



# Terra Dos T4

**HOLMER**   
exxact



**"In the field of beet lifting, nothing happens without HOLMER. We have been convinced about their top lifting quality for 25 years."**

**Sebastian Binder  
(ZRG Weserbergland)**

In 1969 Alfons Holmer took over his father's village blacksmith's workshop. In 1974, he developed the first self-driving, 6-row sugar beet harvester – a milestone in agricultural technology. HOLMER has since been a partner in agriculture for 50 years. The sugar beet lifter Terra Dos T4 was introduced in 2013 at Agritechnica. To this day, it is being constantly further developed in Eggmühl – be it through the automatic single-track depth control EasyLift or the new headland management SmartTurn. For this reason, the Terra Dos T4 has already been awarded machine of the year twice. The 4,000 HOLMER sugar beet harvester is also a Terra Dos T4.

1969 - 2019  
**50**  
**HOLMER**





# Beet lifting made easy

The Terra Dos T4 is a milestone in beet harvesting technology and has been setting new standards every year since 2013. Be it with the world record of 2015 or the DLG Silver Medal for Headland Management SmartTurn in 2017.

The machine of the year 2014 and 2016 has proven itself to farmers, communities, contractors and the sugar industry in over 45 countries worldwide. Since HOLMER developed the first self-propelled, 6-row beet lifter in 1974, the basic idea of lifting from the shares has remained unchanged – only that has now been much further developed with the Terra Dos T4.

The Terra Dos T4 is quality made in Germany. HOLMER develops and builds its vehicles in Bavarian Eggmühl – and has almost 50 years of experience as a machine builder and partner in agriculture. Customer service, spare parts deliveries, sales - at HOLMER, you get everything from a single source and are part of a strong, innovative family.

With passion and appreciation, we work on advanced solutions to continue inspiring you with the Terra Dos T4. Our machines are technologically advanced. Worldwide. For your success.

## The Terra Dos T4 at a glance:

- > HR lifting unit with 7 rollers – for best lifting quality
- > Patented automatic single-row depth control HOLMER EasyLift – for more yield with less wear and lower fuel consumption
- > HOLMER DynaCut scalpels with longer and sharper knife edge – for your yield
- > Lifting Share HOLMER DuraShare – for minimum wear costs
- > Well thought-out chassis concept – for optimum stability and track accuracy on slopes
- > Consistently lightweight construction – because soil conservation begins with machine weight
- > Intuitive operating concept HOLMER SmartDrive – for efficient and ergonomic operation
- > Telemetry system HOLMER EasyHelp 4.0 – for easy deployment planning and fast service
- > Unique driving concept HOLMER EcoPower – for lower fuel consumption
- > Modular system for 2 and 3-axle models – so you always have the best machine



Set standards.



"The Terra Dos T4 is the best beet lifter we've ever built. I am particularly proud of the propulsion concept."

**Dr.-Ing. Michael Gallmeier**  
(Head of Development)

# From professionals for professionals.

HOLMER has been building successful sugar beet harvesters for over 45 years. Our experience is your success.

Perfectly constructed, intelligently networked - that was the holistic approach when developing the Terra Dos T4. Our developers threw all their expertise into this. Intelligent designs and the use of modern, high-strength steels guarantee maximum stability and optimum material utilisation. At the same time, the ideally networked machine relieves the operator's work through intelligent driver assistance systems.

Thus, the Terra Dos T4 is not simply a machine. It is the concept for sustainable and modern sugar beet harvesting. This allows you to use the ever-shorter processing periods efficiently and in a soil conserving manner.

**The Terra Dos T4 developed in Eggmühl (Bavaria, Germany).**

- > Sustainable overall concept – for your success
- > Consistently lightweight construction and therefore up to 3 t lighter than comparable competitive models – because soil conservation begins with vehicle weight
- > High-strength steels S700 – for stability in the toughest conditions
- > Perfect hydraulic design – for maximum performance during use



**Be sustainable.**

# Modular system

The HOLMER Terra Dos T4 is the best beet lifter of all times – no matter whether with two or three axles. This is the reason for the Terra Dos T4's modular design. Thus, innovations from practice are directly introduced into all series. In addition, carry-over parts facilitate spare parts management, the uniform operating concept ensures user friendliness and the identical design stands for optimum serviceability.

## Same modules make life easier:

- > Mercedes engine with 626 HP / 460 kW – for working economically
- > Wide elevator conveyors, transfer webs and discharge elevators – for highest throughput
- > Same transverse and longitudinal slat conveyors – for fastest possible discharge
- > Intuitive HOLMER SmartDrive operating concept – for ideal driving comfort
- > Directly powered axles with automatically controlled lead – for traction and track accuracy on slopes

## Terra Dos T4-30

- > 2 driven axles – for easy rolling over
- > Tank capacity 30 m<sup>3</sup>
- > Optional: Front axle with MICHELIN VF 900/60 R 38 CerexBib 2 and rear axle with MITAS SFT 1250 /50 R 32 – for the largest footprint in its class

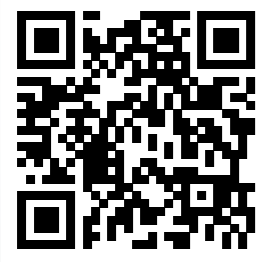
## Terra Dos T4-40

- > 3 power-driven axles
- > Tank capacity 45 m<sup>3</sup>
- > Thrust tube suspension of the third axle – for all degrees of freedom
- > Additional longitudinal slat conveyor to discharge the rear tank area
- > Divided and a split filling auger for gentle filing
- > Centrally arranged discharge elevator – for gentle tank emptying in approx. 50 sec



# World record

In autumn 2015, HOLMER presented its 12-row lifting unit HR 12. From the team of developers, Eduard Richer immediately put it through the toughest practical test – and set the world record in the sugar beet lifting! On 28 September 2015 at 12:01, a HOLMER Terra Dos T4-30 with HR 12 started working towards this world record. In 24 hours, it lifted 85.6 ha of sugar beet in the areas of Baltic Agrar in Liepen (Mecklenburg-Vorpommern). The world record proves the efficiency of the HR 12 – and has not been beaten so far. The HR 12 has proven its practical suitability in numerous field tests and demonstrations as well as in customer use. Particularly impressive is the impact of this future-proof and further developed technology in small fields and the headland. At the same time, the reduction of metres driven per hectare is a major contribution to soil protection through a less compacted area. Due to the greater width of the lifting area, a transport corridor that has not been rolled over is opened for optimal use by the vehicle the beet is offloaded into.

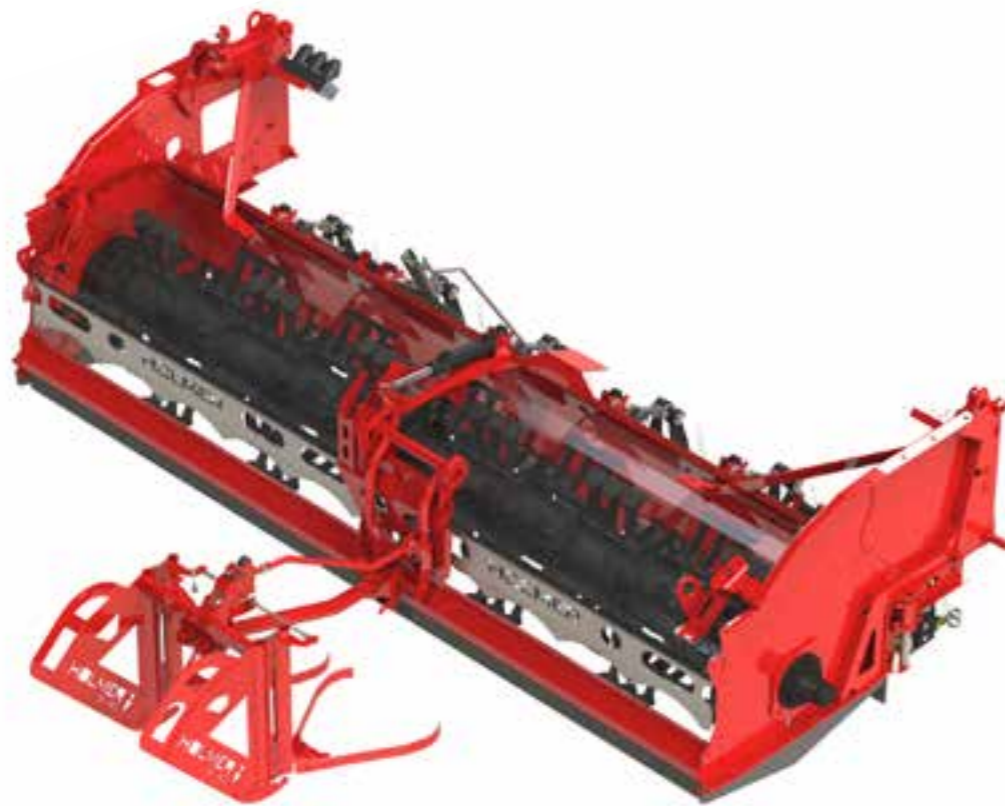


# Topper

The leaf stalk has approximately 5-7 cm – depending on the area of application and setting – which the topper of the Terra Dos T4 leaves on the sugar beet. The remaining leaves are cut off. The automatic depth control of HOLMER EasyLift is also extended on the topper. This is automatically adjusted in height – leaving only as many centimetres of leaf stalk that the operator has previously set; elaborate adjustments are no longer needed. When the roller speed is changed, the topper is readjusted automatically. The topper height is guided hydraulically and without the support wheels.

**The HOLMER integral topper HS I and the HOLMER combi-topper HS KO provide solutions for various types of use when dealing with leaf mass.**

- > **Topper shaft with 600 mm diameter and forged T-blades – for optimum shredding with minimum wear**
- > **Low topper speed – for low fuel consumption**
- > **Fully screwed steel plate construction – for easy maintenance**
- > **Leaf sensors can be hydraulically folded from the cabin – for the lowest setup times**
- > **Automatic rapid excavation – for your safety**
- > **Reduced vibration in the field and on the road – for shock reduction**



## HS I

**The HOLMER integral topper, which places the shredded leaf between the rows of beets.**

- > **Track-to-track lifting possible – for a clearer overview**
- > **Nutrients are retained – as an organic fertiliser**
- > **Uniform soil cover – as the best starting point for conservation soil cultivation and sowing**
- > **Gentlest topper options – to preserve the soil**

## Option: HS KO

**The HOLMER combi-topper, which either distributes the shredded leaf between rows of beets or spreads them over a previously planted area by means of a leaf spreader in the case of strong weed growth.**

- > **Functions can be switched from the operator's seat during lifting processes – for comfort and flexibility**
- > **Hydraulically powered, secured blade auger and spreader – for uniform spreading of large volumes of leaf and weeds**
- > **Nutrients are retained on the field – as an organic fertiliser**
- > **Leaf-harvesting possible with the HOLMER foliage band – for further use of the biomass**



Be precise.

Make the cut.

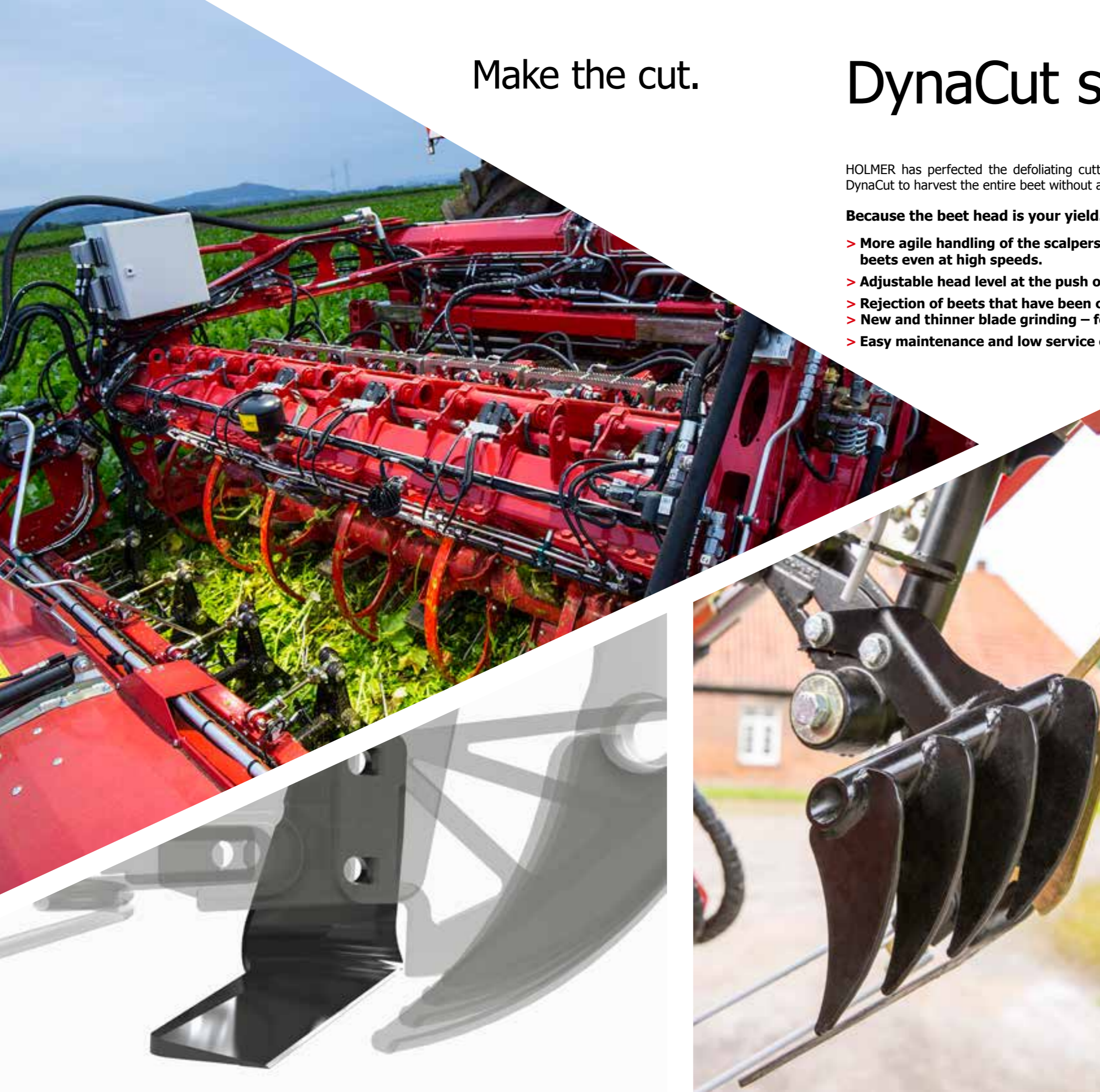
# DynaCut scalpers

HOLMER has perfected the defoliating cutting technique with the DynaCut. Its new geometry allows the DynaCut to harvest the entire beet without any leaves left attached.

**Because the beet head is your yield.**

- > More agile handling of the scalpers due to reduced weight – ensuring reliable scalping of beets even at high speeds.
- > Adjustable head level at the push of a button – for optimum lifting results
- > Rejection of beets that have been cut too low – for your yield
- > New and thinner blade grinding – for a much longer sharp edge
- > Easy maintenance and low service costs – for your profit

**DynaCut** 







# Option: Combi-defoliator

Two oppositely rotating cleaning shafts with a total of 50 rubber beaters work at a reduced speed along the direction of travel. In combination with the standard topper shaft and HOLMER DynaCut scalper, the beets are harvested as a whole without leaves. In contrast to comparable techniques, the HOLMER combi-defoliator no longer works transversely, but in line with the direction of travel.

## Harvest what has grown.

- > 2 counteractive cleaning shafts – for a perfect work result
- > 50 rubber beaters per shaft – for gentle beet defoliating and the least wear
- > Minimised speed – for lower fuel consumption
- > Arrangement in line with the direction of travel – for a longer working distance of the rubber beaters and thus better results
- > Easier adjustability – to relieve the operator's work
- > Can be combined with HOLMER DynaCut – for perfect removal of leaves
- > Higher yields – for your profit

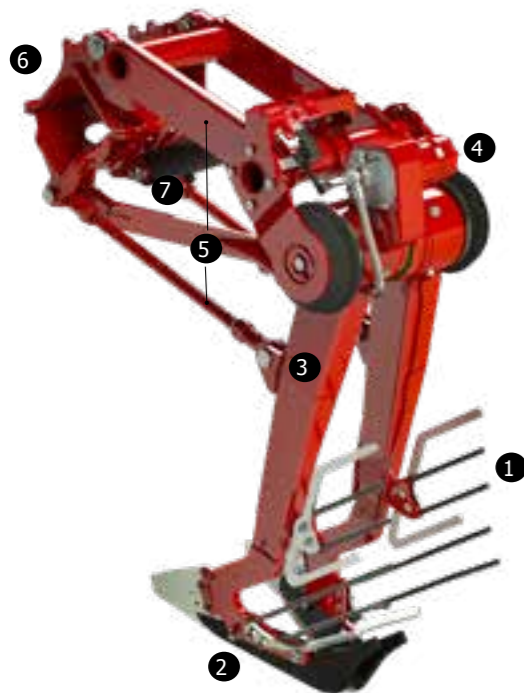
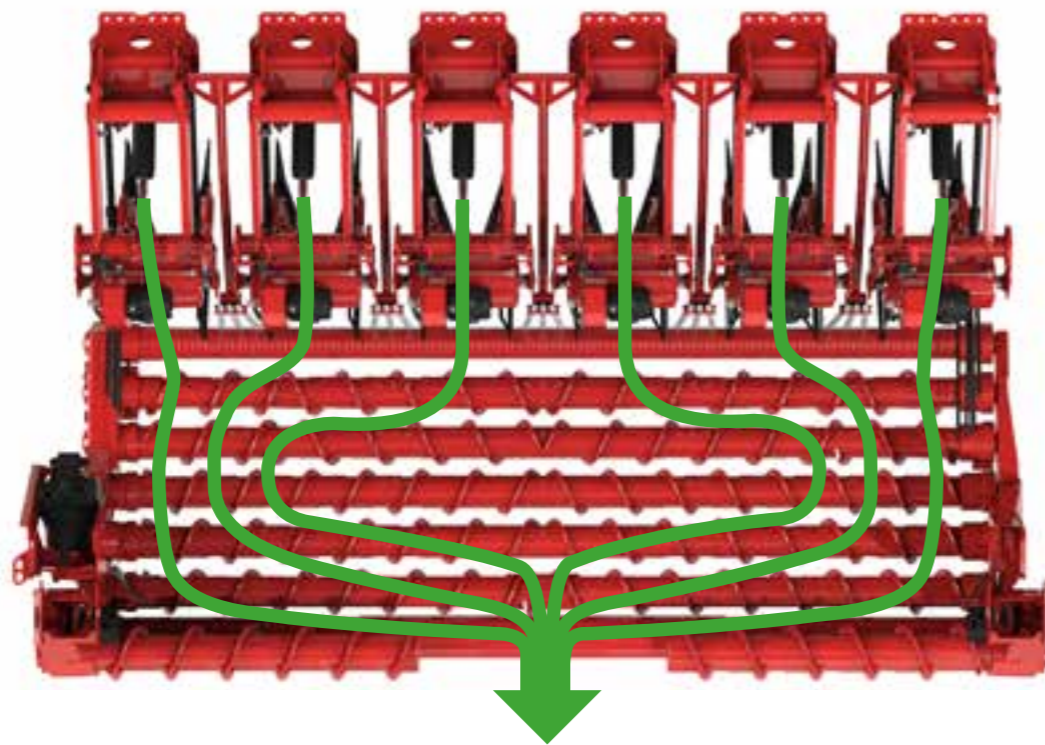
Keep your head.

# Lifter unit

As early as 2009, the HR lifting unit had been awarded a silver medal by the DLG. At that time, the single-row depth guide for every pair of lifting coulters was revolutionary. Since then, HOLMER has steadily worked on further developing the lifting unit. With HOLMER EasyLift, the single row depth control has been working automatically since 2015 – for six, eight, nine or twelve rows. The recipe for success of the HR lifter unit is its modular structure of the single row unit, which automatically adapts to each sugar beet crop.

**Because we invented the single-row depth guide.**

- > **Best view into the lifting unit from driver's seat – ideal for monitoring the lifting quality**
- > **Active and oscillating lifting movement of the shares – for the most gentle beet loosening and thus less root breakage**
- > **Pulled arrangement of the share bodies – for low tractive force requirements**
- > **Lifting depth per share in cm visible and adjustable in the cabin incl. warnings – for easy learning**
- > **70 mm lateral movability of all share bodies – for flexible row adjustment**
- > **Integrated hydraulic, maintenance-free stone guard for each row – for best operational security**
- > **Share field of vision and feeler shaft/roller speed can be adjusted independently of each other – for perfect lifting under all conditions**
- > **7 lifting and cleaning rollers – for more cleaning areas**
- > **Incremental speeds from only 300-600 rpm – for the most gentle conveying**
- > **Lifting rollers with 22-30 mm high spiral winding patterns – for maximum conveying capacity**
- > **Automatic reversing while lifting – for removing stones**
- > **Option: Various lifting roller diameters for 2nd and 4th lifting rollers – for minimising losses with special crops and small beets**
- > **Feeler wheels with 750-800 mm diameter – for automatic elevation of the lifting unit**



1. Beet guide rods
2. Share pair
3. Share body
4. Walking share drive with gearbox
5. Drag rod parallelogram for trailed linkage
6. Clamp collar for fixing to the frame
7. Hydraulic cylinder for lifting control and stone guide



Get the best.

Have stamina.

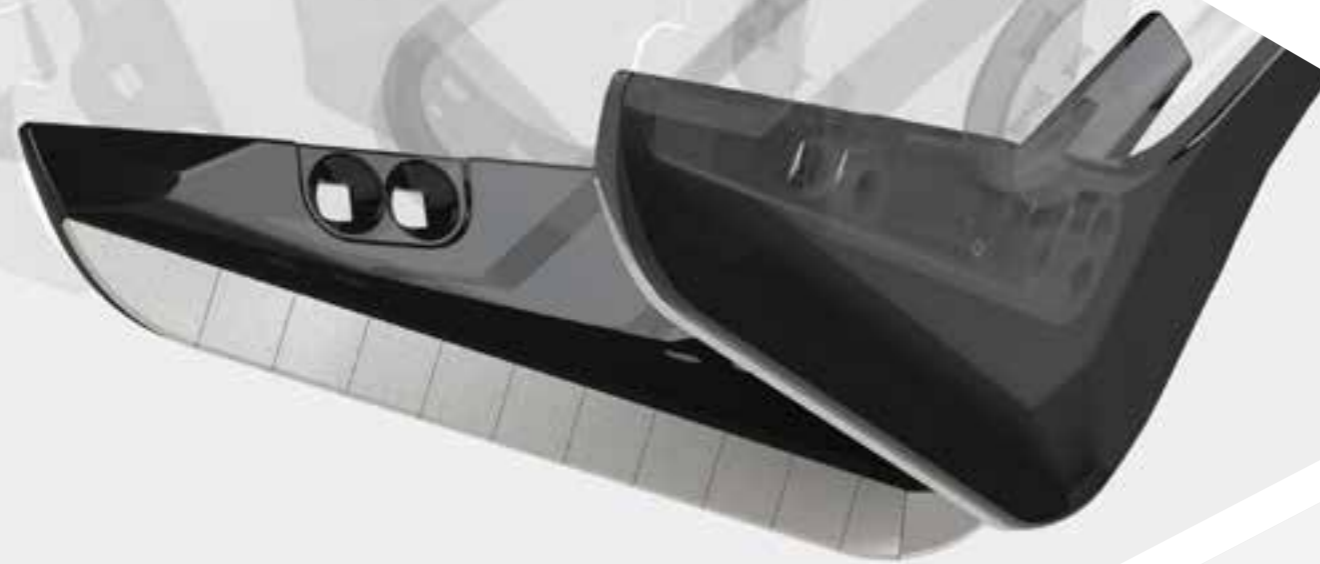
# Option: DuraShare

HOLMER tested a new type of share during the 2018 beet harvest: The HOLMER DuraShare has a working life up to twice as long as that of a conventional lifting share. So it makes an important contribution to consistently high lifting quality, low wear costs and minimum downtime.

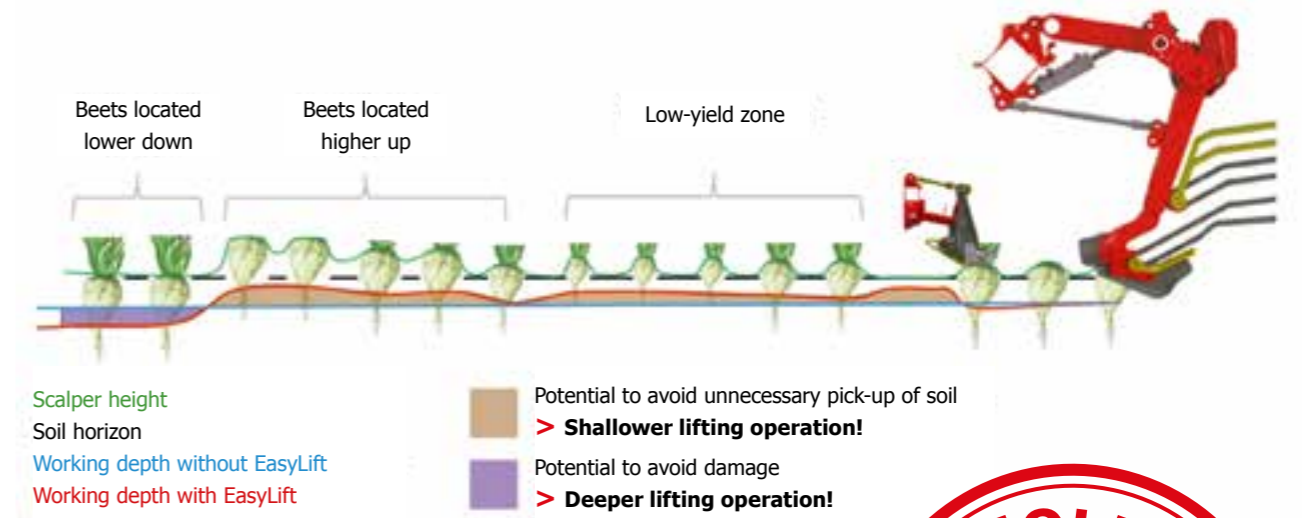
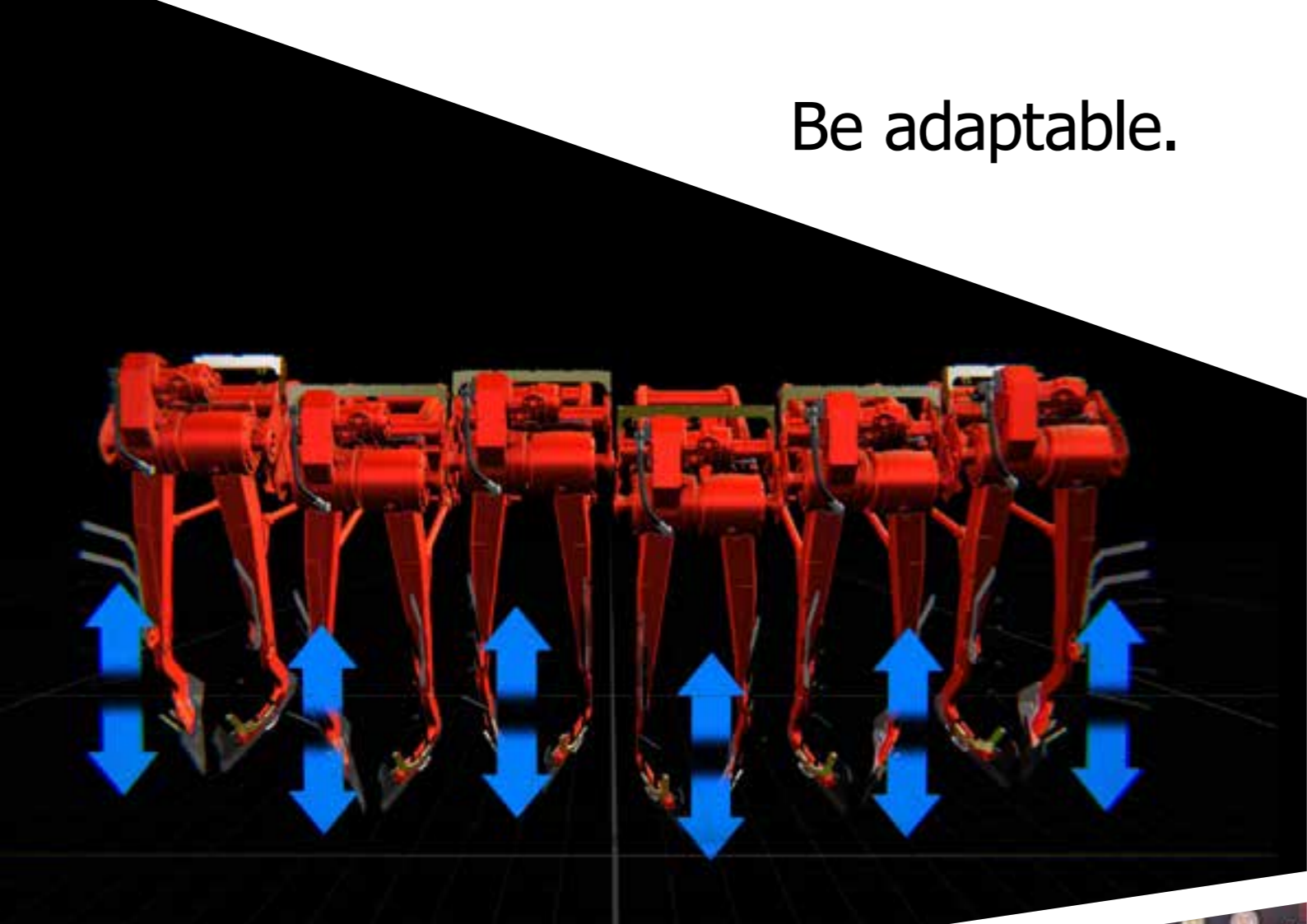
After the convincing practical test, DuraShare is available for sugar beet harvest 2019.

## It lasts and lasts and lasts:

- > **Forged share from a single cast, so that material is used where it is needed – for more stability and less wear**
- > **Small hard metal plates soldered onto the lower edge as wear protection – for longest durability**
- > **Slipstream edge by small hard metal plates reduces contact with soil and stones – for lowest material wear**
- > **Backward compatibility with previous Terra Dos – for maximum flexibility**
- > **Design protection – to distinguish yourself from others**



Be adaptable.



# EasyLift

Die neue Leichtigkeit des Rodens.

## Option: EasyLift

The EasyLift that was developed by HOLMER automatically takes over the depth control of the individual share bodies so that each beet can be lifted at the optimum depth at all times. For this purpose, the on-board computer calculates the maximum heights of the beet from position measurements and automatically adjusts the working depth of the share bodies. Thanks to this automation, the full potential of the HR lifter can be reliably utilised with the same constant power.

### The new ease of the lifter.

- > **No excessively low working depth – to avoid breakage losses and damage to the beet body**
- > **No unnecessarily deep lifting – for less wear and lower fuel consumption; since 1 cm too deep means about 100 t / ha of unnecessary earth movement**
- > **Automatic slope system – for optimum adaptation of the HR lifter on slopes**
- > **Optimum relief for the operator through up to 2,600 regulations per ha– for working comfort**
- > **Perfect lifting results even in the case of yield fluctuations, different beet forms due to different varieties, unevenness on the edge of the field or furrows, driving tracks, patchy populations, as well as soil conditions depending on the weather and location - for your profit**



**„This is the fourth HOLMER we have had, and we'd now never move away from the brand!“**

**Richard Ivatt  
(A & R Ivatt Contractors, UK)**

Beet harvesting has become a challenge for transport. This is solved by decoupling the harvest and transport on the field. Short loading times are the basis for a functioning logistics chain.

- > The sugar beet harvester remains the key machine for beet harvesting. It needs to be utilised optimally. In this case, wider harvesting units increase the surface area – for lower lifting costs per hectare. At the same time, the larger working width saves crossings, rolls over less space and reduces the number of turns – for greater protection of the soil.**
- > In a separate procedure, soil conserving and powerful transport technology takes over the removal and storage in piles at the edge of the field.**

This makes it possible to optimally use the ever-shorter harvest time windows.

# Option: Wide lifting units

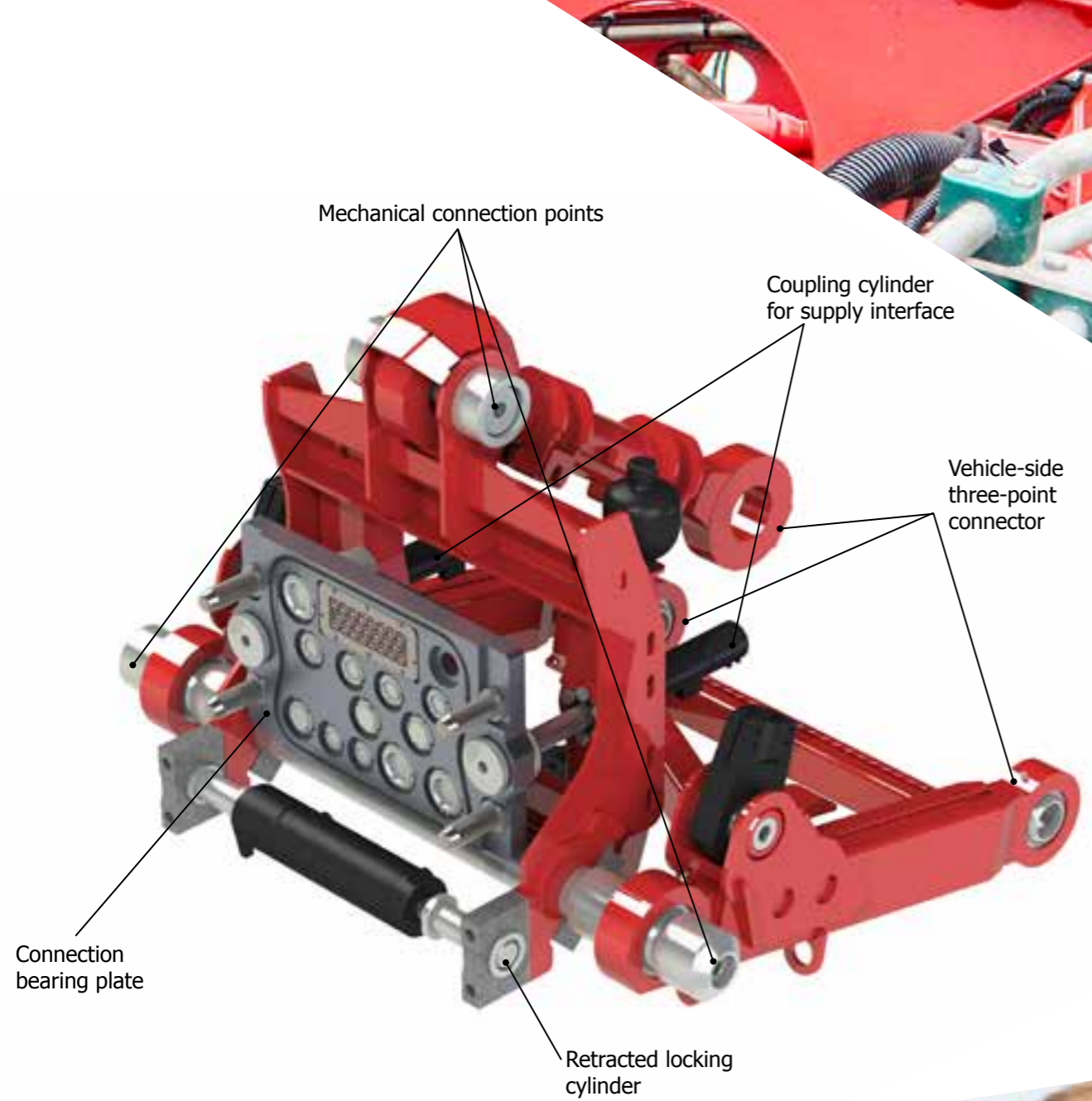
Be it 8, 9 or 12 rows. The wide HR lifting units have been tried and tested for many years, as the world record-holder in beet-lifting with the HR 12 lifting unit shows. The additional rows increase the surface area of the Terra Dos T4 significantly. This helps to reduce the number of non-operating times and save crossings.

**Because more shares simply lift more.**

- > **Diagonal steer already possible with the first lifting – to prevent damaging soil compaction**
- > **Modular design – for straightforward maintenance**
- > **The basis for extensive excavation work – with substantial fuel savings**
- > **Fewer crossing – for active soil protection**
- > **High lifting speeds – for more area capacity**
- > **Rapid loading onto loading vehicles of up to 4.00 m during lifting – for a coherent logistics concept**
- > **Transport vehicle with suspension for road transport**
- > **Wider tyres possible on the front axle – for optimum weight support**
- > **Integral topper HS I can be hydraulically tilted by 180° – for easy transport**



Get more out  
of everything.



## For wide lifting units. EasyConnect

The fast-coupling frame developed and patented by HOLMER, HOLMER EasyConnect, expands the previous mechanical systems with an automatically coupled hydraulic and electrical supply interface.

### Coupling can be so straightforward.

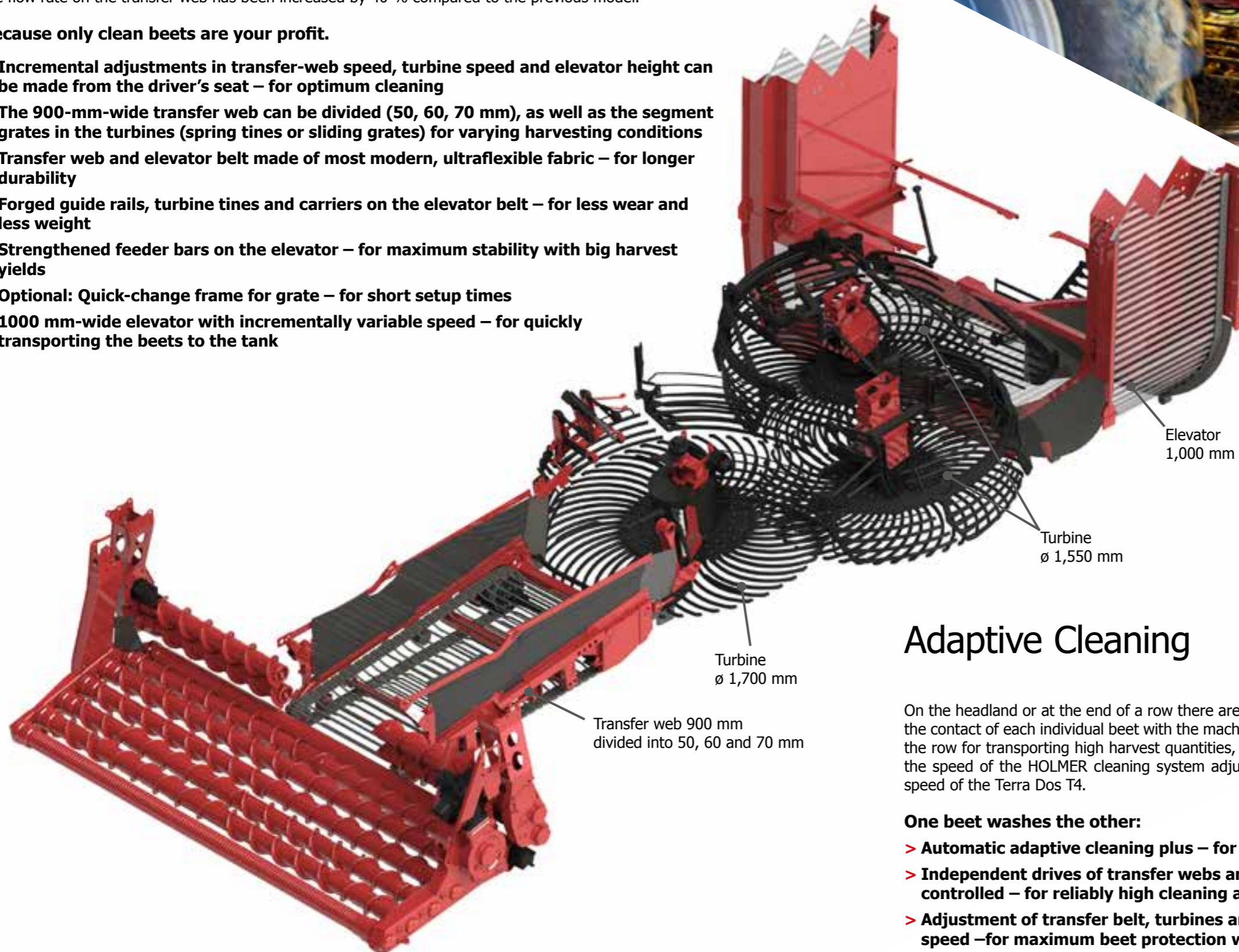
- > Coupling in a one-man process in under 1 min – for the shortest setup times
- > Convenient coupling and uncoupling from operator's seat (mechanical, hydraulic and electric) – for the safety of man and machine
- > No manual coupling of heavy and rigid elements required – for perfect operating comfort
- > Automatic recognition of HR 8/HR 9/HR 12 – for the straightforward use of different lifting units

# Cleaning

Clean, undamaged beet means more money. The Terra Dos T4 provides the perfect basis for this. All of the cleaning and transport units, such as the transfer web, turbines and elevator are optimally adjusted for maximum flow rates and perfect cleaning. Together with the new portal axle and the single axle drive concept, the flow rate on the transfer web has been increased by 40 % compared to the previous model.

**Because only clean beets are your profit.**

- > Incremental adjustments in transfer-web speed, turbine speed and elevator height can be made from the driver's seat – for optimum cleaning
- > The 900-mm-wide transfer web can be divided (50, 60, 70 mm), as well as the segment grates in the turbines (spring tines or sliding grates) for varying harvesting conditions
- > Transfer web and elevator belt made of most modern, ultraflexible fabric – for longer durability
- > Forged guide rails, turbine tines and carriers on the elevator belt – for less wear and less weight
- > Strengthened feeder bars on the elevator – for maximum stability with big harvest yields
- > Optional: Quick-change frame for grate – for short setup times
- > 1000 mm-wide elevator with incrementally variable speed – for quickly transporting the beets to the tank



Stay clean.



## Adaptive Cleaning

On the headland or at the end of a row there are often few sugar beet in the cleaning system. This increases the contact of each individual beet with the machine components. A higher speed of cleaning, as it is useful in the row for transporting high harvest quantities, leads to increased damage and broken beets. To avoid this, the speed of the HOLMER cleaning system adjusts automatically to pressure and also matches the driving speed of the Terra Dos T4.

**One beet washes the other:**

- > Automatic adaptive cleaning plus – for optimum driver relief
- > Independent drives of transfer webs and turbines, pressure-monitored and speed-controlled – for reliably high cleaning and conveying performance
- > Adjustment of transfer belt, turbines and elevator additionally dependent on driving speed – for maximum beet protection when there are few beets in the cleaning system
- > Adjustable settings for the response of the automatic – for optimum adaptation to different harvesting yields



# Tank

With the automatically controlled, switchable holding-tank scroll, the beets are optimally distributed in the tank and the fill level is monitored by 2 ultrasound sensors. This constantly ensures optimal weight distribution and maximum traction.

In the Terra Dos T4-40, the tank auger is also divided. As soon as the hopper is completely filled at the back, the rear part of the auger turns off so as to not damage the beets.

The extended discharge elevator allows beets to be easily unloaded to a trailer while driving, or wide heaps to be created easily. Automatic in-line transverse and longitudinal, allow for fast emptying of the tank.

## Transfer beets correctly.

- > Tank volume of 30 m<sup>3</sup> or 45 m<sup>3</sup> – ideally suited for every field size
- > 2 ultrasound sensors – for estimating yields and determining the fill level
- > Terra Dos T4-40. 2-split hopper screw – for optimum filling
- > Measuring of yield by number of bunkers and ton per job – for optimum transportation planning
- > Screwed cassette scraper floors – for easy maintenance and long durability
- > Cleaner shaft between scraper floor and unloading belt – for additional cleaning
- > Hardox® scraper floor rails – for maximum durability
- > 1,800 mm-wide unloading belt with gentle PU carriers – for unloading times of less than 40 or 50 sec
- > Terra Dos T4-40: centrally arranged unloading belt – for evenly fitting the unloading belt
- > Unloading belt foldable three times with working position – for low vehicle height on the field
- > Last articulated part stretched – for maximum loading height and/or distance and minimum fall height at the pile
- > Rapid loading onto loading vehicles of up to 4.00 m during lifting – for a coherent logistics concept
- > Automatic folding – for easy and fast change from road driving to working position



Be sincere.



**"I enjoy the lifting work. In this way, I see the wishes of our customers directly on the spot. In prototyping, the ideas turn into reality. My goal is to always develop the best sugar beet harvesters."**

**Eduard Richer  
(Development)**

At HOLMER, there are 400 employees worldwide working every day to make our machines even better for you. From development to customer service, everything at HOLMER comes from a single source. The cooperation is distinguished by progress and passion. Our success is a team achievement, which is why we are a technological leader. Worldwide. For your success.

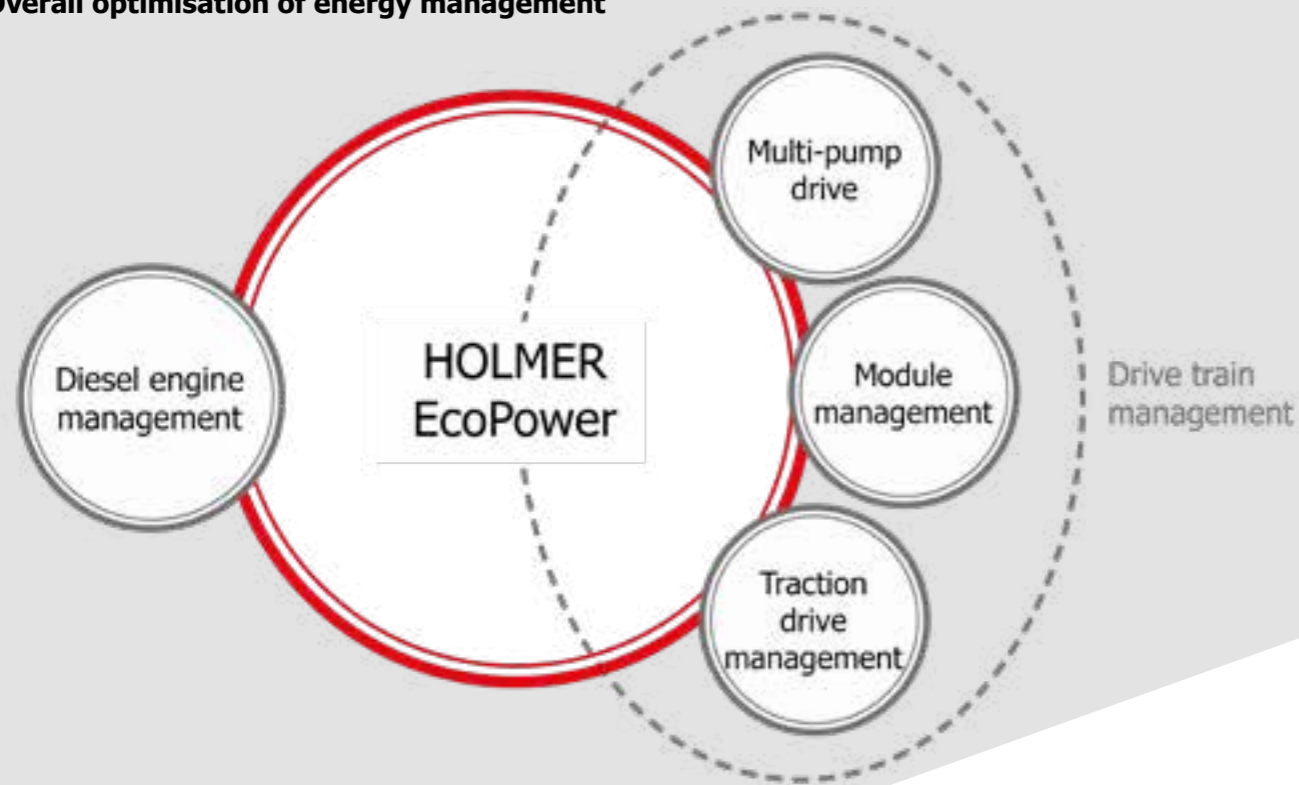


# EcoPower

EcoPower, which was developed by HOLMER, is unique in the area of self-driving work machines. Depending on the current use (harvesting or transfer), EcoPower selects the optimum range within the diesel engine and drive system map. Thus, it always ensures optimum performance while keeping fuel consumption to a minimum.

**Because we use fuel sensibly.**

- > Individual drives are decoupled when not in use
- > Optimum operating point on the diesel engine
- > Increase in efficiency of all assembly drive systems and the travel drive
- > Increased efficiency thanks to an increased number of pumps and consequently optimum coordination between pump and assembly
- > Overall optimisation of energy management



# Motor and hydraulics

Engine technology from Mercedes Benz makes the Terra Dos T4 the most efficient sugar beet lifter. No matter whether it is two or three axles. With 626 HP / 460 kW, the Terra Dos T4 is efficiently equipped for a wide range of operating conditions and has sufficient power reserves. The Terra Dos T4 meets the exhaust gas standard Tier 4 final. AdBlue ensures that nitrogen oxides generated during the combustion process are converted into pure nitrogen and water during the exhaust gas after treatment – for the sake of our environment.

**Always perfectly matched.**

- > **626 HP / 460 kW – for power reserves and operating safety in any position**
- > **Exhaust gas level Tier 4 final – for the sake of our environment**
- > **Performance dependent, automotive speed control of the engine between 1,150 and 1,550 rpm during lifting – for consumption optimised operation**
- > **Powerful load-sensing hydraulic system – for economical supply of the entire working, drive and steering hydraulics**
- > **Optimal, stable torque characteristics – for efficient engine performance**
- > **Max. torque 2,900 Nm at 1,300 rpm – for spraying even at low speeds**
- > **Hydraulically reversible fan with time control – for clean cooling elements**



Working efficiently.



# Chassis concept

The Terra Dos T4 is consistently manufactured in a lightweight and modular design. A straight central tube frame made of high-strength S700 steel – from one piece – forms the reliable, weight-optimised base frame. The front part of the basic vehicle is connected to the main frame by means of a 60° articulated joint. This is the basis for manoeuvrability in any situation and optimum weight distribution.

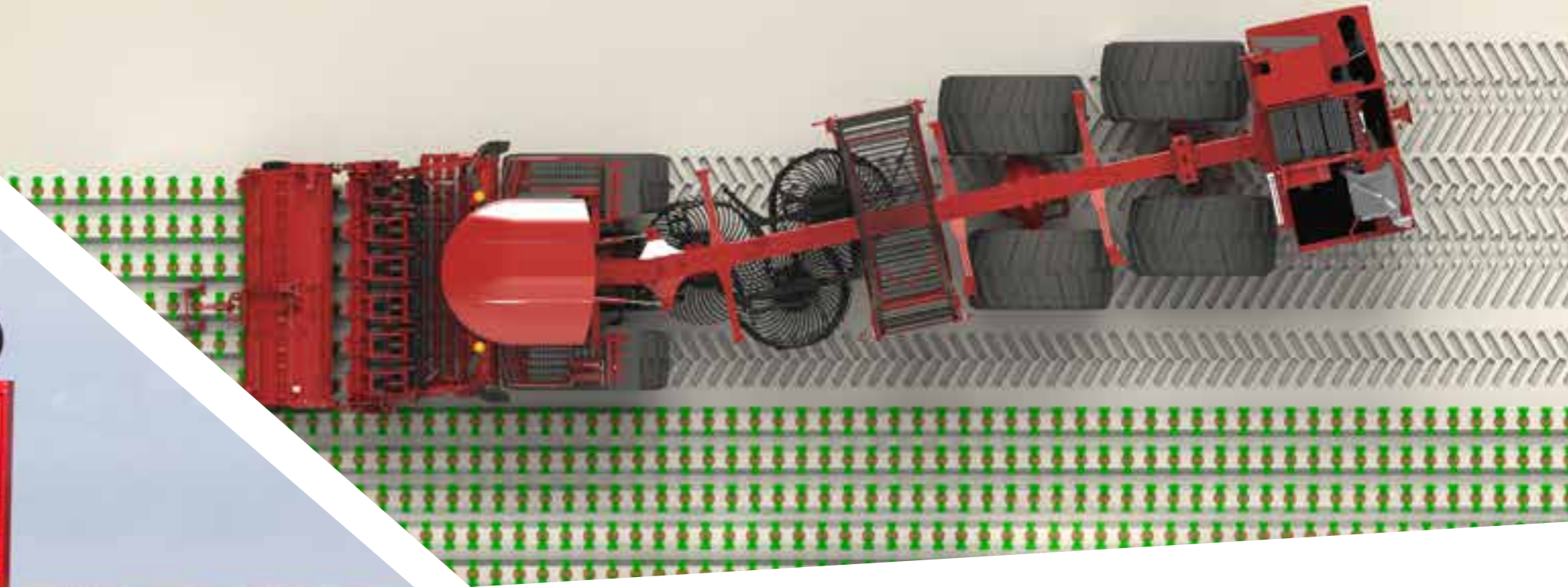
## Simply intelligent driving.

- > **Swivel range of the bend of more than 60° – for maximum manoeuvrability**
- > **Turning circle (inner) of only 6.50 m – for shortest non-productive times**
- > **Front portal axle with slope support system – for large screen pass and stability in any position**

## With Terra Dos T4-40.

- > **Fixed to the middle axis that is connected to the frame – for a high basic machine stability**
- > **Rear axle oscillating – for maximum terrain adjustment**
- > **Rear axle hydraulically sprung incl. hydraulic load balancing – for optimum driving comfort**
- > **Axle load regulation depending on the tank filling level – for optimum weight distribution**

Be stable.



# Steering

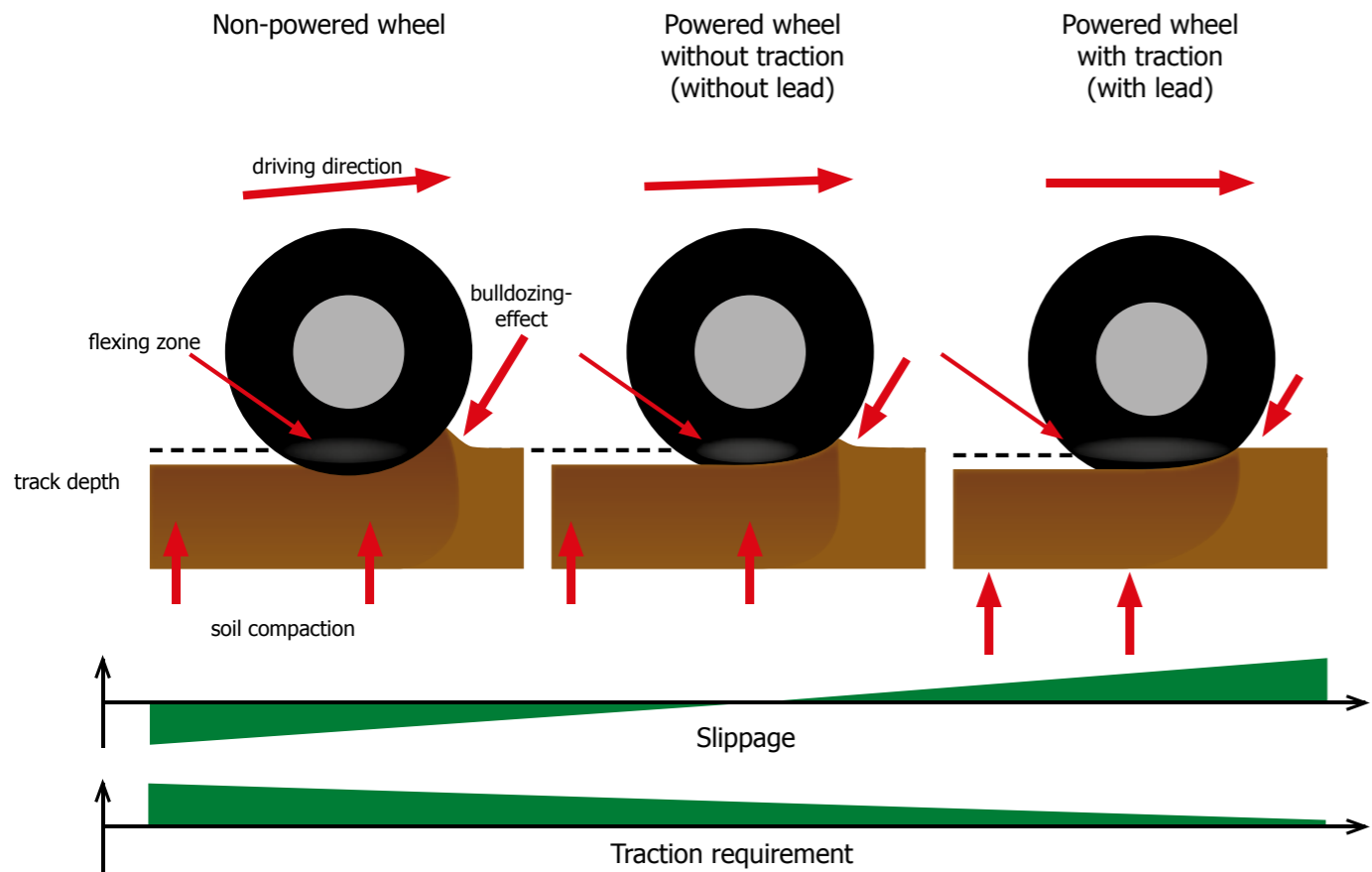
The offset track driving ensures that it is virtually impossible to roll over the same track twice. With the Terra Dos T4-30, each wheel has its own track. This consistently prevents soil damage from compaction. Given the large contact surfaces of the tyres in the diagonal steer, load and traction force are transmitted over a wide surface area – with optimal slip values at the same time. This is how real soil preservation works.

## The Terra Dos T4 steering modes.

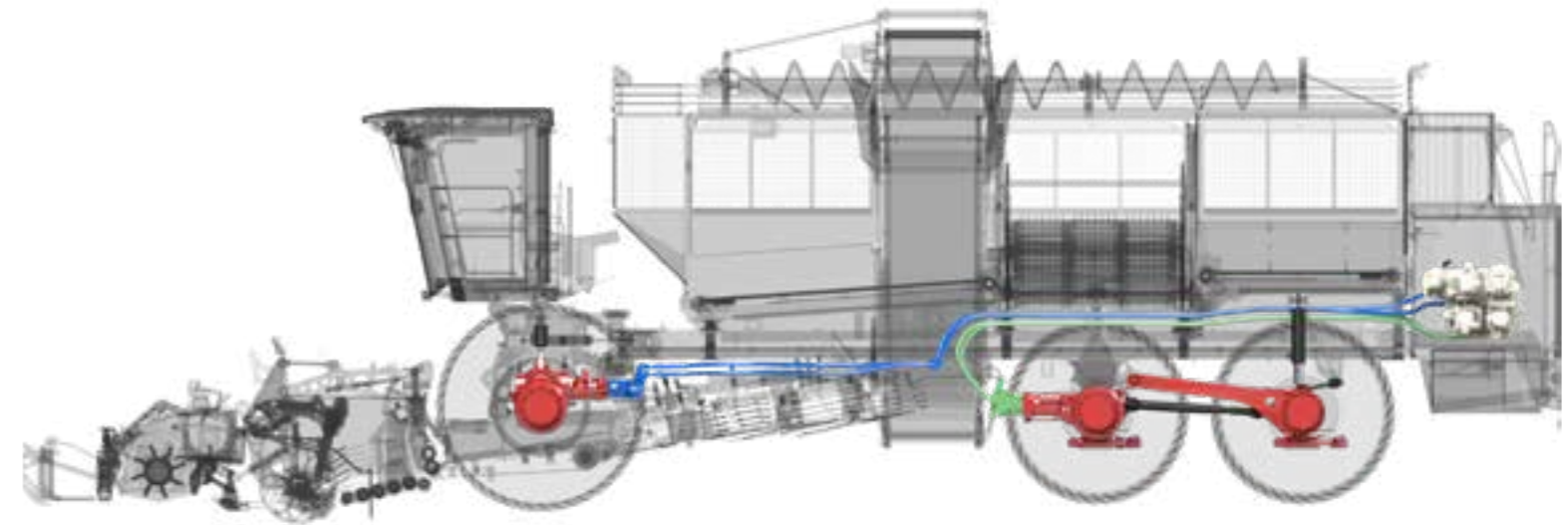
- > All-wheel steering – for driving without articulated steering
- > Turn steer incl. bend – for maximum manoeuvrability
- > Diagonal steer left/right with 2 selectable steps – for rolling over wide areas and for stable driving behaviour also on slopes
- > Combi-drive (combined turn and diagonal steer) – for the best soil protection during turning manoeuvres
- > Four-wheel steer – for lifting with 6-row lifting units
- > Manual steering – for independent steering of the rear axle by joystick
- > Road travel (only the front axle is controlled by the steering wheel) – for incremental travel speeds of up to 40 km/h (also up to 13 km/h with articulated steering)



Hang on.



(according to Prof Renius & Prof Volk)



# Propulsion

Driving comfort, track accuracy and stability on slopes were priority development targets for the Terra Dos T4. Axles that are directly powered hydraulically with highly efficient inclined axle engines guarantee the most efficient power transmission and maximum performance. In combination with the slope sensor, the innovative propulsion concept of the Terra Dos T4 automatically selects the ideal lead that is needed in every situation.

## Use power where it is needed.

- > Hydraulically powered axles with inclined axle engines – for the greatest efficiency
- > Automatic adjustment of the lead – to avoid the bulldozing effect and for optimum traction
- > Zero lead in road driving – to reduce tyre wear and fuel consumption

## Full slope stabilisation system.

- > Design-dependent low centre of gravity – for maximum stability
- > Bend position close to the front axle – for the lowest centre of gravity
- > Slope sensor – for real-time detection of the inclination angle
- > Automatic slope support – for safe driving on slopes
- > Automatic adjustment of the lead on the front or rear axle – for track accuracy on slopes and stability during turning manoeuvres

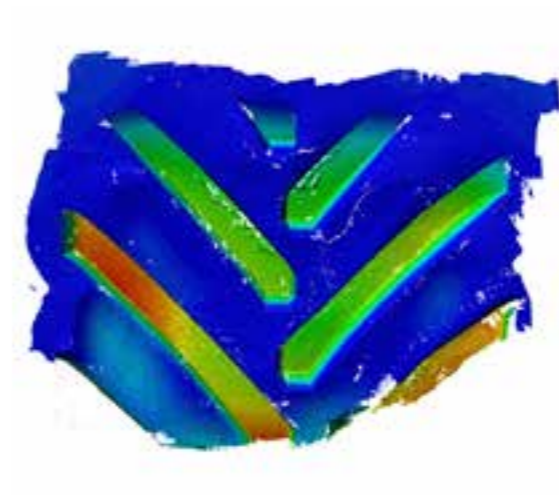


Be sincere.

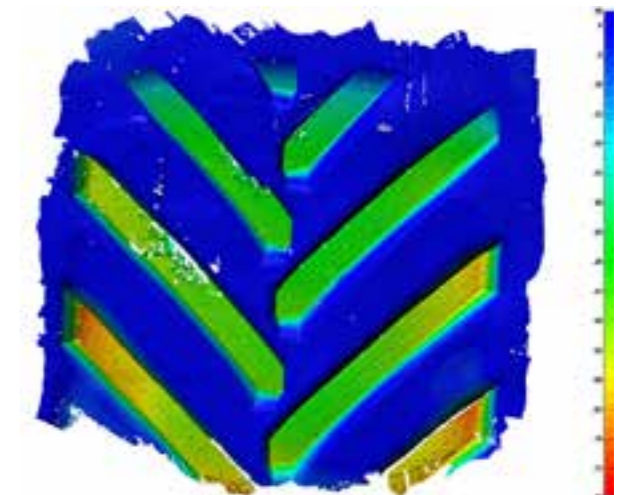


"Soil preservation is important to us. This is why we use HOLMER."

Fridolin Mayr  
(ZRG Mering)



Michelin MegaxBib



Michelin CerexBib

# Tyres

Various tyre variants are available for the Terra Dos T4. Thanks to the systematic lightweight design, in conjunction with modern tyre technologies, air pressures of min. 1.3 bar are possible.

## Because we love our soil.

- > Low tyre pressure – for maximum soil preservation
- > Automatic detection of different tyre sizes – for flexible tyre selection
- > Optional: Large footprint of up to 0.86 m<sup>2</sup> per wheel with MICHELIN CerexBib IF 1000/55 R 32 – for the prevention of harmful compaction
- > Optional: Terra Dos T4-30 (row spacing 50 cm) at the front with MICHELIN VF 900/60 R 38 CerexBib 2 and at the rear with MITAS SFT 1250/50 R32 – for maximum footprints

Put your best foot forward.





# Illumination

The illumination concept of the Terra Dos T4 turns night into day. This also ensures optimal visibility during work at night. The operating range of the machine is illuminated up to 100% by max. 28 LED headlights. This guarantees maximum safety during harvesting, threshing and turning – especially at night.

## More light, more safety.

- > Perfect lighting of the work area – for your safety
- > A total of 28 LED working lights with up to 3,400 lm – for the best illumination on the field.
- > Soft light – to protect the eyes
- > 4 x 1,950 lm LED dipped beam and high beam headlights – for relaxed road driving
- > Energy-saving LED engine compartment lighting – for safety during maintenance work even in the dark



# Cab

The short season often requires long working days - so it is more important that the operator has an optimal working environment. In the HOLMER Comfort Cab II, all controls are, therefore, ergonomically oriented to the operator. The all glass, sound-insulated cab II, with its low-reaching, single, upward sloping front glass pane, provides an optimal view of the scalpers, lifting shares and cleaning rollers. The tried and tested HOLMER Comfort Cab II thus ensures comfortable machine operation around the clock – for satisfying work.

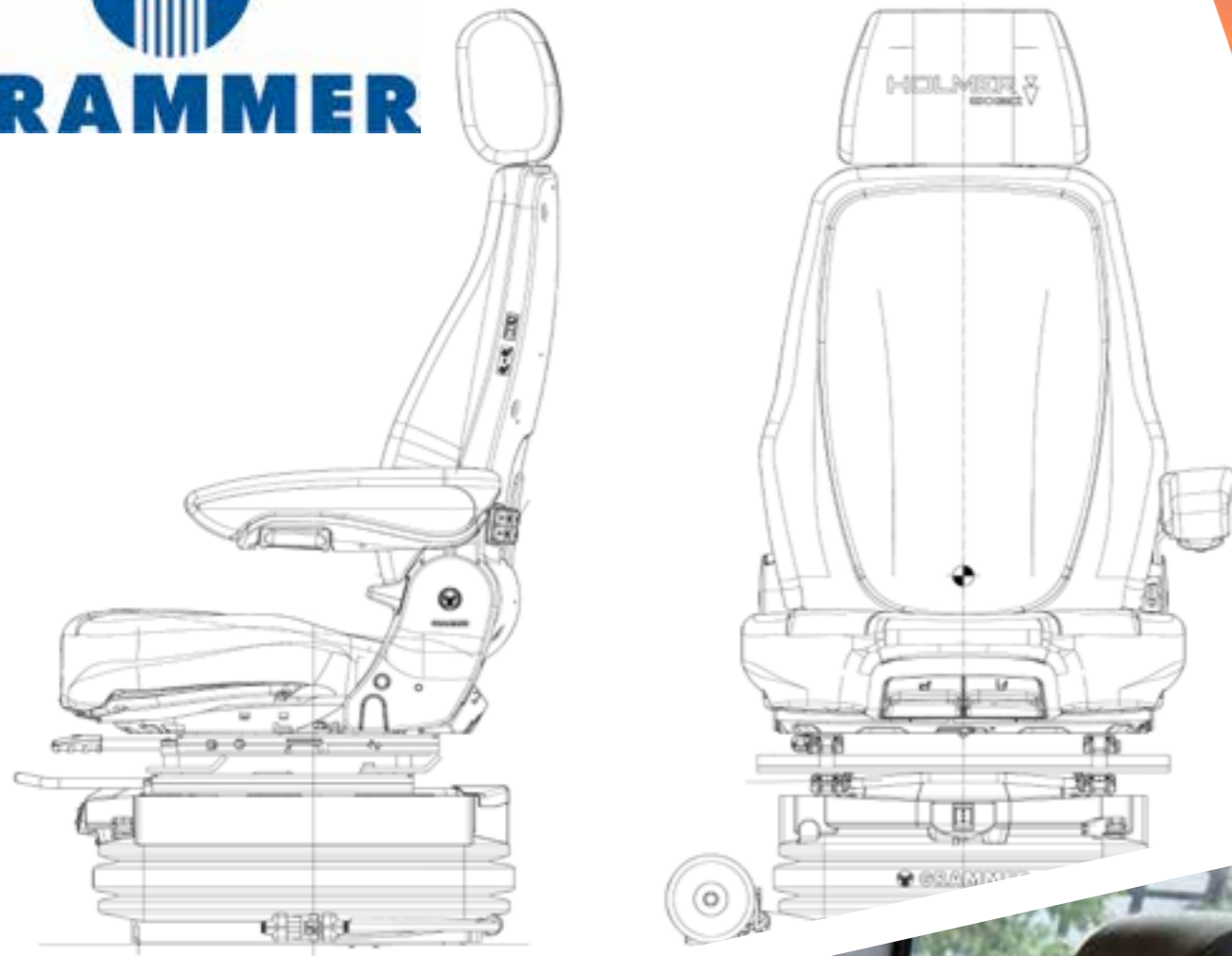
**After all, the operator is our most important person.**

- > **Perfect view of scalpers, lifting shares and cleaning rollers, as well as the side areas and discharge elevator – for the best lifting results.**
- > **Operator-oriented controls – for ergonomic working**
- > **Hydrodynamic cabin suspension – for optimum driving comfort**
- > **Excellent sound insulation with only 63 db volume – for operating comfort**
- > **Electrically adjustable and heated rear-view mirrors – for an optimum viewing angle**
- > **Spacious layout with storage – for personal freedom**
- > **Powerful climate control and tinted thermal insulation glass – for a cool head**
- > **Heating – for warm feet on cold days**
- > **Incrementally adjustable steering column – for individual adjustment**
- > **Optional: Data printer – for printing out orders instantly**



Have profile





# GRAMMER active seat

For continuous use, the GRAMMER swivel seat, which has been specially designed for HOLMER, ensures additional operating comfort. It automatically adjusts itself to the operator's weight, dampens and ensures a comfortable climate through active seat ventilation. At a rate of 250 times per second, a position sensor and an accelerometer record the position, as well as the acceleration induced in the Z direction. The spring characteristic is selected individually at any time. In conjunction with a pneumatic lumbar support and the active reduction of bumps, the operator remains relaxed and highly concentrated on the work. The HOLMER Comfort Cab II provides maximum driving comfort for the highest demands.

## Our experience for your health.

- > Specially built for HOLMER – because you are the focus of our developments
- > Active seat ventilation – for sitting comfortably and temperature control
- > Seat heating – for cold working days
- > Electropneumatic, actively regulated air suspension with vertical vibration reduction – for the active reduction of impacts
- > Maximum acceleration is reduced to up to 75% – for the sake of your health

Show strength.

Everything under control.

# HOLMER SmartDrive

HOLMER SmartDrive is the intuitive operating concept for the Terra Dos T4. The combination of touch terminal, joystick and jog dial ensures that every desired function is quickly and easily accessible. Short cuts ensure comfortable working – because the operator is our most important person.

## The operator in focus.

- > **Intuitive operation – for easy and safe operation**
- > **HOLMER EasyTouch 12.1-inch touch terminal – all information at a glance**
- > **Ergonomic multi-function arm rest with jog-dial and joystick – for comfortable vehicle operation**
- > **Orientation of all controls to the operator – since the operator and machine are one unit**
- > **Discharge elevator controller in the left armrest with incremental regulation and automatic sequence control of the transverse and longitudinal scraper floors – for intuitive operation and ergonomic working**
- > **Memory function for 6 individually adjustable basic machine settings (dry - normal - wet - uphill - straight - downhill) – for comfortable working**
- > **Structured control panel for the 28 LED headlights – for fast operation**
- > **Speed control – for field and road driving**
- > **Vehicle diagnostics – for speedy assistance**

**"You immediately feel at ease on the Terra Dos T4. Operation is straightforward and clear, which really does make the lifting process fun."**

**Alfred Wimmer  
(ZRG Mering)**

# Driver assistance systems

The Terra Dos T4 is automatically steered during the the lifting process. The lifter always stays on track by means of the leaf sensor and the impulses of the coulter bodies, whose signals are output by the on-board computer as steering pulses for the axles.

With these and many other technical solutions, we can relieve and support the operator so that he can concentrate on his actual task of delivering excellent lifting quality.

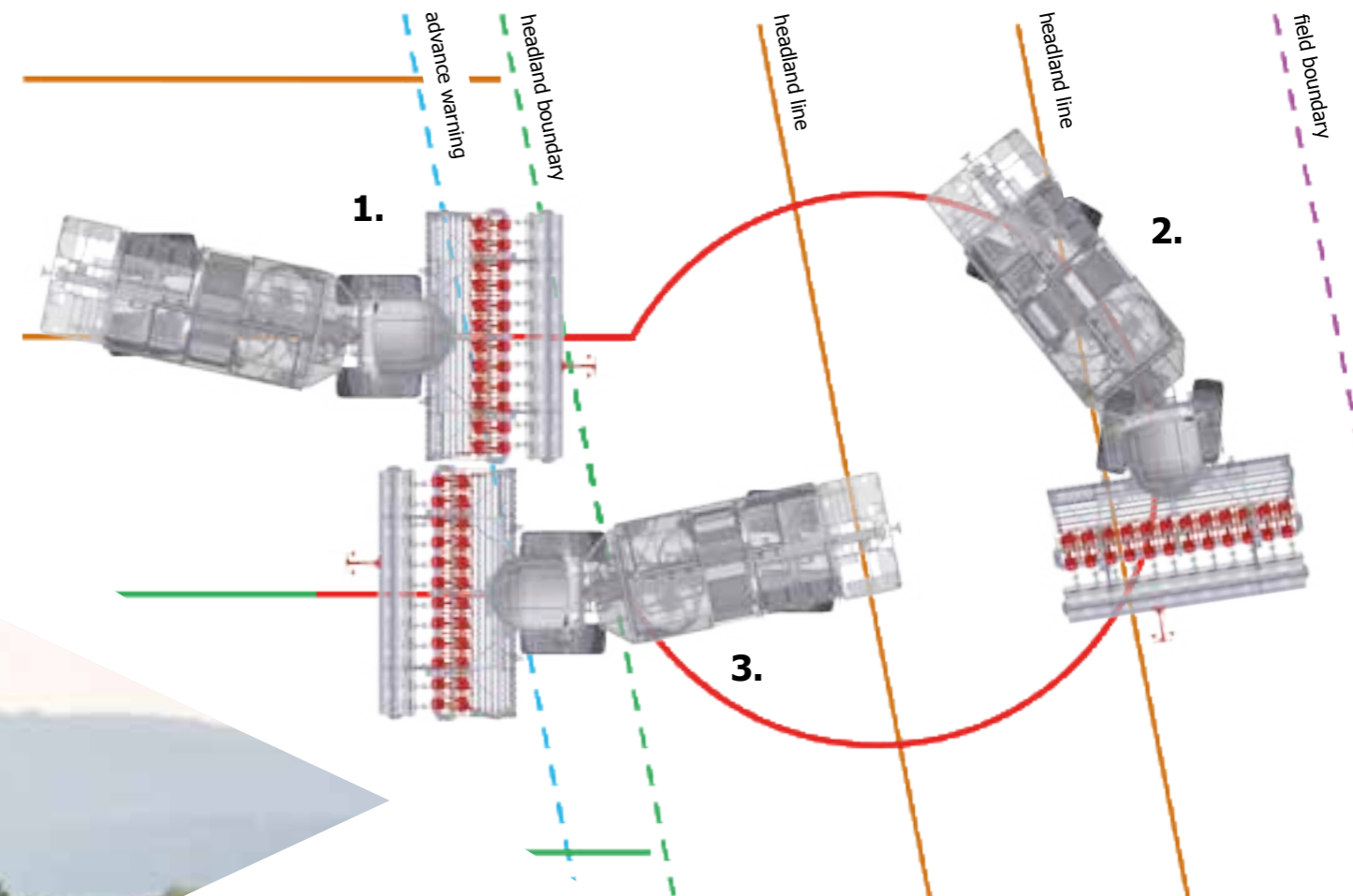
**Facilitating the operator's workload – tomorrow's solutions already here today.**

- > **Row guidance via leaf sensor and share body – for automatic steering**
- > **HOLMER TerraControl headland management – for automatic lifting and installation of the lifting unit**
- > **Speed control – for comfortable driving and road driving**
- > **TerraDat data management system with data export – for the most straightforward documentation**
- > **Optional: HOLMER EasyLift – for automatic single-row depth guide**
- > **Optional: HOLMER SmartTurn – for automatic turn manoeuvres**
- > **Optional: Up to 6 colour cameras in the area of the transfer web, machine tail and unloading belt, as well as the HOLMER TopView with max. 270° panorama view – for a perfect overview**

Always clear.



1. An acoustic signal indicates the optimum time for the turning process. The driver activates SmartTurn. The Terra Dos T4 automatically stops lifting when the stock limit is reached and it raises the lifting unit at the ideal point.
2. At the same time, GNSS steering takes over the turning process, using an ideal turning path. The system automatically checks the correct, next track.
3. There, SmartTurn automatically reinstates the lifting unit at the ideal point. The proven row sensor steering system then takes over control of the machine in the track. REICHHARDT SMART CONTROL records all data; these are available for documentation and evaluation.



**SmartTurn**   
 Die schlaue Art zu wenden.

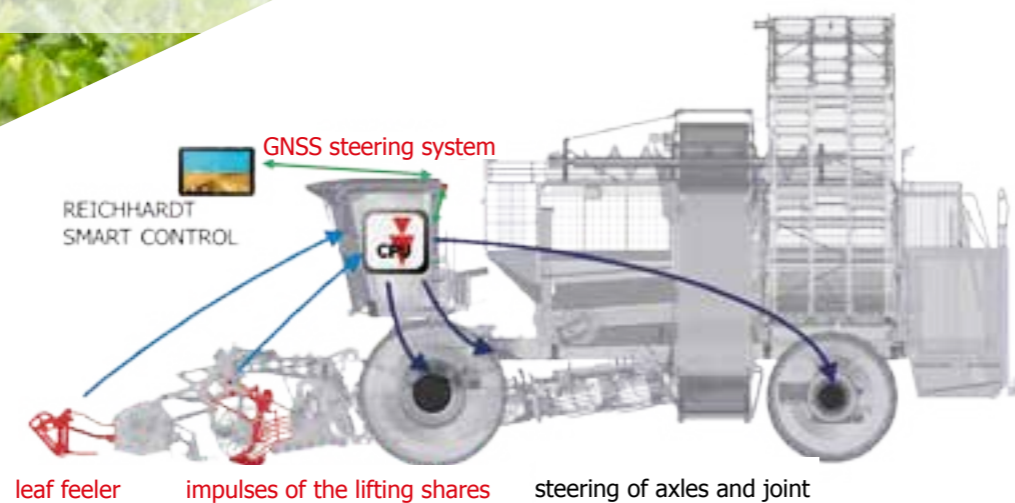
# Option: SmartTurn

The first headland management system for self-propelled harvesters. For the first time, SmartTurn combines the mechanical row steering system and the headland management system TerraControl on the beet lifter with GNSS-controlled headland turning, as is known from tractors. This makes automatic turning at the front end possible for the first time – including lifting and re-insertion of the lifting unit, as well as the necessary steering manoeuvres.

The joint development of REICHHARDT and HOLMER expands the Terra Dos T4 with a modern, automatic steering and smart-farming function to optimise beet harvesting and soil protection. The system has been awarded a DLG silver medal.

### The clever way to turn.

- > **Automatic control of the vehicle via GNSS or row sensor – so that the driver can concentrate entirely on monitoring the lifting quality.**
- > **Always the best and shortest tracks on the headland without unnecessary manoeuvring – for optimum soil protection**
- > **Automatic lifting and fitting of the lifting unit at the optimum time – for reduced wear and fuel consumption**
- > **Quicker turning on the headland – for the shortest non-producing times**
- > **Automatic insertion in the right row – to relieve the driver and to avoid loss of harvest**



Be smart.



INNOVATION  
 AWARD  
**AGRITECHNICA**  
 SILVER MEDAL

# Option: EasyHelp 4.0

HOLMER is developing the EasyHelp 4.0 telematics solution together with Bosch and Arvato Systems. In addition to a further improved and extended service solution for remote diagnostics and maintenance for HOLMER service, EasyHelp 4.0 is also connected to the well-known farm management system Farmpilot. In this way, job data can be quickly and conveniently transferred online from the computer to the driver's cab. At the same time, the Terra Dos T4 reports current machine and order data to the dispatcher.

## The Internet of Things here today.

- > Complete transparency of machine data – for easy scheduling
- > Online transfer of order data directly to the Terra Dos T4 – for efficient and convenient machine deployment
- > In the event of a fault, immediate evaluation of the parameters by HOLMER Service – for straightforward problem identification, fastest service and perfect spare parts supply
- > Connection to the agrirouter data exchange platform – for a manufacturer-independent solution and independence in the choice of farm management system

# EasyHelp 4.0



Be open.

# Maintenance

Maximum efficiency is the central feature of the Terra Dos T4. The concept has also been consistently implemented in the area of maintenance and accessibility. Fast and uncomplicated maintenance is the basis for long operating times.

## Runs as if it is lubricated.

- > Electronically controlled central lubrication system including time control – for the automatic lubrication of all important bearing positions
- > Very accessible engine compartment with LED lighting – for best view
- > Maintenance position for toppers – for ergonomic knife changing
- > Spacious storage areas in the engine compartment – for individual tooling
- > Ladder integrated into the engine compartment – for easiest accessibility of the engine, hydraulic components and tank
- > Maintenance-free bearings on the lifter gearbox, articulated part and share br for long operating times



Be open.

Be stable.



## Used machines

Thanks to the excellent processing quality "made in Germany" and the use of high-quality components, the Terra Dos T4 retains its value over many years. The demand for used machines is also correspondingly high.

The high value stability and low running costs ensure success for contractors and communities.

Are you looking for a HOLMER hero?

Then get in touch with us!

... and benefit from the HOLMER used machine warranty on individual components.

Be there.

## HOLMER Service

Customer-oriented, reliable, competent, fast – the convincing performance of the Terra Dos T4 is the consistent continuation of its needs-based service. From the individual service check to the 24-hour hotline, we are always there for you.

**Always there for you.**

- > **28 service partners in the German-speaking world and our own HOLMER service staff – for you on site for the fastest service**
- > **24-hour service hotline – always there for you.**
- > **New logistics centre across 9,000 m<sup>2</sup> – for a perfect supply of spare parts**
- > **24-hour dispatch of spare parts during the harvest time – so you can work safely**
- > **The entire range of spare parts can be conveniently ordered at the online shop – available at any time**
- > **Comprehensive training programme – so that you are well prepared**
- > **ServiceCheck – individual service offers for best operational safety**
- > **Long service intervals – for low maintenance costs**



# Technical Data

	Terra Dos T4-30	Terra Dos T4-40
<b>Engine</b>	Mercedes-Benz OM 473 LA, exhaust gas standard Tier 4 final incl. AdBlue and SCR-Kat	
Cylinder	R-6	
Piston displacement	15.6 l	
Rated engine speed	1,700 rpm	
Rated power at 1,700 rpm	460 kW/ 626 PS	
max. torque at 1,300 rpm	2,900 Nm automatic, hydraulic fan reversing	
Fuel tank capacity	approx. 1,150 l, additional connection for tank truck filling	
AdBlue tank capacity	approx. 95 l	
<b>Propulsion</b>		
Hydrostatic propulsion	Single axle hydraulically powered on front and rear axle. each via bent-axis motor incl. pre-loaded planetary gear	Single axle hydraulically powered on front and middle axle. each via bent-axis motor incl. pre-loaded planetary gear Rear axle powered by drive shaft of middle axle
	Automatic adaptation of the lead depending on the slope gradient during harvesting and while turning. Zero lead during road driving Automatic calibration with detached or attached harvester (HR 8,9,12) Changes from field drive to road drive mode with phase-shifted Shift-On Fly	
<b>Driving speeds</b>	1st Gear: 0 to 13 km/h, continuously variable 2nd Gear: 0 up to 40 km/h, continuously variable (depending on country-specific formalities) Automotive driving mode incl. automatic speed reduction and tempomat (1st and 2nd gear)	
<b>Axles</b>		
	front: planetary portal steering axle with slope stabilisation system rear: planetary steering axle	front: planetary portal steering axle with slope stabilisation system Centre: planetary steering axle rear: ring-mounted, oscillating planetary steering axle, incl. automatic hydraulic balancing and slope stabilisation
Differential locks	all axles with switchable locks	
<b>Chassis</b>		
Steering modes	Central tube frame, front car designed as articulated part Four-wheel steer, turn steer (incl. articulated), four-wheel steer, Diagonal steer left/right, 2 levels selectable, and combi steer Automatic steering via leaf button or coulter body including mix controls On-road driving with articulated steer (up to 13 km/h) sprung comfort cab (Terra Dos T 4-30: 3rd and 4th axle; Terra Dos T 4-40: only 4th axle) for road driving, height-adjustable for driving over fields	
<b>Tyres</b>		
	front: 800/70 R 38 rear: 1050/50 R 32	front: 800/70 R 38 Centre: 1050/50 R 32 rear: 1050/50 R 32
<b>Brakes</b>		
Service brake	hydraulic drum brake	
Parking brake	Spring-loaded parking brake	
<b>Hydraulic system</b>		
Hydraulic tank capacity	150 l Stiebel pump distributor gears including pressure circulation lubrication Load-sensing work hydraulics 5 x closed hydraulic circuits 5 x axial piston pumps (Danfoss) Additional pressure filter system hydraulic main harvest drive	
<b>HOLMER EcoPower</b>	Diesel engine and traction drive management with characteristic control Lifts at low engine speed from 1,150 rpm load-shifting lamellar clutches for decoupling pump lines during road driving	
<b>Power supply</b>	24 V alternator 150 A central, modular structure of the on-board electronics in circuit board construction water-resistant and vibration-resistant incl. plug systems with secondary locking 2 x 12 V sockets (cab) 1 x 24 V sockets (engine area)	

<b>Cabin</b>	Fully glazed Continuous front pane with low pane edge Hinged windows 2 x windscreen wipers including interval and wash function Stereo DAB+ radio with Bluetooth hands-free system Automatic climate control Soundproofing Hydrodynamic cabin suspension for optimal noise and vibration insulation Tinted rear window GRAMMER aktiv seat
Innovative operating concept HOLMER SmartDrive	12.1 inch HOLMER EasyTouch touchscreen terminal Ergonomic multi-function arm rest incl. joystick and jog-dial can be operated and saved with quick access key settings of all units via softkeys Preset function for all modifiable functions Settings for topper, lifter and cleaning can be saved (6 pre-sets) Quick access keys integrated into the side arm console Fault memory function and diagnostics menu including export via USB interface Armrest on the left for discharge elevator control and hopper emptying incl. automatic emptying function over rotary potentiometer
<b>Illumination</b>	
Headlights	2 x dipped-beam headlights LED (1,950 lm) 2 x high-beam headlights LED (1,950 lm) 2 x rear lights in full LED technology and dynamic indicators
Work lights	4 x LED (1,800 lm) cab 4 x LED (3,400 lm) cab 2 x LED (3,000 lm) cab, bottom side 2 x LED (1,800 lm) harvester 2 x LED (1,800 lm) topper 2 x LED (1,800 lm) cleaner 4 x LED (1,800 lm) bunker 2 x LED (1,800 lm) rear axle 2 x LED (1,800 lm) unloading belt 2 x LED (3,000 lm) tail top 2 x LED (1,800 lm) tail bottom 2 x all-round lights energy-saving LED engine compartment lighting
<b>Camera system</b>	up to 6 cameras HOLMER TopView 360° panoramic view (optional)
<b>Centralised lubrication</b>	BEKA-MAX electronically controlled (Terra Dos T4-30: 151 lubrication points; Terra Dos T4-40: 181 lubrication points) Intermittent lubrication and manual actuation can be set over the terminal
<b>Topper units</b>	Free wheel incl. automatic height control and safety lifting function Height adjustment in cm adjustable via joystick Fast lifting at the push of a button on the joystick  Models: HS I (I=Integral topper), 6 to 12 rows HS KO (KO = can be switched from leaf centrifuge to integral function), only 6 rows  Optional for HS I and HS KO: Combi-defoliator with 2 counter-rotational cleaning shafts after the scalper, 6 to 12 rows available for row spacing of 45 to 50 cm, inch distances possible
Leaf recovery	using a leaf belt installed with fast-coupling system for the KOS KO toppers incl. leaf belt vehicle for road transport Loading height 3.70 m (optional 4.00 m)
<b>Scalpers</b>	HOLMER DynaCut – weight-optimised parallel scalper with automatic cutting thickness Scalper thickness of all blades can be set centrally from the driver's seat agile scalper behaviour with faster response times with highly fluctuating beet volumes optimised cutting defoliating (including at high lifting speeds) Preload by spring on the unit - adjustable in 3 steps Scalper combs and knives, reinforced
<b>Lifter unit</b>	independently adjustable single row units Roller track with 7 lifting and cleaning rollers, height adjustable 4 short lifting and gathering rollers Automatic reversing of the last lifting rollers adjustable speed of the lifting rollers (300-600 rpm) automatic depth control via feeler wheels, adjustable lead

	<p>Automatic side slope over slope sensor  Reversible lifter rollers, reversing system  Hard metal-coated coulters as standard  Reinforced lifter rollers as standard  70 mm lateral movability of all coulter bodies  EasyLift: automatic single-row depth guide (series for working widths over 3.30 m)  Lifting process at the touch of a button via HOLMER TerraControl, pre-application management can be enabled including lowering / lifting and switching the lifter on and off</p> <p>Models:  HR 6 to 12 available with 45 cm row spacing, constant  HR 6 to 12 available with 50 cm row spacing, constant  VHR 6 available with variable row spacing 45; 47,5; 48; 50 cm  Lifting unit HR 6 and VHR 6 can be automatically adjusted to the left or right of the vehicle</p> <p>Lifting unit with over 3.30 m working width:  Model with 180° foldable integral slider for transport position (road transport)  HOLMER EasyConnect fast coupling system  Transport vehicle with suspension for road transport (optional)</p>
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<b>Cleaning</b>	
Transfer web	Reversible 900 mm transfer web made of ultraflexible continuous material, divided into 50, 60 and 70 mm
Turbine system	<p>1st turbine with 1,700 mm diameter  2nd turbine with 1,550 mm diameter  3rd turbine with 1,550 mm diameter</p> <p>adaptive cleaning plus with automatic speed monitoring and adjustment, depending on driving speed  External actuation  Wear-resistant turbine, double-tine, forged  Rubber carrier on first turbine for increased conveying power (optional)</p>
Grates	Partial segment grates or spring-tine grates, combinable, also available with fast-swap frames the height of all screen grates can be adjusted centrally and incrementally from the driver's seat, with display at the terminal

<b>Elevator</b>	<p>Width 1,000 mm; ultraflexible material  Dual cam industrial straps with forged steel actuators  Incremental speed regulation</p>
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<b>Holding tank</b>	
Filling	<p>2-zone holding tank auger with freewheel coupling</p> <p>Electronic fill-level monitoring over 2 ultrasound sensors  Automatic holding tank filling can be switched manually</p>
Slat conveyors	<p>1 transverse and 1 longitudinal slat conveyor, each with 4 high-strength tempered drive chains  Drive system centrally lubricated  Hardox® scraper floor rails  Automatic, hydraulic chain tension  Screwed cassette bottom</p> <p>2 transverse and 1 longitudinal slat conveyor, each with 4 high-strength tempered drive chains  Drive system centrally lubricated</p>
Unloading	<p>Automatic and manual control possible  Pressure-controlled scraper floor control  Automatic control of the transverse and longitudinal slat conveyors with adjustable speed  30 m³ in approx. 40 sec.      45 m³ in approx. 50 sec.  Optimal loading of the discharge elevator through longitudinal slat conveyors that feed in from both sides</p>
Discharge elevator:	<p>With 2 hydraulically bent articulated parts (XL discharge elevator)  Discharge height can be programmed via memory function  Memory function for position of last articulated part  Contour: discharge elevator is retracted during the lifting process  Width: 1.800 mm  Loading to transport vehicles during the lifting process:  Automatic loading using HOLMER EcoPower  Maximum loading power during lifting process  Speed of discharge elevator can be controlled while unloading during the lifting process</p>

<b>Hopper volume</b>	ca. 30 m³/21 t	ca. 45 m³/31 t
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<b>Loading height</b>	4.00 m
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<b>Warning system</b>	<p>Monitoring of speed and pressure of all lifter and cleaning elements in the terminal  Hydraulic oil and engine monitoring via the terminal and acoustic warning signals</p>
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<b>Cleaning path</b>	max. 25.20 m with HR 6
<b>Cleaning area</b>	max. 22.90 m² with HR 6

<b>HOLMER SmartTurn (optional)</b>	Automatic mode for turning at the end of the row, incl. integration into HOLMER TerraControl Remote logging for recording the already cleared area
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<b>Lifting performance</b>	up to 3.6 ha/h (depends on lifter unit)
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<b>Dimensions and weight</b>		
Length overall / length across everything:	12.94 m	15.00 m
Width	3.00 m (with a row spacing of 45 cm; IF 1000/55 R 32) 3.30 m with a row spacing of 50 cm or 45-50	3.00 m (with a row spacing of 45 cm; IF 1000/55 R 32) 3.30 m with a row spacing of 50 cm or 45-50
Height	4.00 m	4.00 m
Ground clearance	5.73 m	5.73 m / 2.12 m
Smallest turning circle (inner)	6.50 m	6.50 m

<b>Optional equipment</b>	<p>Portable cool box  Lifting Share DuraShare  USB stick with „TerraDat“ evaluation software  HOLMER EasyHelp 4.0 telemetry system with remote maintenance  Quick change kit spring tines turbine system complete  Water spray system for sticky soil; outlets freely positionable  Equipment for red beets and chicory</p> <p>Tyres front axle:  MICHELIN IF 800/70 R 38 CFO+ 187A8 TL CerexBib 2  MICHELIN VF 900/60 R 38 CFO+ 193A8 TL CerexBib 2 (external width 3.30 m)</p> <p>Tyres centre and rear axle:  MICHELIN IF 1000/55 R 32 CFO 188A8 TL CerexBib (external width rear axle 3.00 m)</p> <p>Rear axle tyres only Terra Dos T4-30:  Mitas SFT 1250/50 R 32 TL 194 A8 (external width 3.30 m)</p>
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Subject to modifications for technical progress; approved by TÜV and the trade association; in accordance with the CE regulations.  
Machine equipment depending on country-specific formalities.



11/2019

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