

# **Reach trucks**



# Designed to meet the highest of standards: Yours



UniCarriers designs, manufactures and supports the most advanced material handling equipment. By integrating the three distinctive brands of Atlet, Nissan Forklift and TCM, UniCarriers is the perfect mixture of Japanese quality and technology as well as Swedish design and ergonomics. UniCarriers represents more than 65 years of industry experience, an unparalleled global reach and deep understanding of local markets.

<b>5</b> models	ULS UND UMS UHD	
Ĕ	UHD UHX	

The design of a UniCarriers truck always starts on the warehouse floor, with the focus on the operators and the operation. We've also realised that technology designed around human needs makes people more productive and happier at work. And when we created the new generation of UniCarriers reach trucks, the mission was clear and simple: Build the world's most personal truck. We interviewed truck operators and logistic managers across the world. We conducted scientific studies on ergonomics and repetitive strain injuries. And together with our customers, we tested and fine-tuned truck prototypes in the toughest real life conditions. During all stages of product development, we've been challenged and guided by one question: "How can we make the truck more personal?" Design, technology, performance, service and financing – all created to fulfil the needs and wants of the world's most demanding truck users. And now we proudly present what we believe is the world's most personal reach truck range: designed to meet the highest standards – your standards.

# It's not about the machine...

#### Personal performance settings

The option of maximum speed 14.5 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.

### 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.

#### **ProVision concept**

The ProVision mast system, the angled overhead protection bars and pillars, are optimised for all-round vision, safety and productivity.

#### Mast Tilt Control, MTC

For quicker stacking and retrieval of goods, MTC reduce mast oscillation with up to 80% on trucks with Mast Tilt.

### S3 – Soft Motion

S3 incorporate several safety features including Dynamic Cornering Control. Soft Motion – continuously controls the Mast reach, Tilt and Sideshift speed. This technology improves handling speed and safety at all lift heights.

### Easy-entry step-up

The separate footstep gives a low, comfortable instep (390 mm). This, together with the specially designed step-up handle, makes it easy to get in and out of the truck.



### Spacious cabin

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

### Narrow tilting backrest

Our specially designed narrow backrest helps the operator to turn the chest in the driving direction, thus reducing strain on the neck. In addition, the 18 degree tilting backrest within the cabin, enhance the ergonomics while stacking. (Only UMS/UHD & UHX)

### Mini steering wheel

More productivity and less strain are facilitated by the steering wheel position close to the driver, and a supporting floating armrest. It allows more body movement which reduces neck angles. This is the result from extensive scientific studies. It's proven world class ergonomics.

### 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. (Only for UMS, UHD and UHX).

### **Durable wheel**

Unique wheel design with large diameter for greater durability. All maintenance is swift due to excellent accessibility for highest uptime.

#### Low mast noise

High-precision mast design, efficient damping of mast movements and soft stop technology contribute to very low noise levels.



## lt's about You

### 10% upwards

Approximately 10% of the working time, the forks are lifted so high that the operator must look upwards. This strain is reduced by the tilting seat.

### 2000 arm movements/hour

In one hour, the operator's left arm moves up to 2000 times.

### All-round vision

Thanks to our ProVision concept, the driver has good vision in all directions ensuring safe handling.



#### 20% in fork direction

The operator travels approximately 20% of the time in the fork direction.

#### 74% steering

Wheel movements while operating the steering wheel: the left arm is moving for 74 % of the driving time.

### Intuitive foot movement

To control speed and the brake, the operator uses the right foot intuitively.

### 1000 head turns/hour

The operator turns their head more than 1000 times per hour.

### Ergonomic shoulder position

Putting the operator's left shoulder towards the backrest, UniCarriers' mini steering wheel makes it easier to move the body in the direction of the truck.

### **Relaxed posture**

Relieving the pressure on the neck, back, shoulder and elbow, the floating armrest and the mini steering wheel ensure a relaxed posture with less strain.

### 75% seat contact

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.

#### 70% forward

Most of the time is spent travelling forward. Our mini steering wheel allows a relaxed body position.

#### Easy step

During the shift, the operator enters and leaves the truck many times. Our easy entry/exit makes this effortless.

# It's very simple:

People-centric technology means a happier and more productive workforce. That's why our new generation of UniCarriers TERGO<sup>®</sup> reach trucks adapt perfectly to the individual operator. Imagine the prospect of a reach truck that's 100 % dedicated to your material handling needs – how would that benefit your business? The new UniCarriers TERGO<sup>®</sup> – the world's most personal reach truck.





# Innovative technology for your productivity

### Ergonomic mini steering wheel

Scientific studies show that the operator changes steering wheel direction 2000 times per hour. The mini steering wheel with floating armrest is a unique UniCarriers innovation that adds to the operator's relief during long shifts for maximum productivity, control and comfort.

### Multi-adaptable driver's environment

To keep the operator in focus during the whole shift, the seat, floor, armrest and controls can be personally adjusted to fit the size of any operator. In total, nine different parameters can be adjusted. (ULS/UND seven different adjustments).

### Tilting seat with unique Ergo back rest

State-of-the-art seat, including an 18° tilt function for the UMS, UHD and UHX, reduces neck and back strain 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.

### 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.



### Dynamic Cornering Control, DCC

With UniCarriers DCC, the truck performance is greatly improved, as well as providing maximum safety. DCC allows high drive speed but automatically reduces speed to a suitable level when cornering for improved safety. Especially useful if the operator needs to quickly react to avoid an obstacle.

### Ergologic – Multi function control

Less fatigue and more performance by the scientifically designed Ergologic multi-function control that perfectly fits the hand. All controls are placed for intuitive and simultaneous operation.

### Personal PIN code settings

TERGO<sup>®</sup> 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.

### Intuitive dashboard and control

The interface instrument layout and fingertip control panel are perfectly positioned and angled towards the operator to optimise overview, control and safety. All important operator information, activated functions and safety indicators are clearly displayed.

### Mast Tilt Control, MTC

Tergo reach trucks equipped with Mast Tilt Control, MTC experience excellent mast stability for quick pallet handling, contributing to improved stacking performance and safety.

### **S3** Stability Support System

Boosting the operator's driving confidence, the UniCarriers S3 ensures industry-leading safety performance. To maintain driving stability in a wide range of situations, the S3 technology contains several functions including Dynamic Cornering Control. When handling loads at high levels, the Soft Motion adapts the mast tilt, reach and sideshift speed to maximise stability and safety. (Option on ULS)

### OnBoard Diagnostics Technology

The UniCarriers TERGO® truck range features a unique UniCarriers truck computer with CAN bus technology, which allows the service engineer to easily and quickly run diagnostics on the truck and return it back to operation in the shortest possible time, thus keeping uptime to a maximum.



### Modular Design Concept

All UniCarriers trucks are designed according to UniCarriers' 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, which helps to provide a First Time Fix Rate of more than 98 %.



TERGO®

Smart universal tools for warehousing and production – ergonomic, economical and yours

<b>TERGO</b> <sup>®</sup>	ULS 120	ULS 140	UND 140
Lift capacity, kg	1200	1400	1400
Load centre, mm	600	600	600
Truck width, mm	1120	1120	1120

The compact TERGO® ULS is our most nimble and economical reach truck, a genuine UniCarriers reach truck in every detail. Performance, stability and reliability meet high demands and will ensure productivity and a low life-cycle cost. This is the optimum combination of performance and economy, just the right universal tool for your medium-intensive material handling operations with loads up to 1400 kg.

Innovative ergonomic and safety technology ensure operator efficiency in a wide range of tasks – a boost for your warehousing, at exactly the right cost.



### Nimble chassis

Nimble chassis (1120 mm width in ULS and UND) facilitates material handling in confined spaces.

### Innovative mast

Adding to safety and productivity, UniCarriers' innovative ProVision mast design includes mast tilt, neatly integrated hydraulic hoses and clear-view fork carriage enhancing stability and vision.

ULS









### Ergologic

Further enhancing efficiency and ergonomics, this unique multi-functional joystick activates seven different functions, including lifting, lowering, reaching and tilting with one grip using the same control. Ergonomic of course, and very logical.

### Intuitive information

Intuitive driver's environment with clearly displayed information.



Based on the narrow chassis but designed for even greater lift heights and lifting performance. If equipped with optional wheels for rail guidance together with overhead guard, it is also suitable for narrow, deep stacking. UND is the perfect combination for mediumintensive applications.

### Modular design

Like all UniCarriers trucks, the ULS and UND are modularly built to maximise uptime and ensure low life-cycle costs.



# TERGO® UMS

### The world's most personal reach truck is also the most open-minded

The UniCarriers TERGO<sup>®</sup> UMS is the universal reach truck with a capital U. It's designed to perform almost any material handling task in your warehouse. Internal transport and stacking, with a lift capacity up to 2000 kg – the UMS performs effortlessly in your operation. The optional 14.5 km/h performance package makes this a very productive reach truck in efficient material handling, 24/7. Always right, always yours.

### Adjustable floor

Electrically adjustable floor height makes it easy to find the perfect driving position.





### **Tilting seat**

Tilting seat adapted to operator's weight facilitates high-level load handling.

### Mini steering wheel

The mini steering wheel and floating armrest ensure a relaxed, non-twisted driving posture.



<b>TERGO</b> <sup>®</sup>	<b>UMS</b> 160	UMS 200	N N N	l
Lift capacity, kg	1600	2000		l
Load centre, mm	600	600		l
Truck width, mm	1270	1270/1397		

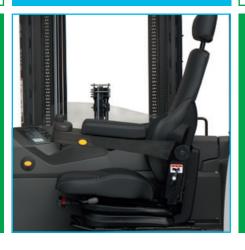


### Mast tilt with MTC

A tilting mast facilitates safe handling of up to ten metres, especially in narrow aisles. Mast Tilt Control, MTC, (standard depending on model) automatically absorb unwanted mast oscillations up to 80%, contributing to quicker handling and improved safety.

### **ProVision concept**

The hydraulics of TERGO®'s ProVision masts are neatly integrated into the mast design so as not to obscure the operator's vision. Support bars are also made to ensure clear vision.





### Easily accessible battery

The battery is easy to inspect without the operator having to leave the truck, simply by connecting the battery tray to the hydraulic reach-out system.



The tougher it gets, the more muscle you need

<b>TERGO</b> <sup>®</sup>	UHD 160	UHD 200	UHD 250
Lift capacity, kg	1600	2000	2500
Load centre, mm	600	600	600
Truck width, mm	1270/1397	1270/1397	1397

The toughest operations leave no room for compromise. Just like the UniCarriers TERGO® UHD reach truck. Everything, from the robust chassis and the high-precision mast to truck performance and operational reliability, is designed to meet your highest demands in all conditions. Handling loads of up to 2500 kg in almost any environment, including cold stores, world-class ergonomics and the unique UniCarriers modular design ensure service friendly-technology to further contribute to flawless 24/7 performance and low life-cycle costs.

### **Robust chassis**

UniCarriers' TERGO<sup>®</sup> range is designed with a robust chassis and high quality components, meeting the demands of multishift operations.





UHD

### **Durable drive wheel**

New drive wheel with a unique tread design and larger diameter for increased grip and durability. Easy access for quick and efficient changes, reducing costs and maximising uptime.



Reaching for stardom, fame and fortune – in a warehouse near you

TERGO®	UHX 200
Lift capacity, kg	2000
Load centre, mm	600
Truck width, mm	1397



### **High-level vision**

Designed for optimum safety and vision, the roof guard bars and side pillars are painted in a non-reflective dark colour and angled to maximise all-round visibility.





It takes something special to reach the highest levels. Or to be precise: the TERGO® UHX. With its high-lifting capacity, the UHX is an extremely capable partner in the most demanding high-rack warehousing. A sturdy chassis design and supreme stability contribute to star-quality efficiency. This is performance, ergonomics and reliability without compromise – equipped for your productivity.

### More than twelve metres

Supreme performance and stable mast design allows safe lifting of more than twelve meters.



#### 1. Fingertip controls

Traditional fingertip controls are optionally available. The controls are perfectly adapted to be reached easily, and the comfortable palm rest also includes a built-in grip.

### 2. Battery change technology

Simple battery inspection can be achieved without the operator having to leave the truck. Optional steel rollers allow the battery change to be carried out from both sides of the truck. For intensive operations, the "fast-track powerbed" system with motor powered steel rollers makes it possible to change the battery in one minute.

#### 3. High performance

Making UniCarriers TERGO<sup>®</sup> a very fast reach truck, this performance package enhances top speed by 16% – from standard 12.5 km/h to 14.5 km/h.



### 4. 360° steering

If you prefer the endless 360° steering system, the TERGO® has this optional feature. By using the personal PIN code, the 180/360° steering functionality is your individual choice.

#### 5. 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.

#### 6. Writing desk

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



### 7. 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 instep handle. It's all about your own preferences.

### 8.12 V power outlet

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

#### 9. Weight indicator

The display provides a load weight indicator and there is also a function for adding multiple weights of up to 100000 kg.

#### 10. Blue Lamp

The Blue Lamp is located on the overhead guard and provides a sharp blue dot on the floor, approx. 4-6 meters in front of the truck to warn other truck drivers and pedestrians.







# How personal do you want to be?

We designed the world's most personal reach trucks to help the operator perform optimally. And to make your UniCarriers TERGO<sup>®</sup> even more you, there's a wide range of specially designed options and accessories. So whatever the needs of your operations, there's a UniCarriers reach truck that's 100 % you.

### 11. Load wheel brakes

Braking with all three wheels improves safety, especially on floors with low friction, for such as cold stores. Load wheel brakes are standard on the UHD 250.

### 12. Video camera and monitor

Improve safety and handling efficiency with the high-quality camera and video monitor. The monitor is mounted in the overhead guard and the camera is mounted in the fork as standard.

### 13. 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.

### 14. 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 ASR on your TERGO<sup>®</sup> reach truck safety is improved and drive wheel wear is reduced, which provides additional cost savings.

### 15. Cold store design (-35°C)

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

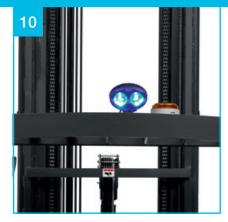
### 16. Cold store cabin

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

### 17. Heated seat

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









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 mds. 2017-07

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