

# BITZER Logistics Systems

## Self service loading and dispatch automation

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The BITZER Logistics System is designed for the automation of delivery and collection of material as well as for process optimisation in factories which handle bulk material. All registered product movements can be transferred to existing ERP systems (e.g. SAP/R3) due to individual interface solutions.



Loading process on truck scale



Terminal for driver's self-service

### Characteristics:

- Self service stations for the truck drivers (24 hours / 7 days), using touchscreens, identification terminals or mobile end devices (e.g. smartphones with Android apps), electronic sign pads or modern identification via RFID
- Intelligent operator guidance – multilingual
- Modular construction
- Modern client-server architecture in combination with a high-performance SQL data base
- Communication interfaces e.g. XML or ASCII Files to superior ERP systems (e.g. SAP/R3)
- Transmission of delivery notes via EDI or e-mail – representation of the notes also on mobile end devices (e.g. smartphones)

## Example for the automation of material deliveries and loading processes in a power plant



The truck drivers arrive at the power plant and register at the identification terminal (touchscreen with customised software). The differentiation between ash loading or material delivery is also made during registration.

In case of material delivery, the following steps take place: First of all, the truck is weighed on a truck scale. Then, the driver gets an instruction via the display of the identification terminal where to unload the material. After having unloaded, the truck is weighed once again and the driver gets a delivery note.

In case of ash loading, the display of the identification terminal at the registration informs the driver about the right loading station. This information is also transferred to the loading PC via the BITZER Logistics System. Furthermore, the system issues an identification card with which the driver has to identify himself at the loading station. If it is the wrong loading station, the system gives him the information that he has to go to the right loading place.



After the correct identification at the correct loading station (under the condition that the loading station is not occupied), the BITZER Logistics System opens the corresponding rolling shutter gates. The vehicle now drives onto the truck scale which is embedded into the loading line. The rolling shutter gates are closed automatically. The driver leaves the truck and goes to the loading terminal. He inserts the identification card and another check of the relevant data is taking place. Thereafter, the weight of the truck is registered automatically and shown to the driver on a connected external display.

The system already knows the quantity to be collected due to the central disposition. Therefore, the the loading fittings are released and the driver can start to load the truck. As soon as the target quantity is reached, loading is automatically stopped by the system. After the second weighing, all data are stored and the driver is requested to quit the loading station. The rolling shutter gates open automatically for the exit. Then the driver has to insert once again the identification card at the registration, in order to finish the preparation of a delivery note. All data are now transferred to the headquarters, and the identification card is automatically retained. The barrier at the exit opens and the driver leaves the factory.