UNITRAC

More than 2,500 UNITRAC models have already been delivered until today. The UNITRAC concept has established itself and proven that it can do the job in different areas of application — from the highest mountains to working in major cities. The UNITRAC is an off-road combination of a transport vehicle and equipment carrier — its variety of equipment is just as broad as its areas of application. Irrespective of transporting goods for agricultural and forestry, landscape conservation or for community service and winter operations, the Unitrac can be used universally in all areas. A UNITRAC is therefore ...

… more than just a transporter

We are now proud to present the complete model range of the Series 2 to you: UNITRAC 72 ep, UNITRAC 82 ep, UNITRAC 92ep, UNITRAC 102 ep and UNITRAC 102 s. The Unitrac engine performance, payload, comfort and design - which have been proven over the past decade - have been upgraded and improved as part of the process. In doing so, it was very important to create an ergonomic and comfortable workplace within the vehicle. Furthermore, the working equipment should meet the high demands from agricultural and community operations as well as being environmentally friendly and easy to maintain.

The four attachment points of the UNITRAC enable many different application possibilities. A payload of up to 5,000 kg and a trailer load of 10,000 kg also makes the UNITRAC ideal for heavy-duty transport — with full off-road capability. The engine power can be transferred via front, middle or rear PTO-shafts to the drive unit so that different attachments can be used.
COMFORT EQUIPMENT
The patented comfort access enables soft closing doors via the automatic rear-window. The panoro-
a ma windscreen in the UNITRAC is heated electrically as standard. This guarantees clear visibility
and provides pleasant radiant heat. The 2-level heating blower fan ensures for fresh air that has
an optimum temperature. A high-performance air conditioning system is also optionally available as
a space-saving unit built into the roof of the cab.

FRONT INSTALLATION SPACE
The front hydraulic circuit can be convenient-
ly operated via a joystick. The front installation
space is therefore equipped with 2 optional dou-
ble-action, control units (one of which has a fl oa-
ting position). If a snow plough or a front hydraulic
is mounted on the attachment bracket, then these
can be operated with the joystick using one hand.

SUSPENSION
The UNITRAC is equipped with a patented hydraulic
 suspension system with level regulator. Even with
 extreme off-road capability, the suspension comfort
 is very similar to the level experienced in passenger
cars. The UNITRAC fulfills the strict EC Directive for
 vibration levels in workplaces (2002/44/EC).
- Nitrogen diaphragm accumulator
- Hydraulic cylinder
- Level control valve and rod
- Planetary drive
**PARTICULATE FILTER**

Due to the particulate filter, the new UNITRACS fulfill the emission level 3B. The particulate filter of the ep models is maintenance free for 3,000 hours. The automatic regeneration is carried out every 30 to 50 operating hours. The operator can continue to work normally during this function. The driver can interrupt or block the regeneration process at any time by pressing a button. The UNITRAC has been provided with the „green label“ for inner cities in Germany.

**TORSIONAL DAMPING**

The UNITRAC is available with an optional electrohydraulic torsional damping. The torsional speed on the swivel joint will therefore be regulated depending on the driving speed. This fully automatic system significantly increases driving safety at high speeds and in curves.

**4-WHEEL-STEERING**

The UNITRAC is available with an optional 4 wheel steering system. The comfort reserves and safety acoustics make the operating simple and comfortable. The 4 wheel steering system can be switched off for each wheel position. The system automatically blocks the rear axle as soon as the wheels return to the zero point.
**TILTABLE COMFORT CAB**

You have an overview of everything in the comfort cab. The rear-view mirror, with integrated additional indicator, can be adjusted electrically and is heated. The steering wheel can be individually adjusted for height and angle to suit the driver. The central information board provides a clear overview of important vehicle information such as speed, engine speed, tank level, cooling water temperature and many other control displays. The time can also be seen alongside the total and daily operating hours. A 3-point safety belt is serial equipment in the municipal package. Radio and digital tachograph can be positioned in the roof console for easy access. There is storage space located behind the sun visor. The complete cab can be tilted 50° to the side without any need for tools to ensure for a high degree of maintenance friendliness.

**ENGINE**

The **UNITRAC** is available in four engine versions with particle filter. The **UNITRAC 72 ep** is equipped with a 3.4 litre Perkins turbo diesel with common rail injection. This provides 55 kW / 76 HP and 318 Nm torque at 1400 rpm. The 3.4 litre Perkins turbo diesel with electronic common rail injection in the **UNITRAC 82 ep** and **92 ep** provides 70 kW / 95 HP and 395 Nm torque. The 3.4 litre Perkins turbo diesel with electronic common rail injection in the **UNITRAC 102 ep** provides 75 kW / 102 HP and 420 Nm torque at 1400 rpm. All Unitrac ep models fulfill the emission level 3B. Due to the particularly high throughput power of the engine, the vehicle meets all the hardest requirements of professional use. The 3-Litre turbo diesel in **UNITRAC 102 s** provides 80 kW / 109 HP and 420 Nm torque at 1100 rpm. The unit meets the emission criteria EURO 6 and is therefore particularly suited to inner city use.

**BRAKES:**

The vehicle is equipped with 4 internally position disc brakes as standard. **UNITRAC 92 ep, 102 ep** and **102 s** are equipped with 2 additional, externally positioned disc brakes. Less pedal pressure and reduced heat build-up increase comfort and safety. The **UNITRAC** with long wheelbase can be equipped with Eddy current braking as an option. The patented safety lock operates directly on the operating brake and provides safe positioning on steep terrain. The **UNITRAC** is available with a compressed air brake system ex-factory.

- 4/6 disc brakes
- Safety lock
- Eddy current brake
- Compressed air brake
- Hydraulic trailer brake
**Agricultural use**

**DUAL CIRCUIT HYDRAULICS**

The UNITRAC is equipped with a high-performance, dual circuit hydraulic system as standard. The simultaneous loading of the front and rear attachments is therefore possible without interruptions in performance. A 50 litre hydraulic oil supply and a hydraulic output of 85 l/min provide the drive unit with simultaneous hydraulic functions. The rear hydraulic circuit is equipped with a single-acting control unit as standard as well as a proportional double-acting control unit. Operation is carried out by touching a button. The rear circuit can be optionally extended to include up to four single-acting or two double-acting control units. UNITRAC 92 ep, 102 ep and 102 s are equipped with the LINDNER POWERLINK system as standard. This load sensing connection enables the drive unit function for external attachments with the maximum hydraulic performance.

**HIGH-PERFORMANCE CHASSIS**

The patented UNITRAC chassis concept has already proved itself in more than 2,500 vehicles. In combination with the rotating parts between the front and rear frames, the independent suspension and hydraulic suspension cylinder with diaphragm accumulator and level regulator guarantee optimum suspension comfort with the highest possible off-road capability. Due to the rotating vehicle frame, all four wheels have constant contact to the ground with the highest possible traction. The mechanical level regulator provides the highest tipping stability on difficult terrain. The relatively small suspension travel of the system enables the top loading surface area to be very low despite large tyres. The 4-star planetary axles enable the UNITRAC to operate efficiently even with increased axle loads. Steering rods, brakes and drive shafts are integrated in the steering knuckle. The closed axle base protects the moving components against damage in difficult terrain.

**GEARBOX**

The UNITRAC is equipped with a fully synchronised 16/16 speed split gearbox as standard. If required, 20 forward gears and reverse gears are available including a super crawling gear version (400 m/h). The model speed can be selected as 30, 40 or 50 km/h. The PTO shaft clutch is integrated in the operating lever and can operate the front, middle or rear PTO shafts by touching a button. A selection between 540 and 1000 rpm can be selected for the middle and rear PTO shaft. The speed for the optional front PTO shaft is 1000 rpm. The vehicle is equipped with permanent all-wheel drive. The standard equipment of longitudinal and rear differential blocking, as well as the optionally available front differential lock, can be operated under load by touching a button.
**UNITRAC Serie 2**

### CLUTCH
- Twin-disc dry clutch
  - Drive clutch
  - PTO shaft clutch
- Hydraulically actuated by pedal
- Electrohydraulic operation at the touch of a button

### STEERING
- Optional 4-wheel steering with comfort operation
- Turning radius 8 m (4-wheel steering, 3.5 m)

### GEARBOX
- Optional:
  - 16/16 R Split
  - 20 W20 R Split + Super crawling speed
- Speeds:
  - 30, 40 or 50 km/h (602 ep / 102 ep)

### PTO SHAFTS
- Optional in the middle (behind driver’s cab)
  - Load switching:
    - 540 / 1000 rpm
- Optional Rear PTO-shaft, Front PTO-shaft 1000 rpm

### DIFFERENTIAL LOCK
- Optional Rear PTO-shaft, Front PTO-shaft 1000 rpm

### AXLES
- Planetary axle with disc brakes

### BRAKE
- Optional:
  - Eddy current brake*
  - 4 discs brakes, 2 of which are internally vented

### SUSPENSION
- Optional Rear PTO-shaft, Front PTO-shaft 1000 rpm

### HYDRAULICS
- Power circuit, front (optional)
  - Working pressure: 165 bar
  - Max. rate of delivery: 165 bar
  - Control units:
    - 1x DWS, 1x DW 1x Return flow including joystick and mounting bracket Euro 3
- Power circuit, rear
  - Working pressure: 165 bar
  - Max. rate of delivery: 165 bar
  - Control units:
    - 1x EWS
    - U2 ep/102 ep/102 s: POWERLINK with LoadSensing (85 l/min)
  - Optional:
    - Eddy current brake*

### WEIGHT
- Optional:
  - Twin-disc dry clutch
  - 4 discs brakes, 2 of which are internally vented
- Additional:
  - 2x EWS, 1x DW

### STANDARD TYRES
- Optional:
  - 2400 / 25 / 19.5 (Standard packet)

### ELECTRICAL SYSTEM
- Optional:
  - 12 volt
  - 120 A (102s: 66 / 180A)
  - Battery 95 Ah
  - Headlights H4 headlights with low and high beam
  - Rooflight H7 roof light with low and high beam (optional)

### STANDARD EQUIPMENT
- Optional Rear PTO-shaft, Front PTO-shaft 1000 rpm

### ENGINE
- Perkins Turbo diesel (Stage 3B)
  - Type / Design: 854C-E34TA Common Rail
  - Power / Speed: 55 kW (76 HP) / 2200 rpm
  - No. of cylinders / Cooling: 4 / 4 / Water
  - Max. torque: 310 Nm at 1450 rpm
  - after-treatment of exhaust gases
    - DPF

### ENGINE
- Perkins Turbo diesel (Stage 3B)
  - Type / Design: 854C-E34TA Common Rail
  - Power / Speed: 70 kW (95 HP) / 2200 rpm
  - No. of cylinders / Cooling: 4 / 4 / Water
  - Max. torque: 395 Nm at 1400 rpm
  - after-treatment of exhaust gases
    - DPF

### ENGINE
- Perkins Turbo diesel (Stage 3B)
  - Type / Design: 854C-E34TA Common Rail
  - Power / Speed: 75 kW (102 HP) / 2200 rpm
  - No. of cylinders / Cooling: 4 / 4 / Water
  - Max. torque: 420 Nm at 1400 rpm
  - after-treatment of exhaust gases
    - DPF

### ENGINE
- VM Turbo diesel (Euro 6) R
  - Type / Design: 754E-E34TA Common Rail
  - Power / Speed: 80 kW (110 HP) / 2600 rpm
  - No. of cylinders / Cooling: 4 / 4 / Water
  - Max. torque: 420 Nm at 1100 rpm
  - after-treatment of exhaust gases
    - DPF / SCR / AdBlue

**STANDARD EQUIPMENT**
- Extract: particulate filter, hydro anti-vibration, open-view comfort cab with doors (OEC2 tested), can be tilted to the side, deep-drawn heated panorama windscreen, 2 side mirrors, electrically adjustable and heated, additional indicator and front positioning lamps on the side mirror, 2 windscreen wipers with intermittent switching, comfort seat, sun visor, radio console with radio pre-installation, 12-Volt mobile phone socket, indicator resetting, heating, 2 speed blower fan, door lock, ergonomically-formed operator panel, VDO central information board, interior lighting;
- Independent suspension, hydraulic suspension with level regulator, longitudinal differential lock and rear differential lock, electrohydraulic with button operation, dual circuit brake system with disc brakes at the front and rear, dual circuit hydraulics with comfort operation (optional with U82 ep), oil tank: 50 litres, diesel tank: 100 litres, U102 ep: additional high beam and dipped beam lights at the top (H7), comfort access; U72 ep: doors and heating optional

**Example of optional equipment**
- Extract: front hydraulics, rear hydraulics, air conditioning system, special colours (RAL / RAL Metallic), light mount, 4-wheel steering, torsional damping, Eddy current braking, safety lock, pneumatic brake, hydraulic trailer brake and much, much more ...