



**euro
maus 4**

ROPA

Superior class.



Double cleaning path during intake - individually adaptable cleaning intensity



An intake width of 10.2 m – individually adjustable cleaning intensity

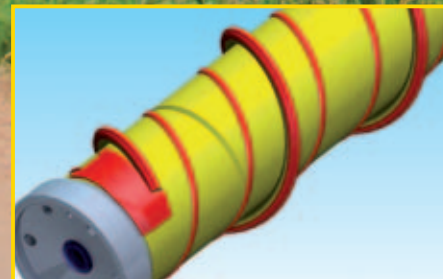
The new and extremely robust intake system from ROPA is the widest version available on the market. A total of 18 cleaning rollers (all with hard welded coating) ensure a gentle and efficient soil and weed separation

whilst at the same time allowing more space underneath. The patented intake system is designed so that the length and intensity of the cleaning path can be variably set from the cabin as necessary. In contrast to

earlier systems 50 percent more beet can be stored in an average-sized clamp - a great advantage on larger fields or in heavy frost.



Separate drives for 3 groups of rollers with individual setting of revolutions and automatic reversing for stone protection



Maximized efficiency of the intake system – significantly less wear and tear

The annual operating capability of loaders is constantly increasing. Many machines operate in 24 hours shifts, and time for maintenance and parts replacement is limited and expensive. ROPA has once again improved

the heavy duty models by developing this new intake system and uses extra durable components. The nose cone with its replaceable point and a split cap offers extra clearance for the drive designed with a conical bearing and

automatic lubrication. Finger rollers, cleaning rollers and spiral rollers (3-seam) have been given a hard weld finish. The first spiral rollers are threaded to the outside for maximum possible cleaning. The beet is then gently,



with protective helpers, brought onto the next spiral roller cleaners and travel into the center of the pick up. At the point of transmission from spiral roller cleaners to the in-feed web hardened end plates cover, to protect the

beet and to reduce the wear and tear, at the roller ends. The beet collector telescope arm (now 180mm x 180 mm x 5 mm) uses proportional control valves and is equipped with a plate with reinforced rubber lip and angled corners.

Already measuring sensors are fitted at the intake, providing the information from which an automatic system for the final beet collector is being developed for 2012 campaign.



Multifunctional Terminal

The complete Maus can automatically be folded in and out with only one control switch



Optimal balance – unique counter weight concept

Without leaving the cab and with only one device the operator can convert the euro-Maus 4 from operation in the field to road transport in as little as one minute. A newly designed and clearly laid-out

console with logically grouped operating units, a selector switch as well as 2 new ergonomically arranged multifunctional joysticks in the armrests provide a highly user-friendly machine when loading.

A counterweight arm from fine 700 grade steel, specially designed by the company's founder, Hermann Painter, guarantees extra stability when loading as well as offering a spectacular sight. The counterweight arm, more

A fully integrated weighing system (optional)

Weighing cells, revolution and sensors, and weight calculators are integrated into the loading elevator



All loader side walls are made from highly durable PU plates and allow four usable positions



than 9 m wide and 4 m high, with the fuel tank attached as a counterweight to the loader swings out and provides optimal balance even at loading widths of 15 m. The weight of the loader is taken up by

the counter weight arm at the machine centre – leaving the frame unstressed. An absolutely safe and horizontal position and optimal traction on all 4 wheels are essential features of the ROPA counterweight concept.



Best all-round vision – flexible comfort cabin

The comfort cabin, specially designed by ROPA, can be raised up to 5,1 m providing the operator with a workplace of a superior class with an all-round vision never known before. The cabin with its unobstructed view is a fusion

of modern design. first class vision and excellent sound-proofing to create a most comfortable workplace. The evenly curved front windscreen with an unusually low horizon grant an excellent, undistorted view. The view over the

loader and the entire width of intake without having to get up from the ergonomically arranged seating position means untiring operation even on long working days – the basis for high performance during beet loading.



Full tinted glazing, adjustable steering column, air sprung-mounted comfort seat with swivle seat brake, MP3-CD radio and audio system, video-controlled depth operation as well as pneumatically folding

and heated wing mirrors, offers a workplace satisfying all an operator needs. An auxilliary heater which also maintains the temperature of the hydraulic oil tank is equipped with automatic air-conditioning and

continuously adjustable fan speed control.





Spiral roller cleaner with beet brake

Efficient cleaning particularly in very heavy soil with large weed growth less wear and tear. Auto reverse spiral rollers with high quality hard weld finish



Technology with maximal performance – minimal fuel consumption

The extremely economical Mercedes Benz engine of 240 kW / 326 HP (OM 926, 7.2 l CC) with integrated AdBlue and SCR-Cat. is automatically driven at reduced revolutions even during loading whilst at the same time pre-

serving enough power for extreme conditions. In contrast to the previous model it is possible to increase the throughput at reduced fuel consumption. Due to the increased throughput the cleaning capacity was also im-

proved to achieve optimal cleaning results.

A pump distributor with a load-switching multiple disc clutch ensures reliable cold-start and minimized fuel consumption for all drives. The new

Rear cleaning web

90 cm wide cleaning web for good cleaning results in light to medium soil



hydraulics with new transmission technology in the pump distributor combines high throughput at lowest consumption even with running at 1,200 rpm. An extremely efficient load-sensing-hydraulic system guarantees

the highest oil efficiency for maximum performance with quick responsive operation even at low engine revs. The cooling system with hydrostatically controlled and automatically reversing fan is contamination protected.



Minimal time for preparation – fast set up and setting off

For road transport the complete Maus folds in automatically to a road width of 3 m and a total length of only 14.97 m on operating just one control in the cabin. The wheel base of 5.5 m combined with two hydraulically sprung

additional axles guarantee safe handling of the ca. 31 ton Maus while maintaining the best driving comfort even at an increased speed (optional 32 km/h). Road transport is as economical in fuel consumption as it is

in operational mode even at reduced engine speeds.



Minimal cleaning before changeover,
with very little possible area for soil build up and no
soil accumulation behind the rear axle at all





Technical data: ROPA euro-Maus 4

Diesel engine:

Mercedes Benz OM 926 LA, 6 cylinder engine OM 926 LA, exhaust level 97/68/EG 3B (with SCR-Cat and AdBlue) 240 kW / 326 HP at 2200 revs/min. and 7.2 l CC, max. torque of 1300 Nm at 1200-1600 rpm, fuel consumption ca. 194 g/kWh at 1250 revs/min when in full operation, fully electronic steering with fuel consumption assessment shown at the colour terminal, temperature dependent control and automatically reversing hydrostatic fan drive, one flat belt drive with automatic belt tightening, automatic engine shutdown when damage may occur engine diagnostics integrated into the colour terminal, fuel reservoir 1225 l, AdBlue store of 95 l, ball cock for 8 l fuel reserve when tank is empty, electronic pump for fully automatic ventilation of the fuel system.

Drives:

Continuous hydrostatic (Bosch-Rexroth) 4-gear OMSI-drive for 2 OMSI - planetary axle steering, drive pump alone can easily transfer more than the complete Diesel engine performance, 2 separately adjustable differential locks with automatic function, automatic all wheel switch, Tempomat, automatic driving at reduced rpm, constant throttle brake prevents the Diesel engine overturning at full braking and downhill drive, load control through highly sensitive steering in crawl gear. Front axle with drum brake 500x180, 4 spring reservoirs – cylinder brake for operation and parking.

Driving speed 20 or 25 km/h, optional 32 km/h (with additional drum brake in rear axle)

Cabin:

Adjustable in height up to 5.1 m, sound-proof, clear view with all-round tinted glazing and low horizon, new compact control panel panel at swivel seat with integrated colour terminal, function keys and rotary selector switch, 2 multi-function joysticks with integrated mini-joystick, air conditioning, air-cushioned swivel chair with swivel seat stay, colour terminal with clearly laid-out display of beet flow, fail indicator, Bluetooth MP3 radio with audio system, halter console for telephone, storage locker of 60 l capacity integrated in the cabin rear wall, windscreen wipers on front right and left and at rear. 2 LED-internal lights, video system at swivel seat with split function and standard 2 cameras (optionally up to 4 cameras).

Operational drive and hydraulic system:

OMSI-pump distributor drive, pressure circulation lubrication, engine oil cooling system, adaptable drive transmission for reduced engine revs (loading revs 1200-1300 rpm) when loading, load-adjustable lamella coupling for switching 6 hydraulic drive pumps -> ensuring easy start of diesel engine even at extremely low outer temperatures;
- 4 Axial piston pumps (Bosch-Rexroth) for continuous and separate revs. setting and roller drive reversing (picking up, discharging, taking in, second cleaning)

- 2 Axial piston pumps (Bosch-Rexroth) for continuous drive of main web and loader
- 1 Load-sensing axial piston pump (Bosch-Rexroth) for feeding all hydraulic cylinders -> with LVS-valves, split for simultaneous execution of all functions
- 1 Axial piston pump (Bosch-Rexroth) for reversible air-conditioning switch (hydraulic oil water and loading air cooling system)
- hydraulic Danfoss motor

Steering: Front axle steering, rear axle steering, all wheel drive automatic centering of rear axle

Turning circle: 9.90 m inside diameter

Cleaning and loading capacity:
up to more than 560 tons/hour

Pickup system:

Maximal pickup width 10.2 m, ROPA roller-pickup with 18 rollers, split into 3 separately driven units (each drive has a continuous revs. control and automatic reversing for all rollers (patented pickup system).

1. Pickup:

2 Finger rollers operate up to a depth of 7 cm,
2 Cleaning rollers

2. Cleaning:

6 Conveyor rollers removing waste, separate the beet flow



3. Intake:

8 tangentially oscillating spiral rollers (8 mm wall thickness) convey into the machine => double cleaning path

Nose cone with new, tensioned drive, automatically adjustable speed matching collecting rollers. Slow running for low wear and tear of the split nose cone cap. Valves protection against breaking safety chains, when not disconnected.

Telescopic and proportional control of end of clamp collector arm (external telescopic tube 180*180*5mm), colour camera and LCD-colour monitor for camera depth control, de-icer in pickup centre and side.

In-feed web:

80 cm wide, 50 mm pitch with new designed PU finger rollers and soil deflectors, double profile belts, with speed control and high-speed gear, 4 mm steel side walls

Additional cleaning:

Standard: conveyer web, 90 cm wide, 40 mm pitch
Optional: spiral roller cleaning with 8 tangentially rotating spiral rollers, 1150 mm inner width, 1300 outer width

Loader:

80 cm wide, 40 mm-pitch, with speed control and high-speed gear, side walls reversible and interchangeable, made of 15 mm PU plates, wear and tear proof

Loading height: up to 6 m

Loading width: 15 m

Counterweight arm: Length 9,02 m, 6 m to pivot point, 156 mm steel base of fuel tank

Total cleaning area: 35.5 m²

Maximum cleaning path: 31.7 m

Electrics:

24 Volt, 2 lights of 100 amps each, electronic battery-operated main switch with automatic cut out after 5 days ignition off (AUS), 3 X 12 Volt sockets, diagnostics mechanism for the entire sensing and operational system integrated in the colour terminal, warning signals are shown as symbols with text in the appropriate native language, software updating via standard supplied USB ports, long-life, water and corrosion protected construction of on-board electrics, use of exclusive, individually protected plugs (AMP German), wiring of central electric system with WAGO-spring tightening clips (vibration proof), 3 ESR computer and RIO module (exchangeable) each, cable looms with heavy duty thread protection

Road transport and operational mode:

Switchover from road transport into operational mode in just over 1 minute.

Measurements at road transport:

Length: 14,97 m; width: 3,00 m; height: 4,00 m
Empty weight with full fuel tank 30300 kg to 31500 kg as applicable, total weight 32000 kg 4 axles

Tyres:

Front- and rear axles of 710/75 R34, load index 178 A8 2. and 3. axles standard production, with tyres 235/75 R17,5

Standard equipment :

Reversing camera, depth control camera, central greasing, air-conditioning, seat heater, radio with blue-tooth, on-board tools, all rollers with hard weld finish

Additional equipment:

Cleaning with 8 contra-rotating rollers, night oil heater, water jet system, elevator camera, camera for additional cleaning, 32 km/h version, data printer, electrically adjustable mirrors, additional locker 1000*600 mm behind rear axle, measuring system, integrated GIS interface, RABS system integrated into terminal for disposal logistics or data-key, laptop fixture for DELL type ATG.

Made in Germany – TÜV and Trade Association tested, conforming with CE legislature. Subject to technical alterations.



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