



Terra Dos T3

HOLMER 
exxact



11/2013

The Terra Dos T3

Maximum performance - no compromises.

It was a good year for beets. Now it is a question of collecting the oncoming crop safely, quickly and tidily – irrespective of the conditions. HOLMER, number one world-wide in the beet-harvesting sector, offers you a smart and flexible answer for this task: Terra Dos T3.

The Terra Dos T3 tanker sugar-beet harvester likes a challenge, no matter whether on snow, stony ground, slopes or in weed-ridden fields. The superior technology of this high-performance harvester ensures the best possible results, even under exacting harvesting conditions.

These are just some of its excellent features:

- High-performance topping, individually adaptable lifting and cleaning units
- Extreme versatility thanks to its 60° swing area
- Extremely gentle soil treatments thanks to offset track drive and large-size Terra tyres MICHELIN IF 800/70 R32
- Ergonomically optimized comfort cabin

The Terra Dos T3 combines user-friendly innovations with robust, world-wide proven technology and maximum efficiency – perfect prerequisites for a safe harvest.

- MAN engine with 383 kW (520 HP) and AdBlue technology for a economical and fuel saving drive connected with a enormous power output
- The automotive control of the engine speed and the hydraulic drive ensures an economic and ecologic optimum



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Topper

Optimum results thanks to perfect precision.

Waste not, want not. Especially when it comes to the sugar beet crop where even today, inadequate topping and lifting results in unnecessary loss all too often. The topping, scalping and lifting units of the Terra Dos T3 are convincing because

The HOLMER KOS-Topper is in two basic variants available:

- > KOS I: integral topper deposits the chopped leaves between the rows (advantages: enables track-by-track lifting; a good starting situation for soil-preserving measures)
- > KOS KO: features integral function combined with the well-known leaf spreader function; change-over possible from the driver's seat during lifting operation

of their quality workmanship and can be adapted perfectly to the prevailing lifting conditions – providing you with the best possible result.

- > Flail shaft (600 mm Ø): forged T-blades for optimum chopping and durability
- > All topper units are available for fixed row widths of 45 cm or 50 cm and for a variable row width from 45 to 50 cm.
- > Completely screw-mounted steel sheet design facilitates maintenance
- > Leaf feeler can be folded hydraulically from the cab
- > Scalpers are automatically adjusted to changing topper height



HOLMER DynaCut

HOLMER brought the cut-defoliation technique using HOLMER DynaCut to perfection. Thanks to its changed geometry, the HOLMER DynaCut can harvest the entire beet without the

leaves clinging to it. Remaining leaf stalks downstream of the topper ensure level tracking of the scalper, excluding any loss due to beets cut too low.

- > Thanks to their reduced weight, the scalpers are more flexible, thus "untopped" beets are ruled out
- > Impeccable quality of work even at higher lifting speeds
- > topping level adjustable from "whole beet" down to the so-called "Göttinger Schätzrahmen" without the operator leaving his seat
- > no beets are cut too low
- > Matches the proven HOLMER KOS topper
- > No additional expense due to maintenance and other costs

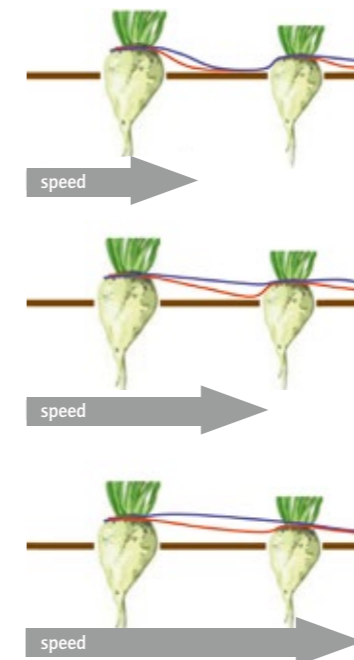


Comparison at three driving speeds

Thanks to its reduced weight, the HOLMER DynaCut is more flexible, thus also ensuring better topping quality at high lifting speeds.

Blue graph:
conventional parallel scalpers

Red graph:
HOLMER DynaCut



Both scalpers reach their initial position between the beets. Both systems provide a high working quality.

Both scalpers still reach their initial position between the beets. With the downward movement of the standard scalper the risk of injury is very high. The HOLMER DynaCut reaches an optimum initial position to ensure precise cutting.

Standard scalper skips the following beet. The results are untidy cutting and non-cut beets. HOLMER DynaCut permits optimum cutting results at high speeds.

HR-Lifter unit

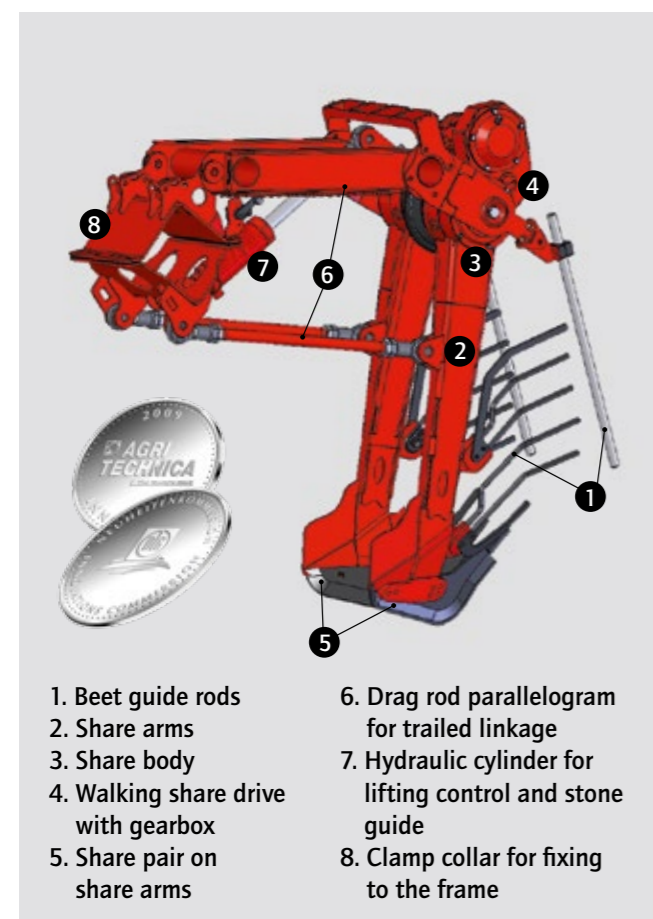
Optimum results thanks to excellent performance.



The new HOLMER HR-lifter unit offers independent level tracking for each individual row, optimum lifting over the entire working width, reduced wear and fuel consumption.

The six-row HR lifter is available in three variants:

- > HR 45 – constant row width of 45 cm
- > HR 50 – constant row width of 50 cm
- > VHR – variable row width (45; 47.5; 48; 50 cm)



- | | |
|-------------------------------------|---|
| 1. Beet guide rods | 6. Drag rod parallelogram for trailed linkage |
| 2. Share arms | 7. Hydraulic cylinder for lifting control and stone guide |
| 3. Share body | 8. Clamp collar for fixing to the frame |
| 4. Walking share drive with gearbox | |
| 5. Share pair on share arms | |

The HR lifter unit's modular design consisting of single-row units is the secret of its success.

It's special benefits:

- > Prevention of loss due to breakage by the lifting depth adjustment feature, available for each individual row
- > Reduction of unnecessary working depths and gentle treatment of the machine – depth adjustment at the edge of the field or in machine tracks
- > Reduced power requirement thanks to integrated vibrating share drive in each row
- > Reduced weight thanks to the use of high-tensile materials, thus relief of the front axle
- > Stone guard integrated for each row
- > Significantly reduced tractive effort required thanks to the solid share body being a drawn implement
- > Spiral rollers 2 and 4 available in different diameters

HR 8 / HR 9 lifter unit

Increased area capacity. Increased efficiency.

With its HR 8 and HR 9, Holmer is, for the first time, offering an 8- and 9-row lifter whose benefits will convince the customer:

- > Easy to pull thanks to the ideal, drawn arrangement of the share bodies
- > 7 hydraulically reversible spiral rollers
- > Optimum visibility of topper, scalper and lifter units
- > Adaptation of each row to uneven ground possible at working widths of more than 4 meters



Straightforward coupling of the HR 8/HR 9 unit

- > Diagonal steer possible as of the first lifting operation
- > Basis for extraordinary lifting performance in conjunction with significantly reduced fuel consumption
- > Different row spacing at 4.5 m working width possible



Double or quadruple tempered rollers with increased windings

Convincing performance.
Terra Dos T3-HR 9.



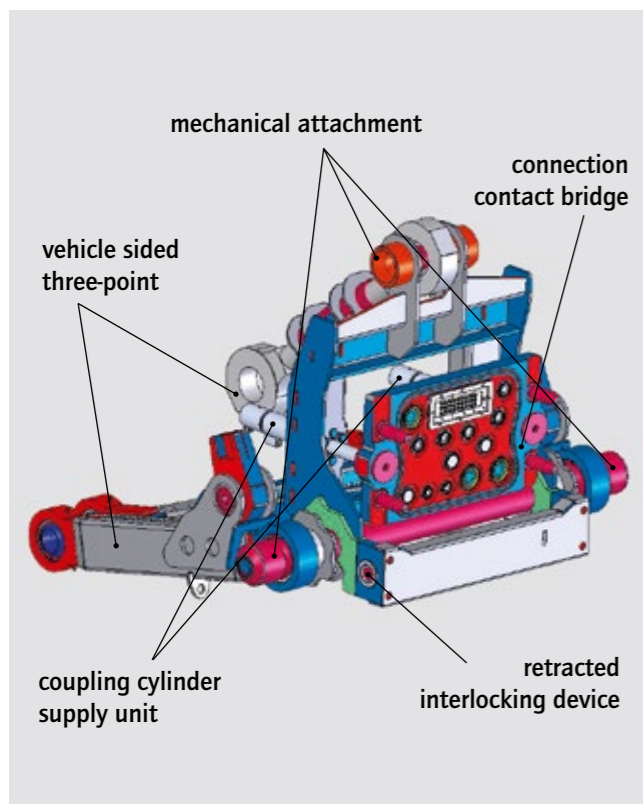


HOLMER EasyConnect

Complete coupling without leaving the cab.

KR lifter unit

Focus on the essentials.



The quick-coupling frame HOLMER EasyConnect developed by HOLMER enhances the mechanical quick-coupling frames know so far by an automatically coupling hydraulic and electric supply interface.

Convincing benefits:

- > Increased machine efficiency thanks to reduced set-up times
- > Reduced risk of accidents, as the operator has to leave the cab only once to mount the attachment
- > Enhanced comfort, as manual coupling of heavy and rigid elements is a thing of the past
- > No risk of mixing up hydraulic and electrical lines on coupling
- > Coupling and uncoupling performed completely (mech., hydr. & electr.) from the driver's seat
- > Easing the operator's workload and system protection

The long-established, reliable KR lifter offers optimum results. Whether on stony, extremely heavy or slightly frozen soil – the robust technology of the KR lifter has been convincing customers from all over the world for years now.

Lifter units available:

- > KR lifter with vertically adjustable roller track: constant row width of 45 and 50 cm
- > VR lifter with vertically adjustable roller track: row widths adjustable from 45; 47.5; 48 to 50 cm
- > Special hardened wearing parts

To safeguard the adjacent row, both the KR and the HR units can be offset to the left or right of the vehicle by 200 mm. At the same time, optimum visibility of all scalper and lifter units is of course ensured. The specially treated wearing components (optional) are available in various versions for all types of applications. HOLMER will be pleased to provide you with special sizes and solutions on request.



Steering

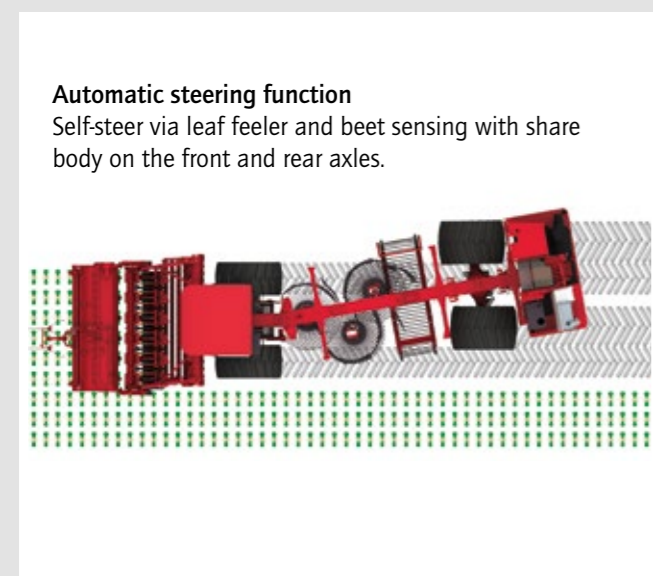
Ground-breaking technology.

The Terra Dos T3 is steered automatically during lifting operation – via the leaf feeler or the share body which act directly on the rear and the front axles. The topper and the lifter unit adapt to the soil independently of the vehicle. Thus, the lifter also works on extremely demanding, rough terrain, providing

extremely precise results with low loss. This facilitates the driver's work, allowing him to focus entirely on his task: fully exploiting the yield-relevant parameters in lifting, but also achieving an enhanced hourly output.

- > Swing area of 60° (30° to the left or to the right) for maximum manoeuvrability
- > Extremely small (inner) turning circle of 7.95 m minimizing the time required for turning
- > Connectable axle stabilisation ensures excellent stability on inclines

With the centered and accordingly left/ right staggered position of the axles flexible harvesting options are possible. The following steering variants can be activated via the ergonomic joystick at the push of a button:



Automatic steering function
Self-steer via leaf feeler and beet sensing with share body on the front and rear axles.

- > **On-road travel: driving speeds up to 32 km/h (optional), only the front axle is actuated via the steering wheel (up to 12 km/h also with articulated steer)**
- > **Four-wheel steer: actuation of front and rear axles via the steering wheel**
- > **Turn steer: the front and rear axles and the articulation are controlled via the steering wheel**
- > **Diagonal steer: the right-hand and left-hand wheels of the rear axle run between the tracks of the front wheels to prevent the wheels from rolling over the soil twice, which provides a perfect basis for soil treatment at a reduced depth**

Cleaning

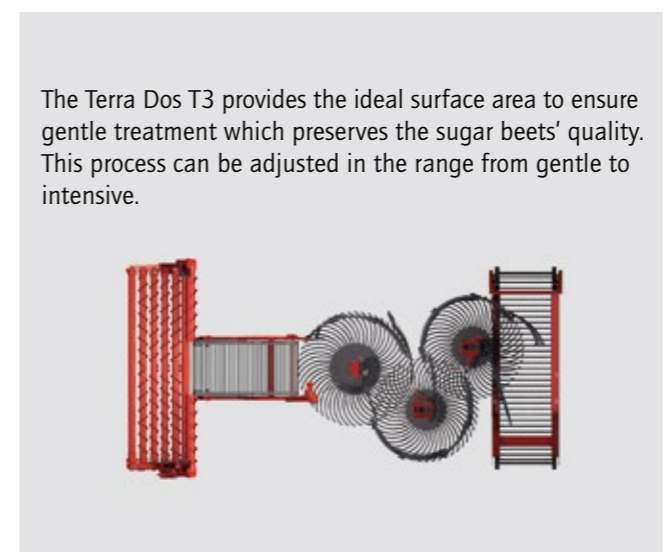
A straightforward task.

Clean, flawless beets stand for cash. With this in mind, the Terra Dos T3 provides you with the perfect basis. All cleaning and transport units such as transfer web, turbines or elevator are optimally matched to the enormous throughput.

- > Progressive adaptation of transfer web speed, turbine speed and grate height from the driver's seat
- > Equipment depending on the customer's requirements: Division of the 900 mm wide transfer web (50, 60, 70 mm) and segment grates of the turbines (spring tines or sliding grates) selectable for different harvesting conditions
- > Transfer web and turbine pressure-monitored and speed-controlled via independent drives
- > Elevator speed adjustable in ten steps
- > Additional rollers between slat conveyor and discharge elevator for additional cleaning
- > Automatic compensation of load peaks thanks to pressure-dependent increase of speed

The automatically controlled, reversible tank scroll of the Terra Dos T3 distributes the beets in the holding tank (size: 28 m³) (optionally available with higher holding tank). At the same time, optimum weight distribution onto both axles is always ensured. During driving operation, the beets can be transferred

to an escort vehicle via the prolonged discharge elevator, which also serves to unload the beets on wide clamps easily. Transverse and longitudinal slat conveyors in automatic in-line arrangement ensure unloading within less than 40 seconds



The Terra Dos T3 provides the ideal surface area to ensure gentle treatment which preserves the sugar beets' quality. This process can be adjusted in the range from gentle to intensive.



Large turbine area allowed a high delivery rate

Working place

Functionality boasting maximum comfort.

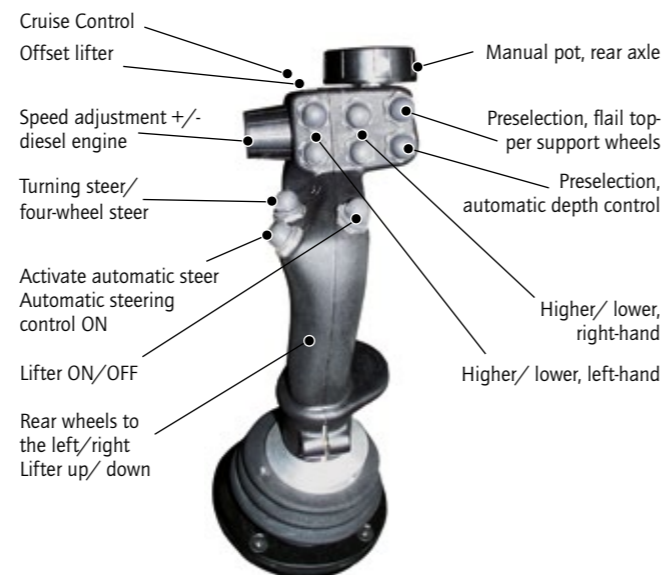
The short harvesting season means long working hours. High operating comfort is a prerequisite for achieving best work results. The fully glazed sound-insulated panoramic cabin (just 56.5 dB(A)) offers a visibility of scalpers, lifter shares and cleaning rollers plus the opportunity to make any necessary adaptations immediately.

- > Electronically adjustable and pneumatically folding
- > 25 halogen or - optionally- xenon headlights
- > Infinitely variable steering column
- > Air-suspended, heated comfort seat with headrest and functional armrest
- > Climate control (optional)
- > Pull-down sun visor
- > Pneumatically opening lower windshield

TerraDAT – the professional software

TerraDAT is software developed by HOLMER for convenient administration of plot, customer and machine data on the PC. In particular, it permits:

- > Creation of data bases for customer data and transfer to the machine via USB-Stick
- > Evaluation of all driver and harvesting data, operation overviews and individual jobs
- > Schedule and reminders regarding maintenance
- > Online-tracking of current lifting data in connection with the GSM module (optional)



High Tech

To satisfy maximum demands.

The high standards required for a comfortable, operator-friendly working environment and which are reflected perfectly by the comfortable cab of the Terra Dos T3 are continued systematically in the operating elements.

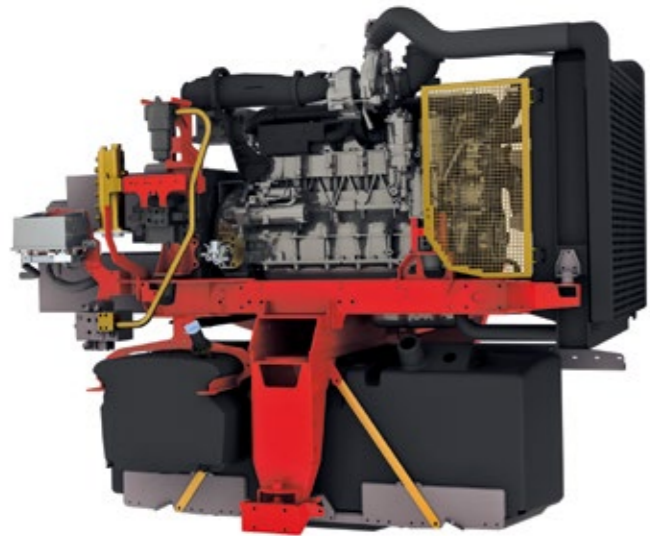
The entire workflow of the machine is controlled by intelligent computers while all relevant settings and machine parameters are clearly displayed on the colour terminal.

- > Ergonomically shaped multifunction joystick for comprehensive operation and setting options
- > Cruise Control feature for fieldwork and road-work
- > Discharge elevator control in the left-hand armrest including infinitely variable discharge speed and automatic sequencing control of the transverse and longitudinal slat conveyor
- > Monitoring via up to three colour cameras in the area of the transfer web, the rear of the machine and the discharge elevator
- > Data printer for immediate order creation



Engine

State-of-the-art technology
for a clean environment.



The drive technology of the Terra Dos T3 has always been marked by state-of-the-art engine technology for economic fuel consumption.

- > New, powerful MAN diesel engine with 383 kW (520 HP) and SCR technology
- > Load-dependent automotive engine speed control in the range from 1,200 and 1,600 rpm for consumption-optimized operation
- > Compliance with the latest exhaust gas regulations EUROMOT 3b (TIER 4).
- > Load-sensing hydraulic system for economical supply of the entire working, drive and steering hydraulics



Long operating periods Short downtimes.



Maximum efficiency is a central feature of the Terra Dos T3. Thus, long operating periods are as much a matter of course as are speedy and easy maintenance.

- > Excellent access to the engine compartment and to all components requiring maintenance
- > Integrated ladder providing safe support for refuelling and inspection
- > Spacious storage areas at the rear and on the left-hand and right-hand sides
- > Maintenance-free lifter gearbox, articulated system and share bodies
- > Electronically controlled central lubrication system

The HOLMER Service More than convincing.

More than convincing: the HOLMER Service

Within easy reach of our customers, reliable, competent and quick. With its Terra Dos T3, HOLMER not only boasts a convincing performance, but also tailor-made consultation and other services.

- > Customized services offered by HOLMER's after-sales service
- > Providing comprehensive service base support
- > 24-hour service and spare parts shipment
- > Ample training schedule for customers
- > Comprehensive spare parts program can be ordered conveniently from our on-line shop

Technical data

Engine :	MAN D2676 LE 121SCR with AdBlue technology
Engine rating:	383 kW (520 HP)
Drive:	<ul style="list-style-type: none"> mechanical axles at front and rear axles driven via propeller shafts 2-speed transfer box, hydrostatically driven automatic control of engine speed and drivetrain
Axles:	<ul style="list-style-type: none"> front: portal planetary steering axles with brakes rear: planetary steering axles with brakes
Locks:	Front and rear axles are provided with controllable differential locks
Driving speeds:	<ul style="list-style-type: none"> 1st gear: 0–12 km/h steplessly variable 2nd gear: 0–25 km/h steplessly variable (0-32 km/h optional) Cruise control in 1st and 2nd gear
Hydraulic system:	<ul style="list-style-type: none"> DRIVE: LINDE PTO: DANFOSS/ BOSCH REXROTH
Topper Units:	<p>KOS toppers in the following models</p> <ul style="list-style-type: none"> KOS I (integral topper) KOS KO (can be changed over from leaf spreading to integral function) EB unit (defoliator, with two counter-rotational rubber-lined topper/cleaning shafts for gentle defoliation without scalping)
Leaf recovery:	<ul style="list-style-type: none"> by means of conveyor belt Attached with quick-coupling device for KOS BS and KOS KO toppers incl. leaf conveyor carriage for road transport
Scalper:	<p>Parallel scalper with automatic topping thickness control: The cutting thickness of all 6 blades can be adjusted centrally from the driver's seat. HOLMER DynaCut with a higher response speed for economically optimized cut defoliation</p>
Lifter unit:	<p>KR lifter (6 rows) with vertically adjustable roller track in the following versions:</p> <ul style="list-style-type: none"> KR 45 (constant 17.72 in. row width) KR 50 (constant 19.69 in. row width) VR (variable row widths 17.72; 18.70; 18.90; 19.69 in.) <p>HR lifter (6 rows) with vertically adjustable roller track and single-row units in the following versions:</p> <ul style="list-style-type: none"> HR 45 (constant 17.72 in. row width) HR 50 (constant 19.69 in. row width) VHR (variable row widths 17.72; 18.70; 18.90; 19.69 in.) <p>HR -M lifter with vertically adjustable roller track and single-row units in the following versions:</p> <ul style="list-style-type: none"> different row numbers up to 4,50m working width in combination with the integral toppers IS/8 and IS/9 with quick-coupling system and transport carriage for road transport Linear lateral mobility of 2.76 in. among all pairs of shares Zero maintenance due to oil bath Automatic depth control via driven feeler wheels, adjustable from the driver's seat Walking vibrating shares Spiral rollers reversible Lifter unit offset feature 7.87 in. to the left or right of the vehicle (safeguards the adjacent row) Special dimensions on request
Cleaning:	<ul style="list-style-type: none"> 6 long spiral rollers / 7 rollers with HR-M 4 short spiral rollers Reversible 900mm wide endless transfer web with a pitch of 50, 60 and 70mm 3 turbines with automatic speed adjustment
Grates:	<ul style="list-style-type: none"> Segment gates or spring tine gates which can be combined Central infinite vertical adjustment from the driver's seat with indication on the terminal Automatic and manual speed adjustment

Elevator:	<ul style="list-style-type: none"> Double „Continental“ type web with steel bars - width 900 mm 10 speeds
Beet distribution in holding tank:	Tank scroll, reversible: automatic and manual
Tank bottom:	<ul style="list-style-type: none"> longitudinal and transverse slat conveyors, each with 4 drive chains, hardened and tempered automatic hydraulic chain tensioning screw-fastened segmented base
Unloading:	<ul style="list-style-type: none"> Possible automatically with sequence control discharge elevator, longitudinal and transverse slat conveyor speed can be controlled 1012,54 cubic feet in less than 40 sec
Discharge elevator:	<ul style="list-style-type: none"> unloading height programmable via memory feature contour: discharge elevator retracted in machine during lifting operation width: 72.83 in. hydraulically folding Transfer of beets onto trailer moving alongside the machine possible during lifting operation Controllable discharge conveyor speed when emptying the tank during lifting operation
Comfort cabin:	<ul style="list-style-type: none"> climate control - optional air conditioning system Radio with MP3 and CD player (optional) 2 vent windows Colour terminal USB interface to read customer data in and out glazing for panoramic vision sound-insulated extremely quiet - 56.5 dB(A)
Lighting	<ul style="list-style-type: none"> 2 rotating beacons 25 working lights Xenon front and rear (optional)
Warning device:	<ul style="list-style-type: none"> Beet flow recorded via terminal hydraulic oil and engine oil monitoring by acoustic and visual warning signals
Steering: (preselectable steering combinations)	<ul style="list-style-type: none"> Four-wheel steer Diagonal steer Turn steer Automatic steering control On-road driving with articulated steer
Central lubrication:	Electronically controlled (BEKA MAX)
Fuel tank:	<ul style="list-style-type: none"> approx. 1150 liters (70 l AdBlue tank) Separate connector for refuelling from tank truck
Holding tank volume:	1012,54 cubic feet
Transfer height:	153,54 in
Overall length:	496,06 in.
Overall width:	<ul style="list-style-type: none"> 118,11 in. in case of a row width of 17,71 in. 118,11 in. in case of a row width of 19,69 in. or 17,71-19,69 in.
Overall height:	156,69 in.
Wheelbase:	225,59 in.
Front tyres:	<ul style="list-style-type: none"> 800/65 R32 (width approx. 31,49 in.) 900/55 R32 (width approx. 35,43 in. in case of a row width of 19,69 in.) IF 800/70 R38 (with 1,5 bar) (optional)
Rear tyres:	1050/50 R32
Transfer height of leaf belt:	145,67 in.
RCleaning track:	Over 472,44 in.
Lifter output:	up to 2.5 ha/h
Subject to technical modifications!	



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HOLMER Maschinenbau GmbH
Regensburger Straße 20
D-84069 Schierling/Eggmühl

Telefon: +49 (0) 94 51/93 03-0
Telefax: +49 (0) 94 51/33 70

info@holmer-maschinenbau.com
www.holmer-maschinenbau.com

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