

Claims

1. Warehouse for order fulfilment with a product storage and at least one order fulfillment level in which picking stations are arranged and supplied with articles from
5 the product storage for picking into order load carriers according to allocated orders wherein each picking station is supplied with articles from the product storage by a connecting conveyor system on the least one order fulfillment level, characterized in that each order fulfillment level has at least one further virtual order fulfillment level in
10 fulfillment level or in which connecting conveyor systems connecting to picking stations are arranged at different height from the at least one order fulfillment level.
2. Warehouse for order fulfilment according to claim 1, characterized in that the picking stations are arranged at different height from the at least one order fulfillment
15 level creating the virtual order fulfillment level by vertically raising the picking stations, especially by using raised platforms.
3. Warehouse for order fulfilment according to claim 1 or 2, characterized in that the picking stations arranged in the virtual order fulfillment level(s) are connected to
20 the product storage for supply with articles from the product storage by at least a second connecting conveyor system arranged at a different height than that of the first connecting conveyor system.
4. Warehouse for order fulfilment according to claim 3, characterized in that the
25 first connecting conveyor system is arranged below picking stations arranged in the virtual order fulfillment level(s)
5. Warehouse for order fulfilment according to claim 1 or 2, characterized in that in that the picking stations arranged in both the at least one and virtual order
30 fulfillment levels are connected to the product storage for supply with articles from the product storage by common vertically movable connecting conveyor system.
6. Warehouse for order fulfilment according to claim 1 or 2, characterized in that the picking stations arranged in the virtual order fulfillment level(s) are connected to
35 the product storage for supply with articles from the product storage by at least the

second connecting conveyor system arranged horizontally offset to that of the first connecting conveyor system.

7. Warehouse for order fulfilment according to claim 6, characterized in that the
5 second connecting conveyor system and/or the first connecting conveyor system are curved around the respective picking stations in the other level.

8. Warehouse for order fulfilment according to any proceeding claim,
characterized in that the picking stations are grouped to include a picking station in
10 each level in a horizontally staggered manner.

9. Warehouse for order fulfilment according to any proceeding claim,
characterized in that the picking stations in the at least one and/or virtual order
fulfillment level(s) are robotic stations.
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10. Warehouse for order fulfilment according to claim 9, characterized in that the
robotic picking stations are located on the product storage side of the connecting
cross aisle conveyor, with a dedicated connecting conveyor system in its own virtual
order fulfillment level.
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11. Warehouse for order fulfilment according to claim 9, characterized in that the
robotic picking stations are located on the product storage side of the connecting
cross aisle conveyor, with a shared connecting conveyor system in the at least one
order fulfillment level or virtual order fulfillment level.
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12. Warehouse for order fulfilment according to any proceeding claim,
characterized in that the picking stations are connected to a dedicated connecting
conveyor system in a corresponding order fulfillment level and/or to connecting
conveyor system(s) of the virtual order fulfillment level(s).
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