



## City centres are morphing,

and Linde is keeping pace by offering the innovative solution to ease that last delivery mile.





Linde has put its manufacturing know-how to work, offering an electric pallet truck to facilitate city centre deliveries:

the CiTi Truck.

Most European city centres these days have pedestrian areas where cars are banned or severely restricted. Walking in these traffic-free zones is a pleasure; pedestrians no longer have to inhale a constant stream of pollution from passing cars and trucks.

City planners are keen to improve the daily life of city dwellers. Urban furniture is strategically placed to form attractive safety barriers between pedestrians and roadways. Convenience stores are opening up in handy city locations, thus avoiding the need to visit out-of-town shopping centres – a boon to elderly and less mobile urban dwellers.

But helping inner-city pedestrians hinders inner-city deliveries. A myriad of obstructions complicate that last mile for goods to reach their city centre destinations. Restricted delivery timeslots, one-way or narrow streets, pedestrian zones, uneven ground – all these hurdles have to be cleared, with patience, ingenuity and physical effort, in order to make deliveries to city centre businesses.





## Comfort & Ergonomics for effortless load handling

To facilitate the operator's daily work, Linde has equipped the CiTi Truck with ergonomic features.

**EasyControl (Joystick):** With all electrical functions integrated into the tiller, CiTi Truck is effortlessly manoeuvred with just one hand on the easyControl – lifting or lowering, moving forwards or backwards, accelerating or decelerating – it's all easyGoing!

**Multifunctional digital display:** CiTi Truck's user friendly digital display keeps the operator continuously up to date with truck and load status, battery charge indicator and working hours – all visible at a glance.

**Tubular structure:** Both robust and light, the CiTi Truck is designed around a tubular concept. The entire structure of the truck, from tiller head to fork tips, is rounded for ergonomic handling and pallet care.

**Safety Features** to protect the operator, passers-by and the goods

The hustle and bustle of a city centre requires rigorous safety.

**Belly switch:** On pressing the belly switch when driving forwards, the CiTi Truck will stop. Thus the operator has complete control over the load at all times. The easyControl also features a horn to alert passers-by of the CiTi Truck's presence.

**Electromagnetic disc brake:** While releasing the easyControl or at the end of tiller strokes, the compact electromagnetic disc brake efficiently immobilizes the CiTi Truck, especially on a lift tail, allowing the operator to safely control the CiTi Truck and its load in urban traffic.

**Emergency switch:** Within easy reach on top of the technical cover, the operator can simply press the emergency switch to power down the CiTi Truck.

## **Energy management,** innovative battery technologies

In order to make the CiTi Truck as efficient as possible, Linde integrates a new and innovative energy concept.

**Battery capacities:** The CiTi Truck offers three battery capacities according to customer needs. The batteries have a discharge controller that is linked to the multifunctional display via a CAN bus for accurate real-time information.

**Plug & Play system:** The battery has a locking cover for secure storage in the CiTi Truck. All batteries are the same compact size, making them easily and quickly interchangeable in the plug & play system. An ergonomic handle allows easy extraction of the battery.

**Charger capacities:** Two lightweight external chargers are available depending on the number of batteries to be charged or the maximum time available for full charging. Each battery has an LED showing its discharge status when the battery is not connected to the truck.





**Engineered to perform** crossing and transferring in an urban environment

The city is where the CiTi Truck feels most at home, facing the challenges of transporting goods in an urban environment.

**Tandem load wheels:** The unique curved shape of the load wheels, which rotate on crossing obstacles (max. 70 mm), provides outstanding maneuverability.

**Drive wheel:** Crossing obstacles is like taking a walk in the park for the Citi Truck, whose large diameter three-layer drive wheel delivers precision steering.

**Lifting Motor:** Lifting pallets is fast and effortless with the CiTi Truck's lifting motor. The compact ball screw technology converts the electric motor torque into high lifting performance (up to 500 kg).

**BLDC Traction Motor:** Load transfers are a cinch for the CiTi Truck. Equipped with a traction motor fitted inside the drive wheel, the truck glides along at a top speed of 6 km/h. Efficient and compact, the Brushless DC motor is maintenance free.

**Booster effect:** When the going gets tough (e.g. getting out of a pothole or negotiating small steps), the standard booster effect automatically provides an extra torque surge, allowing the operator to maintain complete control of the CiTi Truck in any situation.



Having reduced the physical operating effort to a minimum, the CiTi Truck also takes care of the environment.

**Tyre and load wheels:** City dwellers will not be subjected to a rude awakening when the CiTi Truck handles its early morning deliveries. CiTi Truck's tyres are made from a cushioning rubber that dampens down and minimizes noise while crossing tiled floors, pavements and cobbled streets.

**Environmentally friendly:** The CiTi Truck's load wheels are covered with a moulded plastic protection that leaves no scratches or marks on customers' floors and entrances. A mechanical lifting device was chosen for its environmental friendliness in an urban setting: no messy oil is necessary, so no risk of leakage or pollution. 95% of the CiTi Truck is recyclable.



