

# Customized Order Picking solutions

## Electric Order Pickers - Man-Up range

N20V, V08, V10, V11, V12

Linde Material Handling

*Linde*





## Full liner order picking range.

Of all warehouse processes, order picking gets the most attention. The ability to process customer orders quickly and accurately has become an essential part of what Linde trucks deliver thanks to our market knowledge and design expertise.

Linde's key objectives when designing order pickers are to increase productivity by reducing cycle times and increase picking accuracy. As the environment, the type of goods and the methods of order picking vary greatly, Linde offers a wide range of order pickers to fit the needs of every organisation. Many innovative solutions enhance the current range from ground level order picking through to occasional or more frequent medium-level picking up to high multi-level order pickers with guidance systems for maximum productivity and customer satisfaction in the most demanding applications.





Engineered for your performance



## Two major picking styles – Horizontal & Vertical.



## Vertical order picking range. Linde - a full liner for Man-Up trucks.

**Extend the height of a picking zone** To optimize picking in a restricted area (e.g.: a growing business, increasing numbers of picked lines), logistics managers have to extend the height of their picking zone.

**Man-up order pickers** As far as creating new picking levels is concerned, order pickers fitted with a rising platform (the so called Man-up order picker) enable picking at heights from first level to over 11 m.

**Linde, full liner** Linde offers a comprehensive range of man-up order pickers for applications requiring anything from occasional to frequent picking above ground level.

**Choosing the right picker** Different characteristics determine the choice of man-up truck for any particular order picking application:

- Maximum picking height and the picking window are two major factors defining the choice of man-up order picker for an application
- Man-up order pickers may also be equipped with different guidance systems to work in very narrow aisles (VNA)
- If the application requires a heavy-duty order picker (for frequent picking at height), man-up order pickers equipped with a 48 V electrical systems will give greater productivity.





Picking Height

11 m

7 m

6.3 m

2.8 m

1.4 m

Ground floor

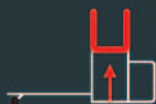
Picking window

Picking window

Model



N20Vi



N20VLi



V08



Aisles types

Wide

Power

24 V



Range



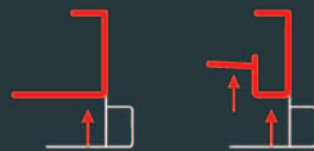
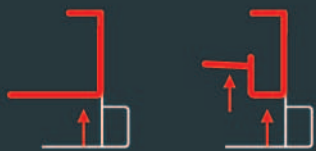
V10



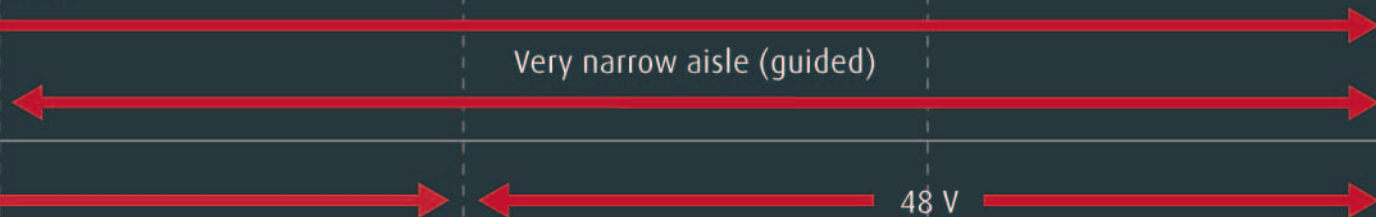
V11



V12



aisle





# Two Order Picking concepts. Up to second level & high

First and second level picking **N20Vi, N20VLi & V08.**  
User-friendly design & ergonomic controls.



**Access and operator's compartment** Low 135 mm step-in height and wide 432 mm entry on both sides allow easy and frequent access to the truck. While picking with the platform up, the operator is at ease with enough space to handle goods and safe with front and rear protection (optional system on the V08).

**Rising platform** Platform lift with OptiLift® system for accurate operation via user-friendly finger-tip controls. For more comfort, a platform mat acts as a deadman sensor and its edges are slightly inclined for safe picking. On each man-up order picker, the standard soft-padded platform offers further comfort.

**Twin-grip steering and controls** The user-friendly twin-grip control concentrates all controls within easy reach of either hand. This allows one handed operation while driving or lifting leading to greater productivity. Effortless power-assisted steering is provided as standard. Positive steering feedback is essential for accurate operating when working close to the racking while transferring between two picking areas.

**Truck access** This range of first & second level man-up order picker offers a choice of three methods to activate the truck - a conventional key, a PIN code log-in or via biometrical technology.

**Workstation and equipment** The workstation can be supplied with various accessories to meet the specific needs of an application: a rotating clipboard, a central bar to mount specialist equipment or a front shelf. Inching buttons, located on both sides of the chassis, enable the operator to walk to the next pick alongside the truck.

**Storage space** Several roomy storage compartments are provided all around the operator for fast, easy access to picking accessories such as pens, shrink wrap, knives, scanners...



level picking.

High level picking V10, V11 & V12.  
Versatile choice of chassis options & high comfort  
operator's concept.



**Safety** In operation, safety is of paramount importance. When lift heights exceed 1,20m, side barriers are compulsory and, on a Linde truck, these are fitted with gas struts so they open and close easily. When working in guided very narrow aisles, the operator must be protected against contact with the racking or loads, so lifting, lowering and traction controls require both hands to operate while a central dead man pedal keeps his body within the cab footprint. The overhead guard protects him from falling objects.

**Rising cabin** The cabin floor has a soft padded rubber cover ensuring comfort during a long shift. The central operating position ensures good visibility while the design of the cab ensures that the operator can get

close to loads on either side when picking. These trucks are equipped with soft landing of the forks to absorb shocks and vibration when lowering the cab to the ground.

**Control console** The ergonomic layout ensures that all functions are within easy reach guaranteeing comfortable operating. Two different steering controls are available: a steering wheel for ease of manoeuvring and a steering knob for very narrow aisle operations.

**Wide aisles or very narrow aisles (VNA)** When space is limited, not only do picking heights increase but operating aisles get narrower. All Linde trucks work as well free-ranging in wide aisles as they do when guided in very narrow aisles.

**Workstation and equipment** A supplementary lift mast is available allowing the pallet to be raised and lowered to maintain an ergonomic height when picking. The "walk-out pallet" allows direct access when picking heavy or bulky goods. The work-station can be equipped with a wide range of options such as a radio, fans, data terminals and scanners.

**Storage** The cab interior is equipped with a wide variety of storage compartments, pen holders and spaces for bottles, cans and tools. Strip lights are available to illuminate the racking, the load handler and/or cab interior.

# Frequent ground-level order picking with occasional 1st/2nd level access. Two order pickers for different picking styles.

Warehouses where order picking is increasing due to a greater number of line items often need to extend the picking zone upwards due to a lack of floor area.

This results in operators mainly picking at ground level but occasionally going up with the rising platform to reach an item.

As the proportion of items to be picked at higher levels is small, only the platform needs to lift with the operator; there is no need to lift the pallet during these occasional picks at height.

Even though the operator only occasionally needs to reach the first and second level, no compromise has been made on safety and comfort. The operator is well protected and can pick from the stable platform with ease, comfort and confidence.

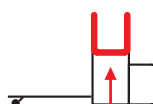
Linde presents two order pickers to fit this occasional first and second level picking requirement: **the N20Vi and the N20VLi.**

## N20Vi. Order picker with rising platform.



The N20Vi is ideal as a standard order picker as it can be used to pick occasionally from the first or second level thanks to its rising platform.

This order picker retains the productivity and characteristics of a ground level order picker (order picking onto either 2 pallets lengthwise or 3 roll cages) with the additional benefit of first or second level picking when necessary.







## N20VLi. Order picker with supplementary lift and rising platform.

Although the N20VLi allows occasional first and second level picking, this man-up order picker provides ergonomic benefits when picking larger, heavier items.

The configuration of the N20VLi enables the operator to place the picked goods onto a pallet or cage that is at a comfortable working height. This is due to the supplementary lift function which is controlled via the OptiLift control that can be accessed both from the platform and alongside the truck.

The operator can adjust his pallet or cage so he always places his picks at the optimum height, avoiding constant bending and stretching and making the operation stress-free.

The N20VLi is also equipped as standard with initial lift (2000 kg capacity) which increases ground clearance for easier operating over dock levellers or ramps.



# Frequent 1st/2nd level order picking.

## Two order pickers with dedicated platform concept.

Warehouse organisations with picking locations from ground level up to the 2nd level, need the operator to be able to pick with the same speed and ease whether he is picking at ground level or from the raised platform.

Thus direct access to the pallet is necessary to be able to put down picked items regardless of the height of the platform.

Linde introduces innovation and widens its range with two versions of the Man-up order picker models **V08 “walk-out”** and **V08 “supplementary lift”** each with the forks directly connected to the rising platform so the operator can stack his picked items regardless of the picking height.

### V08 “walk-out”. Order picker with rising platform and fixed forks.



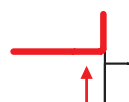
The forks of the V08 “walk-out” are an extension of the rising platform.

The operator is able to access the pallet directly from the platform stack his picked loads without any barrier.

As different applications require different kind of trucks the V08 is also available with short load arms. This reduces its capacity to 700 kg but reduces the turning radius for use in applications with limited space.

If maximum stability is important the truck is equipped with load arms which allow to take up to 1000 kg of load.

To provide additional security while picking at height onto an open pallet, an additional guard can be fitted to either version, providing handgrips for safe picking without compromising pallet access.







## V08 “supplementary lift”. Order picker with rising platform and supplementary lift.

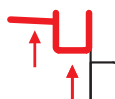
This Man-up version offers direct access to the forks while the operator remains well protected within the comfortable work station.

The V08 “supplementary lift” lifts the pallet to an ergonomic working height for stress-free load placement.

The operator can also adjust the position of the pallet downwards as he fills it up.

Safety is guaranteed when using the supplementary lift as both hands are required to operate the function.

The V08 “supplementary lift” can also be used as a counterbalance stacker as the load arms do not extend beyond the front bulkhead where they could interfere with the “ground zone” of the racking system.









# V10 with “walk-out” facility or “supplementary lift”.

## Order pick up to 6350 mm picking height.

When 1<sup>st</sup> and 2<sup>nd</sup> level order picking is common and even higher picking is sometimes required, this 24 Volt truck is the ideal solution for picking at heights up to 6350 mm. Designed on a modular basis, the truck specification can be perfectly tailored to the application. For example, there is a choice of 3 lift motors depending on the performance level required. Is block stacking important? If so, then choose the 790 mm chassis width for easy operation between lanes of pallets. The truck is also available with or without supplementary lift to match the loads being picked. Whatever your application, we can match it.

**Driving** The ergonomic control console makes even first time operation intuitive and simple - the operator immediately feels confident and at home. The truck is equally suited to free-ranging in wide aisles and working in guided very narrow aisles. The optional GPRS on-line function reports potential faults directly to the service engineer, thereby saving time and increasing uptime.

**Lifting** Integrated sensors tell the truck that both the operator’s hands are on the controls and thus within the cab footprint and safe from contact with racking or loads when lifting. The LSC lift control monitors lift height and steering angle reducing truck speed to guarantee stability. The soft-stop mast improves operator comfort as well as increasing truck durability.

**Order picking** The supplementary lift mast and the slim cab front make high picking rates possible. The low step-in height of the V10 makes ground level picking easy and convenient, while the wide variety of storage compartments and options such as cooling fans, mountings for radios, data terminals and barcode scanners make the truck easy to equip and use in all order picking applications.





## Frequent medium and high level order picking. Two heavy-duty order pickers.

For intensive applications with regular picking at all heights up to a maximum of 11 m – available with either a supplementary lift mast or as a “walk-out” machine with front safety barrier.

Heavy-duty order picking in wide or very narrow aisles with mechanical side guidance or inductive wire guidance.

**Driving** Whether the truck has a conventional cab or a “walk-out” platform, the operator has an ergonomic and comfortable working position with excellent visibility of racking and loads. The intuitive layout of the control console has been carefully thought through. The clear display provides instant information on status: operating hours, battery charge, steered wheel and truck position...

**Lifting** Linde order pickers are designed to minimize vibrations. The cab itself is suspension mounted and the floor has a soft padded rubber covering to absorb shocks and guarantee operator safety and comfort throughout the shift.

**Order picking** The low console makes it easy to position picked goods on the pallet while the supplementary fork lift allows the pallet to be kept at a comfortable working height avoiding the operator bending and stretching.

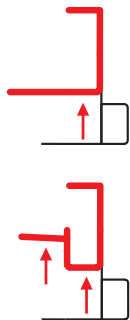
One of Linde’s core brand values is “ergonomics”. We aim to match the operator to the truck so that minimum effort can lead to maximum results. This range of trucks matches an operator’s needs for effective order picking. Combining a high level of technical performance with user-friendly design, Linde’s V range lets the operator concentrate on his task, helps him stay fully motivated and maximizes his efficiency. Linde’s V range guarantees low downtime and high throughput.



V11 with “walk-out” facility or “supplementary lift”.

Order picker up to 7000 mm picking height.

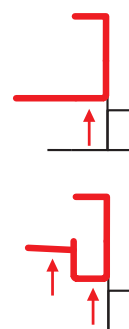
The V11 is the truck to choose for intensive multi-level picking applications at up to 7 m. Its powerful AC lift and traction motors perform especially well in these heavy-duty applications.



V12 with “walk-out” facility or “supplementary lift”.

Order picker up to 11000 mm picking height.

The V12 is the truck for almost limitless order picking. With lift heights up to 11 m even the tallest and most demanding picking applications can be handled successfully.







Linde Material Handling ranks among the world's leading manufacturers. This position has been justly earned. Linde trucks excel not only with their recognized innovative technology but especially their low energy and operating costs, which can be as much as 40% less than competitors.

High quality in production is matched by the standard of the services we provide. With a comprehensive network of local sales partners, we are at your call around the clock and around the world.

**Your local Linde partner** offers you a complete single-source package. From qualified pre-sales consulting through the sale to after-sales service; including finance packages matched to your business requirements. Leasing, rental or hire purchase. Flexibility is maintained in your operational and decision-making processes.

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