



KEILER I

ROPA

Fully hydraulic drive

The fully hydraulic drive enables automatic rotational speed control of all cleaning units. All cleaning units can be supplied at maximum power at a PTO speed of 450 rpm. In order to adapt to different harvesting conditions the cleaning elements can be controlled independently from the engine speed over the complete speed range. If full power is not required, the PTO speed and engine speed can be further reduced.





Unique drive concept

- The speed of the sieve conveyors can be adjusted independently of the speed of the leaf chain
- All cleaning units maintain their optimal speed independently of the PTO speed
- The speed of the leaf chain can be reduced to 20% of the sieve conveyor speed
- A continuous pressure monitor prevents overrunning the lifter
- Mechanical slip clutch not necessary – significantly improved power transmission
- Soft start of all belts and cleaning units
- No chains, belts and tensioners – no adjustment, fewer wear parts, increased operational reliability
- Only one articulated shaft, which means fewer lubrication points
- Significantly reduced noise level, more comfortable working with the machine
- Save fuel with reduced engine speed
- Many settings can be made directly at the picking table, optionally also at the terminal
- Fast and convenient adjustment of the machine for variable harvesting conditions
- Fully hydraulic drive of the complete harvester, thus extremely low vibration and reduced noise



Pickup control - fully automatic ROPA ridge pressure regulation

- Ridge pressure relief and ridge pressure regulation as required (optional)
- Adjustment while driving - conveniently from the tractor cabin
- Depth guide and ridge pressure relief
- Optional range of different lifter shares (one-blade, two-blade, three-blade)
- Optional different ridge rollers (flat, deep)
- Optional stone protection for lifter shares

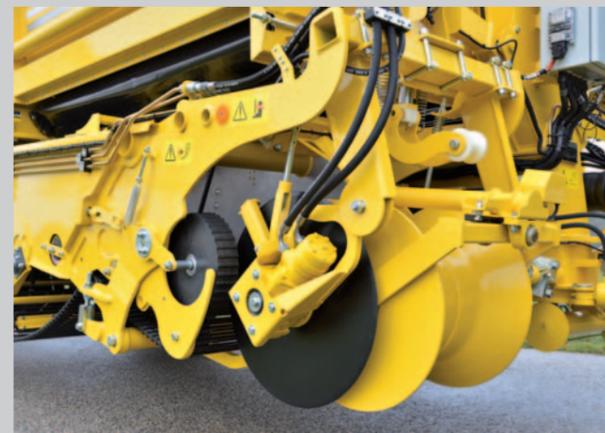


Additional disc coulters (optional)

The additional disc coulters cut through even large amounts of haulm for harvesting without blockages

Hydraulically driven disc coulters right/left (optional)

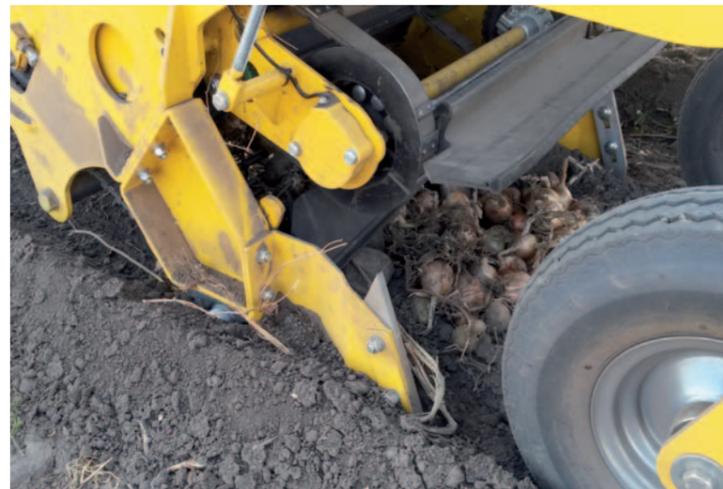
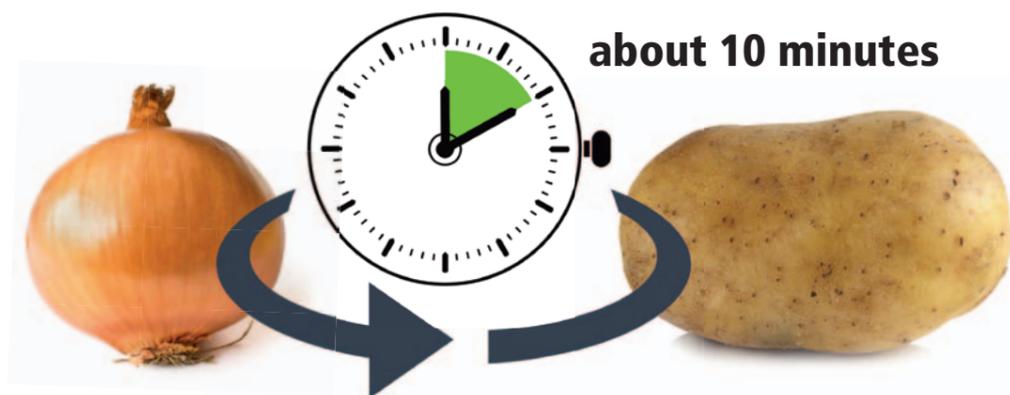
The hydraulically driven disc coulters guarantee clean and efficient harvesting without blockages. The speed is controlled manually or automatically depending on the driving speed - optionally synchronously or leading.



Standard ROPA quick-change system - High efficiency with short setup times

ROPA has designed a practical new quick-change system for switching between row pickup and swath pickup. The Keiler 1 can be switched from potato harvesting to onion harvesting in just a few minutes. The reverse is the same. One person can perform the complete coupling process easily and without requiring special tools. A practical solution for potato farmers who may need to change their pickup system several times a day to harvest onions, carrots or red beets.

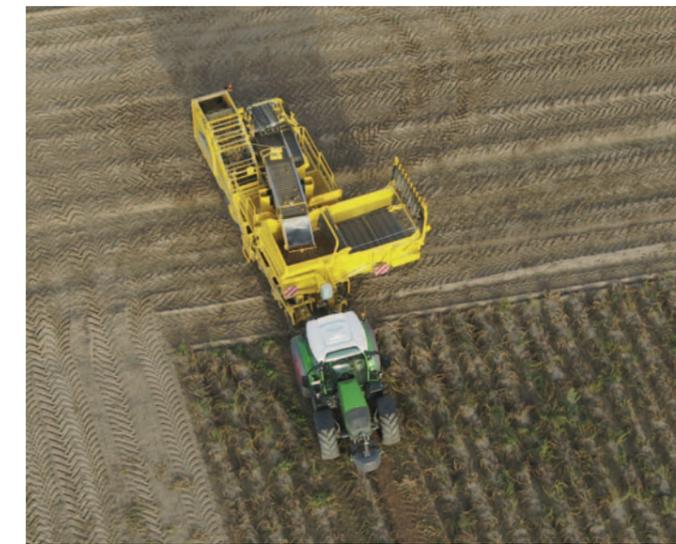
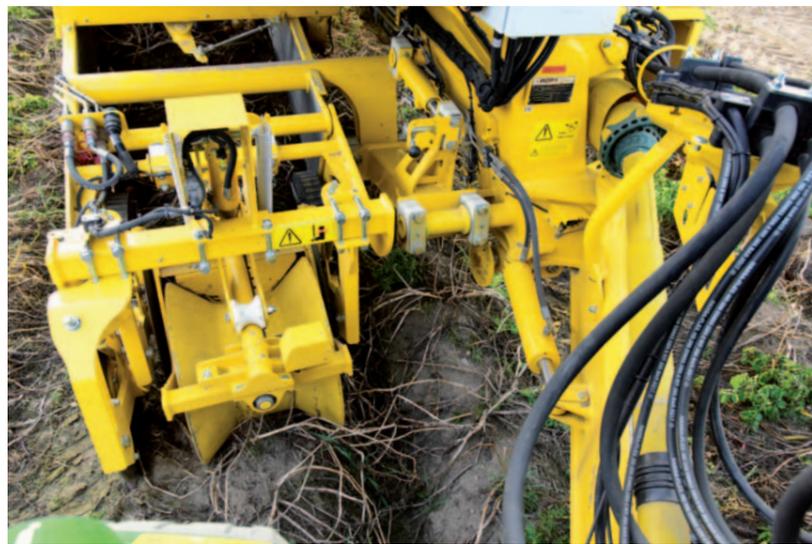
- Faster and easier change of pickup
- The driver can do the change alone without requiring assistance from other persons
- Specialized tools not required
- Conversion can be done in the field
- Attachment of the pickup offers the best accessibility for fast and easy change of sieve conveyors – switch to different pitch
- Cover belt and sieve conveyor can run synchronously





Unique lifting program for spay lanes

- Simple and fast digging through spay lanes
- No damage of the adjacent potato ridges
- Requires no additional opening wheel

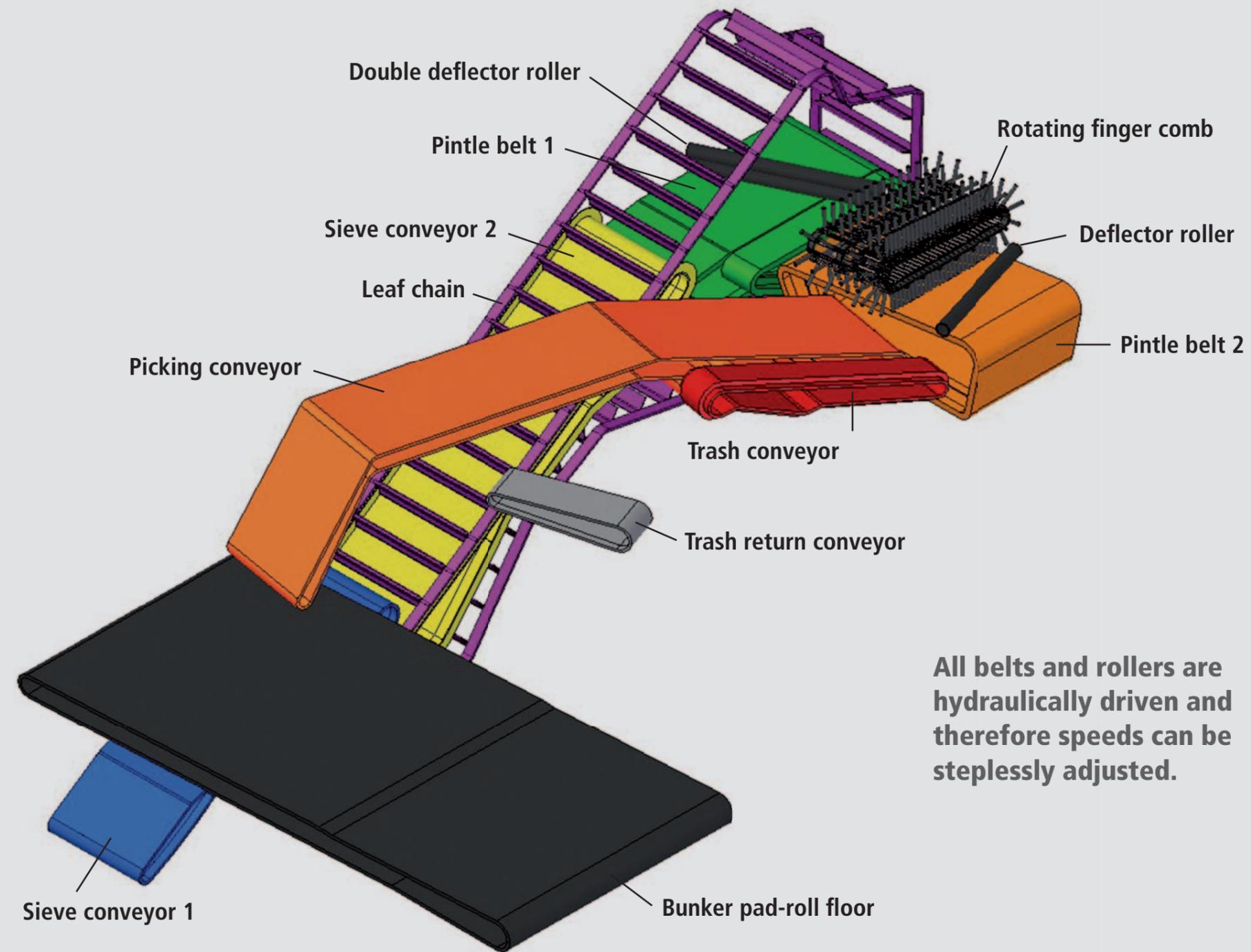




Generously measured cleaning

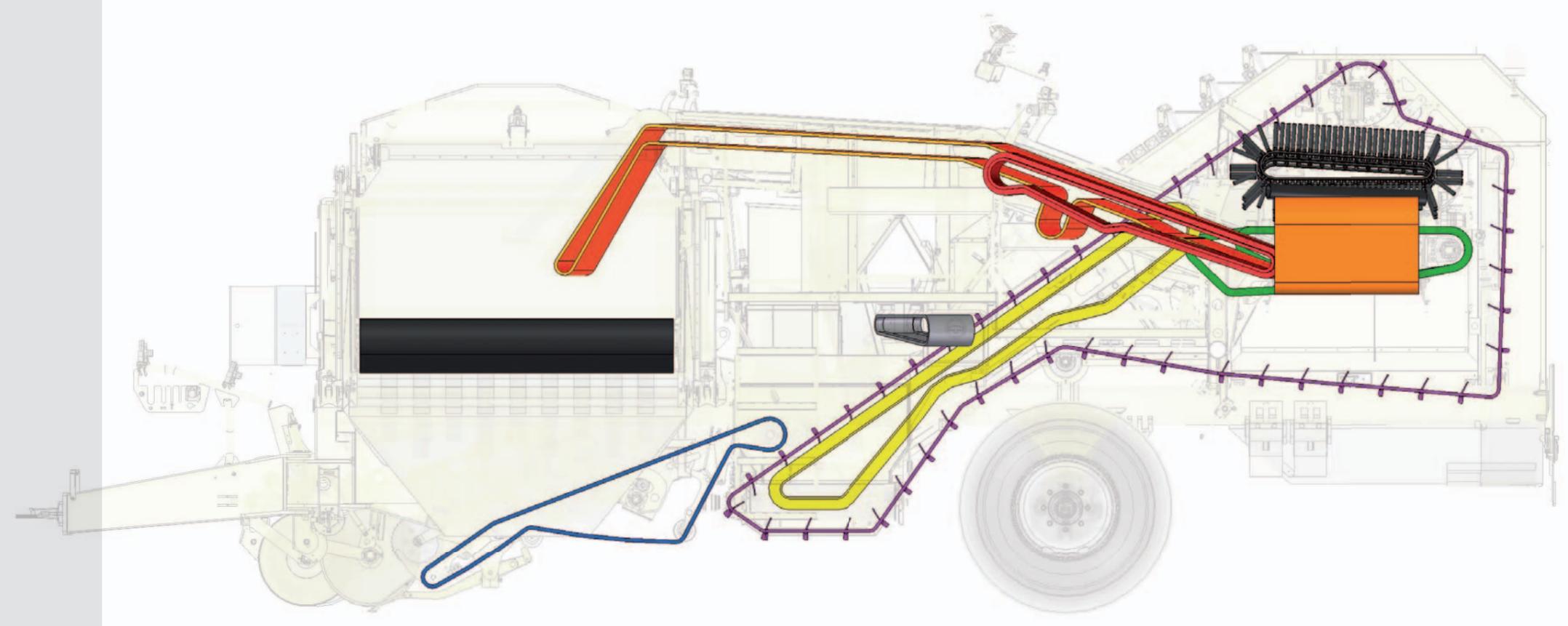
- Large sieve conveyors with variably adjustable shaker (standard)
- Two transfer stages for removal of large amounts of foreign matter
- Integrated sieve conveyor tensioner with optional cleaning roller
- Speed ratio of leaf chain to sieve conveyor 2 can be adjusted
- Excellent haulm ejection with 6 rows of haulm retainer springs (7 rows optional), steplessly adjustable
- Pre-separation with hydraulically driven and steplessly speed-adjustable twin deflector rollers
- Rotating finger comb (RFC) over 900 mm wide pintle belt 2 with H-knob profile
- RFC speed and height steplessly adjustable on both sides (optional electric height adjustment)
- Gentle and efficient cleaning even at high throughput
- All cleaning devices maintain their set speed independently of PTO speed





All belts and rollers are hydraulically driven and therefore speeds can be steplessly adjusted.

Longer cleaning distance for gentle and efficient separation and cleaning



The ROPA Keiler has large cleaning components with maximum cleaning area for gentle and efficient cleaning. The ROPA Keiler is particularly efficient for harvesting on heavy soils and/or during bad weather.



Root protection

Adjustments that can be individually and easily changed ensure high throughput with increased cleaning performance. The ratio of the speed of the leaf chain can be adjusted steplessly and conveniently from the driver's seat. The mechanical (optionally electrical), height-adjustable rotating finger comb (RFC) and numerous additional adjustment options form the basis for efficient and gentle cleaning of potatoes.





Freedom of movement at the picking table

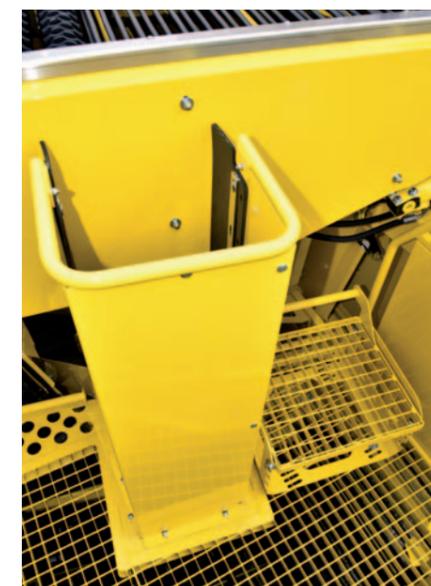
Ergonomic working on the sorting platform

- Height-adjustable platforms offer greater safety and comfort for the sorters, even over long working days
- Freely positionable platforms
- Maximum freedom of movement
- Generously sized chutes
- Rounded edges and covers for user safety

Generously sized chutes



Height-adjustable platforms (optional)



Sunshade (optional, can be extended with side panels)

Large volume bunker with 6 t capacity



Convenient truck loading - even on high trailers

- Separate controls for bunker unloading standard
- Pad-roll floor for gentle handling of potatoes (optional with metal strips)
- Perfectly positioned bunker filling conveyor for gentle and optimal filling of the bunker
- Hydraulically operated front bunker articulation part (optional)
- Tray filler with rubber baffles (optional)
- Automatic filler with automatic level control (optional)
- Bunker fill level can be adjusted for different crops at the tractor terminal





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Double bunker

- Twice as good - separate bunker filling and unloading
- Bunker division 3 to 1
- Bunker capacity: main bunker approx. 4.5 t, auxiliary bunker approx. 1.5 t
- Auxiliary bunker can be unloaded from the tractor cabin or the sorting platform
- Hydraulically folding tray filler with divided discharge



Divided chutes and five steplessly adjustable sorting rollers make it easy to sort undersized items into the separate bunker



Perfectly integrated feeding conveyor for optimal filling of the separate bunker



Divided bunker with pad-roll floor for gentle filling. The automatic bunker filling is easier for the driver and ensures the best possible use of the bunker capacity

ISOBUS control unit on sorting platform (optional)



Keiler "Plus" control unit (optional)

Quick and easy adjustments

Height and inclination of the separating equipment easily adjustable at the press of a button



▲ Keiler "Basic" control unit



▲ Keiler "Premium" control unit (optional)

▼ Keiler "Plus" control unit (optional)





Large and simple terminal – intuitive operation

- Clear and simple display with large function keys
- Up to 6 different lifter settings can be easily saved (optional)
- Simple and very fast adjustment to changing soil and crop conditions at the push of a button
- Display and adjustment of functions also available at the picking table terminal

Greater ease of use means greater harvesting quality and performance





Optional touch terminal



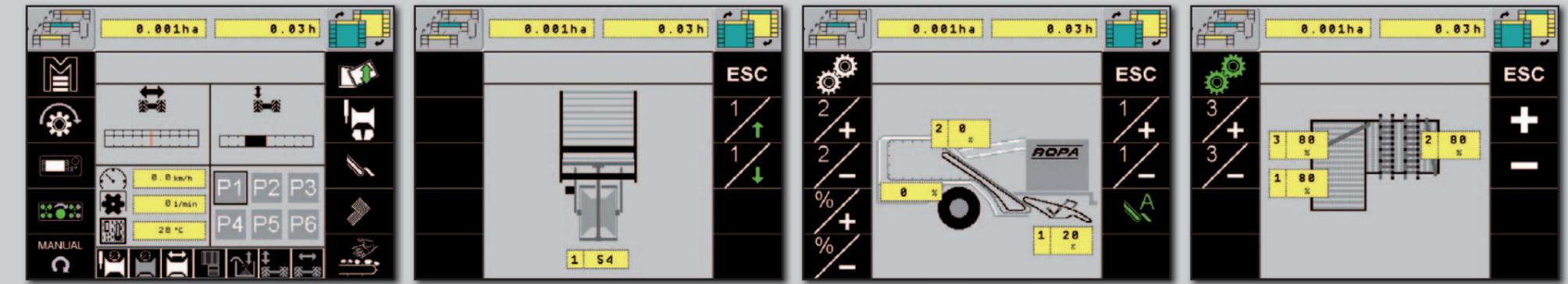
Description of terminal and functions
in the operation manual.
www.ropa-maschinenbau.de

Intuitive operating concept

- ROPA Terminal is ergonomically and easily integrated into any tractor cabin
- ISOBUS 5.7-inch basic terminal, optionally 8-inch colour terminal with glass touch screen
- Self-explanatory icon display on screen
- Freely configurable user interface
- Ergonomically designed user controls with mini joysticks – orderly and easily understandable layout
- Individually configurable lifting programs that can be saved simplify manual or automatic adjustment for different harvesting conditions for the driver

Fully ISOBUS-compatible

- Operation with any ISOBUS terminal
- ISOBUS installation of modern tractors fully supported
- ISOBUS retrofit set for tractors without ISOBUS functions (optional)



Optional assistance systems and ISOBUS

The fully hydraulic drive allows user-defined machine settings to be saved and recalled at any time. Adjustments to specific crop conditions or switching programs between ware and starch potatoes is convenient at the press of a button. Enabling the task controller allows the field documentation to be output to the field file in the ISO-XML file format.

Assistance systems - additional attachments of the fully hydraulic drive

- Six programming buttons for fast saving and calling up various machine settings
- Individually configurable and can be saved with names
- Ideal for repeating harvesting conditions

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Easy maintenance and easily accessible design

- Logical electrical design, with all leads labelled throughout the complete cable length
- Integrated diagnostic system
- Bearings, bolts and components conform to DIN standard
- High-quality hydraulic lines



Spacious - park position for hoses and cables



Trash management (optional)



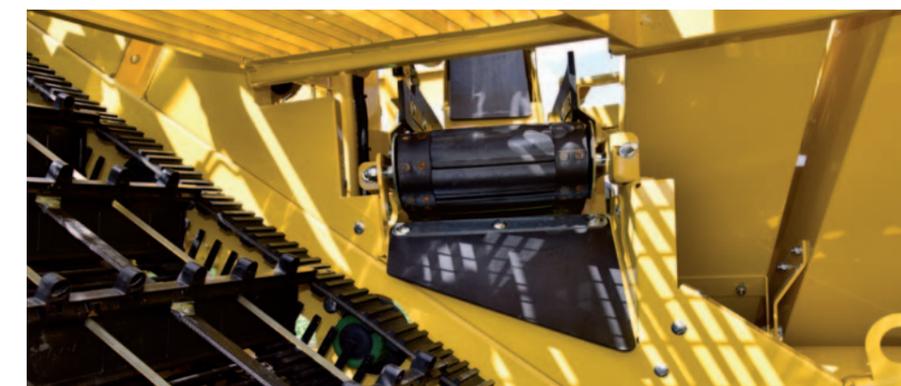
Grader rollers, steplessly adjustable from 25 to 40 mm



Grader container (internal), can be combined with collection box



Trash return can be combined as required:
- to the ground
- to the trash return conveyor
- to the collection box discharge conveyor



Trash return conveyor on sieve conveyor 2

Optional cameras and lights

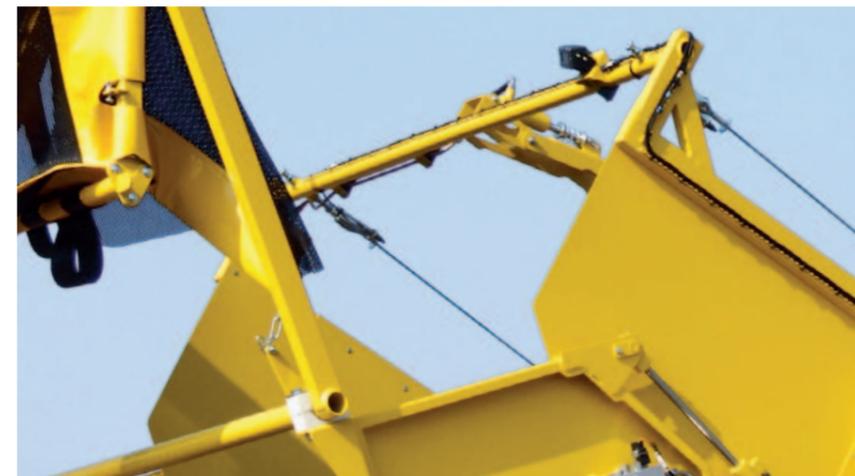
Cameras and LED working lights for sieve conveyor, leaf chain, pintle belts, picking table, bunker and rear



Picking table



Sieve conveyor, leaf chain



Bunker



Rotating finger comb



Rear view camera at the back, rotating beacon

Optional equipment for even more functions



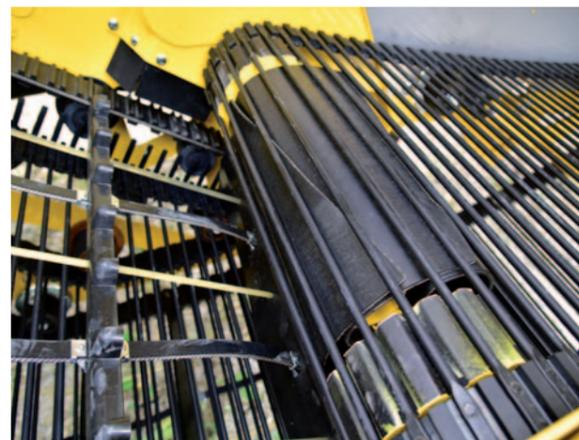
Sieve conveyor tensioner with integrated cleaning roller



Spiral roller



Agitator for better separation of potatoes and haulm



Roller with rubber paddles for efficient closure and cleaning



Tool box



Automatic tilt compensation for pintle belt 1 and 2



Automatic hydraulic tilt compensation



Technical Data of ROPA Keiler 1:

Length: 9,600 mm

Width: 3,000 mm

Height: 3,530 mm (with 26.5" tyres)

Bunker capacity: approx. 6,000 kg

Bunker width: 2,235 mm

Overloading height: 4,200 mm

Drawbar length: 1,730 mm

Track: 2,350 mm

Sieve conveyor 1 width: 800 mm

Sieve conveyor 2 width: 840 mm

Width leaf chain: 950 mm

Width of pintle belt 1: 1,050 mm (800 + 250 mm)

Width of pintle belt 2: 900 mm

Pre-separation with hydraulically driven twin deflector rollers, height and speed-adjustable from the picking table

Main separation with 4-rows rotating finger comb (UFK), adjustable in height and speed from the picking table

Picking conveyor width: 750 mm

Trash conveyor width: 300 mm

Est. tractor efficiency: from 60 kW

PTO drive: 540 rpm

Row width: from 750 up to 900 mm

Haulm extraction rollers: Ø 340 mm



Equipment with added value – standard with us:

- Fully hydraulic drive of the complete harvester
- Automatic ridge centring
- Pickup with quick-change function
- Sieve conveyors and haulm conveyor are steplessly adjustable from the tractor
- 900 mm wide pintle belt 2
- Separation unit with 4 rotary finger combs (RFC), the speeds of 2 rows each can be separately adjusted
- Trash conveyor driven and steplessly adjustable separately from the picking conveyor
- 6 t bunker with pad-roll floor
- Hydraulic steering of drawbar and axle
- Hydraulic support stand
- High-volume standard tyres 600/55-26.5, air brake
- ISOBUS control unit for easy adjustment of functions from the tractor

Optional equipment:

■ Chassis and tyres

- Tyres 600/55 R26.5 radial
- Tyres 710/45 R26.5 radial
- Lifter wheel 16.5/85-24
- Hydraulic slope compensation including automatic function

■ Pickup / sieving channel:

- Lifter depth adjustment hydraulic instead of mechanical including ridge pressure control, steplessly adjustable from the tractor
- Ridge roller, deep model
- Share, one-blade
- Share, three-blade
- Stone protection for share pickup
- Hydraulics for hydraulic disc coulter/swath pickup with lifter shaft and cover belt
- Hydraulically driven disc coulter right
- Disc coulter right also mechanical
- Swath pickup with lifter shaft, hydraulic cover belt and depth guide wheels
- Share pickup for special crops, e.g. carrots, with depth guide wheels
- Haulm pickup rollers, wide model (75 mm)
- Agitator in sieving channel 1 for better separation of haulm and potatoes
- Stainless steel plates in sieving channel 1
- Rubber paddle roller on drive shaft
- Sieve conveyor 1 cleaning roller

■ Leaf separation:

- Additional 7th leaf spring row
- Leaf chain, wide-mesh > 250 mm

■ Separation:

- Tilt adjustment pintle belt 1 and pintle belt 2 hydraulic with automatically operated cylinder
- RFC electric height adjustment
- RBC 6x (brushes instead of fingers), 2 rows each separately driven, speed adjustable
- Bottom deflector roller with spiral design on pintle belt 1 (e.g. for carrots)

■ Picking table:

- Sorting with 4 rollers, steplessly adjustable, adjustment range 25 - 40 mm, including sorting container
- Trash return conveyor with switching flap
- Collection box with discharge conveyor, hydraulically driven

■ Bunker:

- Pad-floor bunker steplessly adjustable with metal strips
- Bunker articulation can be hydraulically lowered
- Tray filler funnel width 900 mm, hydraulically folding
- Tray filler funnel width 1,900 mm, hydraulically folding
- Bunker filler slide including automatic filling

■ Comfort:

- ROPA Touch Terminal instead of ROPA Basic Terminal
- Control unit "PLUS" at picking table, mechanical speed adjustment of separator units and adjustment of lifting functions at terminal
- Control unit "PREMIUM" at picking table, electric speed adjustment of separator units
- Programming buttons for saving 6 lifter programs
- Automatic sieve conveyor controlled by driving speed
- TASC controller for crop management with ROPA terminal
- Basic ISOBUS equipment for tractor without preparation
- Up to 4 LED working lights on sieving channel, RFC and sorting conveyor and also 1 rotating beacon
- Video system with up to 6 camera positions
- Storage compartment, at left ladder

■ Protection from sun and weather:

- Canopy I - sunshade for picking table without side panels, with mounting frame
- Canopy II - weather protection for picking table with side panels, with mounting frame
- Canopy lights



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