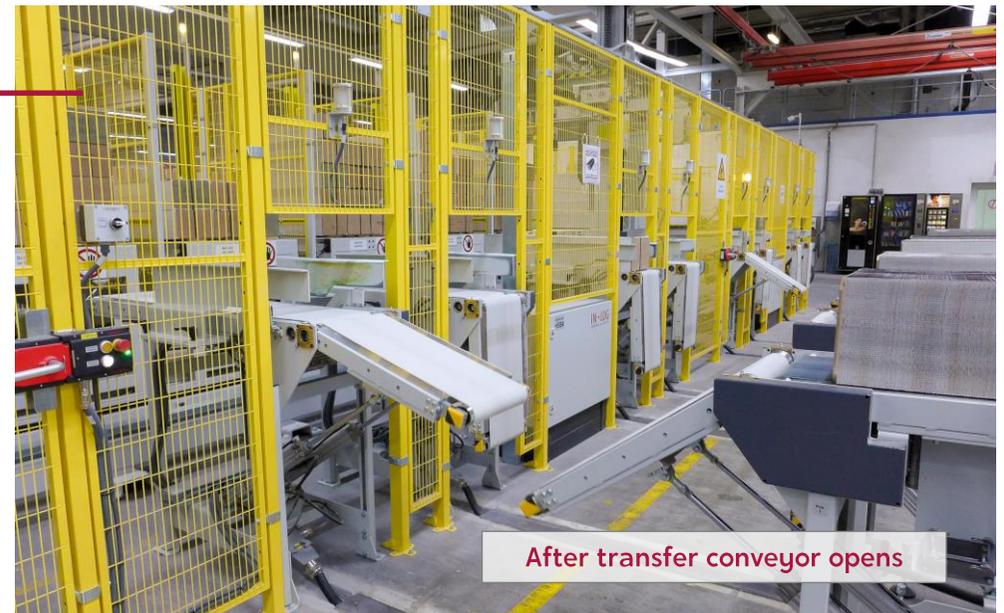
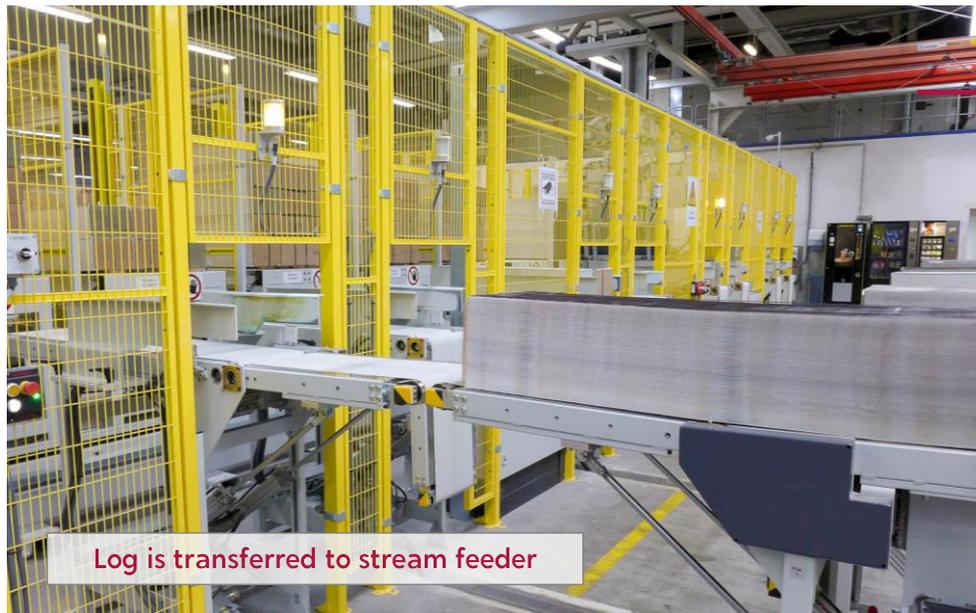
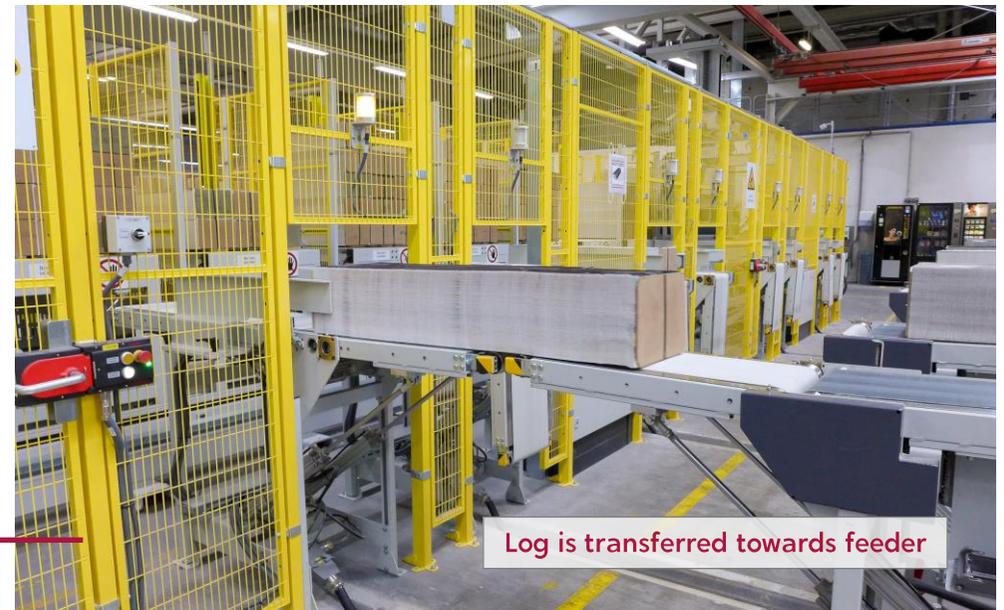
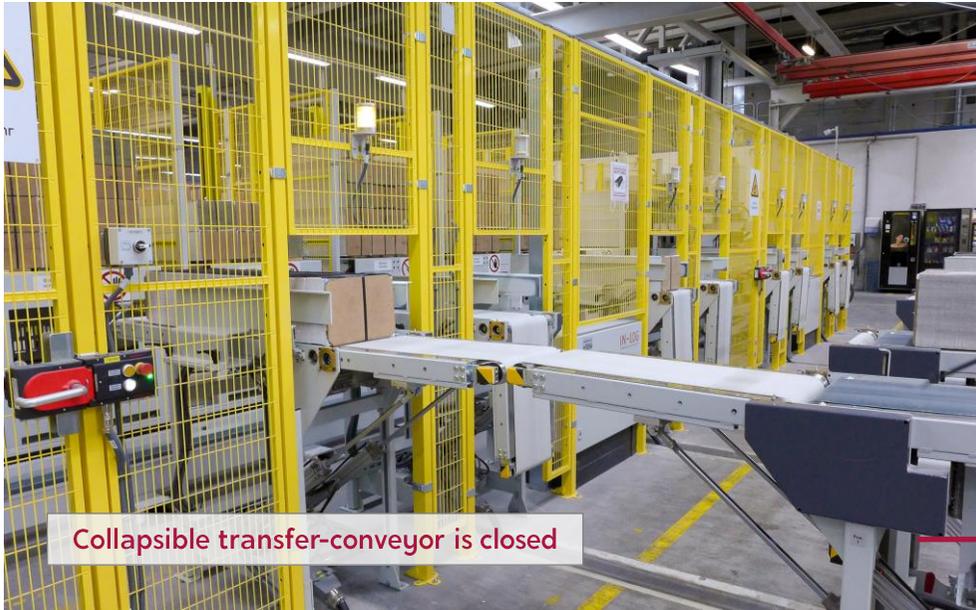
▲ Front side of the log shuttle with moveable log clamp, collapsible log conveyor and slip sheet magazine



▲ Back side of the log shuttle with control cabinet and rail on the floor on which the log shuttle travels



▲ Heart of the system is the unique log shuttle mounted on rails and equipped with a moveable log clamp, a log conveyor and a magazine for the slip sheets (under the conveyor).



▲ Log delivery from the Log-Shuttle onto the stream-feeders. The walkway conveyors are only up when a log is transferred.



1



2



3



4



5

▲ The handling of slip sheets separating the log layers on the pallet is fully automatic – the log shuttle picks-up the slip sheets when a layer has been de-palletized and places them into a magazine underneath the log conveyor of the shuttle.



conveyor for empty pallets underneath de-palletizing positions



Empty pallet magazine

Empty pallet conveyor

◀ After de-palletizing the empty pallets are evacuated downwards onto a pallet conveyor located underneath the de-palletizing positions. All pallets are piled up in a empty pallet magazine at the far left (or right) of the system.

►  
Two collapsible transfer conveyors connect the log outfeed conveyor of the log shuttle to the infeed conveyor of the stream feeders. All feeders are freely accessible.

Logs transferred from the log shuttle are waiting on an infeed position in front of the stream feeders who trigger the loading of the log onto the feeder.

The empty infeed position will initiate a log loading cycle (closing of the two collapsible log conveyors – transfer of the log from the log shuttle area onto the infeed position of the feeder – opening of the transfer conveyor to open the walkway again).





▲ Logs on de-palletizing position



▲ Collapsible transfer conveyors between shuttle & feeders



▲ Log on collapsible transfer conveyor



▲ Log on log conveyor of the shuttle



▲ View from stream feeders towards log shuttle system



▲ Log on infeed conveyor before feeder



▲ As an option, logs can be turned +/- 90° or 180° to match the correct product orientation for the bindery line



▲ Logs delivered spine to the side need to be turned +/- 90° before being delivered onto the stream feeders of the saddle stitcher



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## Merten Maschinenbau und Vertriebs GmbH

A-1220 Wien, Puchgasse 9

Fon: +43 1 2594648

mm-office@merten.at

www.merten.at

 **IN-LOG**

Post Press Solutions | in-log.com

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