



TERGO[®] URS

Very-Narrow-Aisle (VNA) free-range reach truck



UNICARRIERS

Experience the VNA effect

Do you want to get the most out of your costly warehouse space? Then high-level racking with narrow aisles can be your ultimate solution – especially if high selectivity and accessibility are top priorities. Simply by reducing your aisle widths from 3 metres to 1.5 - 1.7 metres, you'll gain around 30 % more storage and lower your total cost of operation by 25 %. And by seamlessly adapting to almost any warehouse task – VNA applications, stacking and internal transports – our new TERGO[®] URS means 100 % business.

	25% lower total cost of operation	30 % more storage	100 % business
UniCarriers TERGO® URS			



All flexible, all efficient

UNICARRIERS

To utilise your warehouse space to the maximum, you need a VNA truck. For general duty, you need a free-range reach truck. If you need both, you can have it all with the new TERGO[®] URS combined man-down VNA/reach truck.



UNICARRIERS

What's your ultimate storage solution?

Space is money. So how do you get the most out of your warehousing space? There are numerous methods of storing palletised products in a warehouse. All have their virtues, depending on your operational requirements – whether it is simply to pack as many pallets as possible or to provide a very high degree of selectivity and instant retrieval of any given pallet. With our Logistics Analyser we can support you in your efforts to find the best solution for your unique needs.



Very-Narrow-Aisle storage (VNA)

creates high storage capacities thanks to narrow aisles and high racking height. Pallets are stored and retrieved quickly due to the design of the VNA trucks. This can be a cost-effective solution when the cost per m^2 is high or the available area is limited. To operate in a VNA installation, specially designed rail or wire guided high lifting trucks are required. The floor space utilisation is up to 40-55%.

Installation cost comparison index = 110 - 140 (APR = 100)

Narrow-Aisle or Very-Narrow-Aisle - a difference that makes a difference

Space utilisation

Racking 45 % Aisles 48 % Work areas 7 % Why choose dedicated Very-Narrow-Aisle equipment instead of a free-range truck for Narrow-Aisle operations? The answer is simple: reducing the aisle width too much when using free-range trucks (instead of rail or wire-guided VNA trucks) will result in reduced performance, increased rack damage and damage to your stored products. There's also an increased risk of collisions. However, choosing a man-down VNA truck, on the other hand, with a truck guidance system (floor mounted rails or under-floor wire) will maximise your performance, manoeuvrability and safety. The truck guidance also allows diagonal travel – the safe and legal lifting and lowering of loads while travelling – which enhances your truck performance by up to 17 %.

Conventional, Adjustable Pallet Racking (APR=100)



Space utilisation

Racking 39 % Aisles 55 % Work areas 6 %



Space utilisation

Racking 50 % Aisles 44 % Work areas 6 % is the most common type of racking. Each individual pallet is easy accessible, the racking arrangements are flexible and the capital cost is relatively low. But this racking rarely provides the lowest storage cost since the utilisation of floor space is comparatively inefficient.

Double-Deep racking

halves the number of aisles required to achieve excellent utilisation of storage space, with up to 30% savings compared to conventional pallet storage. Four pallets can be stored in each racking bay between the aisles. It is an ideal system where stock moves quickly, and direct pallet access at 50% is less critical than optimum space utilisation. What's more, the initial capital cost of Double-Deep is lower than other high-density storage systems, it lowers your handling costs and requires less manpower to operate. However, practical use of available positions is 85% at most depending on the amount of pallets of the same type. A purpose-built Double-Deep telescopic fork truck is required to operate the system, which also has the added advantage of conventional reach truck flexibility. **Installation cost comparison index = 100 - 110 (APR = 100)**



Very-Narrow-Aisles? Free range? You can have it all with the new TERGO® URS

Kiss compromises goodbye. Our new TERGO[®] URS reach truck has all the powerful features you expect from a man-down VNA truck, while it effortlessly deals with almost any other tasks in your warehouse. In narrow aisles, the operator can feel relaxed and work efficiently. Conveniently guided by rails or wire, he or she can concentrate on controlling speed and lifting. And outside the aisle, the TERGO[®] URS instantly transforms into a superbly efficient and flexible reach truck.

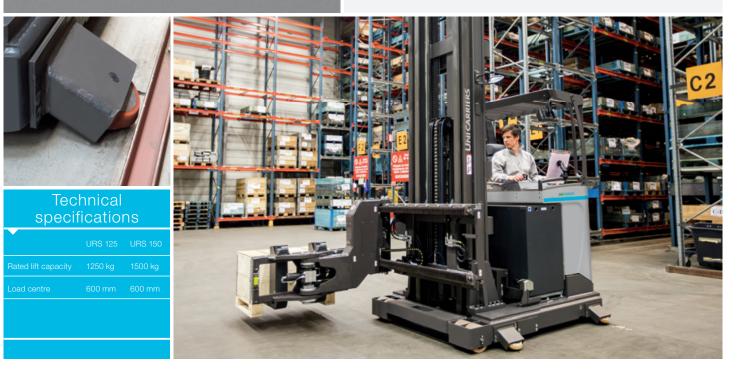
- High-performance diagonal lifting mandown VNA truck
- Ultra-flexible freerange reach truck
- No feeder equipment or P&D stations needed
- All-aisles, all-warehouse efficiency
- Proven ergonomics for operational efficiency
- Available with rail guidance or wire guidance module





Simultaneous access to both sides of the aisle With the 180° Swivel Reach fork unit, the operator conveniently rotates the forks to allow placement of goods into the racking on either side of the aisles – instead of turning the truck, the operator turns the forks.

Improved performance with diagonal travelling Reducing lifting and lowering time by 80 %, the VNA truck guidance (rails or wire) allows the operator to safely and legally lift and lower the load while travelling in the aisle.



UNI CARRIERS

Man and machine as one – for your profitability

Scientists agree*: intelligent ergonomics and a fully adjustable operator's environment are key to your operational efficiency. That's the simple truth behind the unique design of the new TERGO[®] URS. You get more from a healthy operator: he or she performs better and reduces your Total Costs of Operation.

* According to research by the Swedish Transport Research Institute (TFK 1996:3)

Enhanced vision of fork position

The placement of mirrors on the mast provides unparalleled views of the fork tips when accessing pallets at the lowest level.

Ergologic all-in-one control

A neutral posture minimises the tension on nerves, tendons, muscles and bones. The unique Ergologic control is designed to allow the operator to efficiently control all hydraulic functions with a minimum of strain on hand and forearm.

Durable wheel

Unique wheel design with large diameter for greater durability.

Automotive pedal design

To enhance driving safety, the pedals follow the same logic as in a car – speed to the right and braking in the middle. The safety switch to the left is conveniently operated with a minimum of effort. When the truck stands still the parking brake is automatically activated.

Adjustable floor

At the touch of a button, the operator can lower or raise the floor by up to 70 mm – for a perfect driving position.

Personal performance settings

HILE E

<u>ĿĿĿĿĿ</u>ŧ+<u>ĿĿĿĿĿĿĿ</u>E<u>EEEEE</u>E

The option of maximum speed 14 km/h makes this a very fast reach truck. To suit each operator's driving skills, the truck performance can be individually set in the ATC truck computer. PIN code entry allows authorised use only.

Mini steering wheel

While operating the steering wheel, the left arm is moving for 74 % of the driving time. Putting the operator's left shoulder towards the backrest, UniCarriers' unique mini steering wheel allows a relaxed body position with minimum strain on the arm, neck and shoulders – regardless of travel direction.

Ergonomic seat design

75% of the operator's body contact with the truck is through the seat – that's why the seat is so important in ensuring that the operator is efficient the whole shift.

Narrow backrest

Our specially designed narrow backrest helps the operator to turn the chest in the driving direction, thus reducing strain on the neck.

Adjustable armrests

The right and left armrests relieve the strain on the neck and shoulders and are adjustable to suit each operator. Together with the mini steering wheel, the floating armrest provides a relaxed posture with less strain – in one hour, the operator's left arm moves up to 2000 times.

Easy-entry step-up

During the shift, the operator enters and leaves the truck many times. Our easy entry/exit with a low comfortable instep (390 mm) and a specially designed step-up handle makes this an effortless action.

Tilting seat

In around 10% of the working time the operator must look upwards. For very high lifting the seat backrest can easily be tilted 18° within the cabin area to reduce this strain and enhance the operator's vision.

Spacious cabin

A generous roof height and spacious cabin add to the operator's sense of well-being.

Relaxed driving posture

In guided aisles the operator travels 50-50 in both directions. And when outside the stacking aisle, the operator travels approximately 20% in the fork direction. A relaxed driving posture in each direction is vital for comfort and efficiency.





Innovative technology for your productivity





To keep the operator in focus during the whole shift, the seat, floor, armrest and controls can be personally adjusted to fit any operator size. In total nine different parameters can be adjusted.

2. Personal PIN code settings

TERGO[®] performance can be set to suit the operation or experience of each operator. The user ID settings are connected to 350 personal PIN codes. Every operator can optimise the truck performance to best suit their preferences.

3. Ergonomic mini steering wheel

Scientific studies show that the operator changes the steering wheel direction 2000 times per hour. The mini steering wheel with floating armrest is one of our unique innovations that add to operator relief during long shifts for maximum productivity, control and comfort.

4. Hands-free direction control

By using the accelerator pedal to change travel direction, forward or reverse, the operator can focus on the right hand for using up to three hydraulic functions simultaneously.

5. Intuitive dashboard and control interface

OnBoard

Self Diagnostics

Perfectly positioned instrument panel optimises overview, control and safety. All important operator information, activated functions and safety indicators are clearly displayed.

6. Tilting seat backrest

State-of-the-art seat, including 18° tilt function, reduces neck and back strains when handling loads on high levels. The tilting backrest adapts conveniently to the weight of the operator for maximum comfort. With the narrow Ergo backrest it is also easier to turn the chest in the direction of travel, thus helping to reduce repetitive strain injuries.

7. Ergologic all-in-one control

This perfectly designed grip together with well-placed hydraulic function levers ensures a relaxed posture. With the unique multifunctional joystick Ergologic, the operator activates six different functions, including lifting, lowering, reaching out and rotating. Using the same control with one grip, the operator has convenient access to all functions which will increase the material flow output with a minimum of strain and effort. Ergonomic, of course, and very logical.

Dynamic Cornering Control, DCC

Design Concept

Modular

With our DCC technology the truck performance is greatly improved, as well as providing maximum safety. DCC allows high cornering speed, but if the operator needs to avoid an obstacle, the truck automatically reduces speed for a continued high level of safety. (DCC is included in all TERGO[®] reach trucks equipped with S3.)

OnBoard Diagnostics Technology

The TERGO[®] truck range features our unique Truck Computer (ATC) with CAN bus technology, allowing the service engineer to easily and quickly run diagnostics on the truck and return it back to operation in the shortest possible time, thus ensuring maximum uptime.

Modular Design Concept

All our trucks are designed according to our unique Modular Design Concept, which improves quality and limits the number of parts used. Our mobile service engineers therefore carry a limited number of spare parts helping provide a First Time Fix Rate of over 95 % and an uptime of more than 98 %.

UNICARRIERS

Some extras for your efficiency

With our all-new TERGO[®] URS VNA free-range reach truck you'll employ one of the most efficient and ergonomic VNA trucks available. And to make it even more flexible and tailored to your operations, we have created a range of optional equipment – specially designed to meet your requirements.



Camera and monitor

Improve safety and handling efficiency with the high quality camera and monitor. The camera is mounted on the fork as standard.

Cold store design (-35°C)

Cold store design includes a wide range of modifications for durability and maximum uptime in these conditions.

Cold store cabin

The TERGO[®] Cold store cabin is designed to please even the most demanding operator. The wide clear entry, spacious cabin, large windows in the sides and in the overhead guard, together with an efficient ventilator and heater, ensure a climate controlled by the operator, providing maximum performance and comfort throughout the whole shift.

Heated seat

Adding to comfort, a stepless thermostat regulated electric heating system is available for the seating and backrest surfaces. Choose between fabric and PVC covered seat, depending on your environment.

Mast mirrors

With angled mirrors in the mast, the operator will conveniently have great views of the fork tips when accessing pallets at the lowest level.

Battery change technology

Optional steel rollers allow battery change to be carried out from both sides of the truck. For intensive operations, the "Fast track" system with motor-powered steel rollers provides battery change in one minute.

High performance 14 km/h

Making TERGO[®] URS a very fast reach truck.

Midi steering wheel

If you prefer the midi steering wheel, it is placed to fit perfectly in your left hand. Positional adjustability of the wheel combined with the tilt function provides maximum flexibility.

Writing desk

Conveniently mounted on the included equipment bar, the writing desk brings order to the on-board office.

Equipment bar

For all extra equipment we offer many alternatives. Adjustable RAM holders in different lengths for the computer keyboard, display and scanner, which can be placed not only on the equipment bar, but also on the step-up handle. It's all about your own preferences.

12 V power outlet

Power outlet for the extra equipment or just for charging your mobile phone.

Smart Start

Eliminate the PIN-code start-up process by using the touch-free Smart Start system. When using different TERGO[®] trucks, just bring your personal Smart Start key; the truck will recognise you and your personal performance settings.

Level Assistance System, LAS

The unique LAS intuitively and automatically finds the storage level. It is useful to always be at the exact fork height, providing major improvements in handling efficiency and safety.

Active Spin Reduction, ASR

Loss of drive wheel grip with a reach truck means big risks for the driver, but also for all people in the surrounding areas. With patent-pending ASR on your TERGO[®] reach truck the safety improves and drive wheel wear is reduced, providing additional cost savings.

For more TERGO[®] options, please visit **unicarrierseurope.com**



It's all about the price. But what price?

Reduce your Total Cost of Operation with UniCarriers

We agree. Price is everything. Or to be more specific: your Total Cost of Operation (TCO). That's why we're so focused on cutting costs and improving your material handling. The truck and its performance play an important role, but this is even more about how we can support you in optimising your warehouse operations to give you the best value for your money. Which – in the long run – is what creates a winner.

UNICARRIERS CORPORATION

UniCarriers Corporation reserves the right to make any changes without notice concerning colours, equipment or specifications detailed in this brochure, or to discontinue individual models. The colours of vehicles delivered may differ slightly from those in this brochure. The specifications vary for different countries depending on local market conditions. Please consult your local dealer to ensure that the vehicle delivered meets your expectations. All values are determined based on the standard condition and may vary, due to motor and system tolerances, condition of the truck and operational conditions. Some equipment shown on photos are optional.