

Claims

1. Warehouse for order fulfilment with at least one order fulfillment area in which picking stations are arranged and supplied with articles from a product storage for
5 picking orders wherein each picking station is supplied with articles by a connecting conveyor system and said connecting conveyor system also supplying and returning order containers and being used for discharge of emptied product containers and partial orders or finished orders from the respective picking station, characterized in that a bypass conveyor is arranged in parallel to the connecting conveyor system
10 such that product and/or order traffic inbound to the picking stations/product storage and outbound from the picking stations/product storage may be off-loaded from the connecting conveyor system.
2. Warehouse for order fulfilment according to claim 1, characterized in that the
15 connecting conveyor system is a connecting conveyor system arranged between the product storage and the order fulfillment area and picking stations therein.
3. Warehouse for order fulfilment according to claim 1 or 2, characterized in that the connecting conveyor system is a cross-aisle conveyor running the length of the
20 front of the storage segmenting the pre-zone.
4. Warehouse for order fulfilment according to any proceeding claim 1 to 3, characterized in that the bypass conveyor(s) is/are located below or above, possibly directly underneath or directly above the connecting conveyor system, especially
25 cross-aisle conveyor.
5. Warehouse for order fulfilment according to any proceeding claim 1 to 3, characterized in that the bypass conveyor(s) is/are located below or above, possibly diagonally underneath or above the connecting conveyor system, especially cross-
30 aisle conveyor.
6. Warehouse for order fulfilment according to any proceeding claim 1 to 3, characterized in that the bypass conveyor(s) is/are located below or above, possibly both directly and diagonally underneath or above the connecting conveyor system,
35 especially cross-aisle conveyor.

7. Warehouse for order fulfilment according to claim 3 or 4, 6 characterized in that the bypass conveyor(s) is/are connected to connecting conveyor system, especially cross-aisle conveyor by means of inclined or declined conveyors, ramps or lifts, especially at intervals.
8. Warehouse for order fulfilment according to claim 5, characterized in that the bypass conveyor is located in the same plane as the connecting conveyor system, especially cross-aisle conveyor and is connected by connection conveyors running but not limited to at 90 degree angles between those two conveyors.
9. Warehouse for order fulfilment according to claim 7, characterized in that the bypass conveyor(s) is/are connected with the inclined and declined conveyors by a right angle transfer or tilted conveyor mechanism and/or an angled merge/divert mechanism.
10. Warehouse for order fulfilment according to claim 7, characterized in that the lift is a single cycling or tandem cycling lift.
11. Warehouse for order fulfilment according to claim 5, characterized in that a plurality of bypass conveyors are running in parallel and are connected to connecting conveyor system, especially cross-aisle conveyor by lifts.
12. Warehouse for order fulfilment according to any proceeding claim 7 to 11, characterized in that each lift is connected to a dedicated bypass conveyor.
13. Warehouse for order fulfilment according to any proceeding claim 7 to 11, characterized in that all lifts are connected to a shared bypass conveyor.
14. Warehouse for order fulfilment according to any proceeding claim 3 to 11, characterized in the bypass conveyor is located horizontally between the end of the storage and a first cross aisle conveyor.

15. Warehouse for order fulfilment according to any proceeding claim, characterized in the bypass conveyor and connecting conveyor system, especially cross-aisle conveyor have the same or opposite conveying direction.