

Kaiser. Performance counts.



EcoCycler/Combi

High performance under Nordic conditions

**COMBINED SEWER CLEANING
& WATER RECYCLING**

EcoCycler/Combi

Built for rough conditions

The EcoCycler / Combi is built for the sometimes very tough conditions in the Nordic countries, where temperatures can fall down to around -25° C for long periods of time. Besides its efficient frost protection system, a sturdy subframe is also essential, given the recurrent frost damages caused to the road network due to severe winter conditions.

Optimum weight distribution

Thanks to a robust tank-in-tank construction, optimum weight distribution is guaranteed. The sludge tank is positioned inside the fresh water tank, which means that weight is equally distributed, no matter which tank is filled.

Frost-protection

The EcoCycler / Combi disposes of a very efficient frost-protection system and all water-carrying pipes and components are located in a heated and insulated area. The tank-in-tank design contributes to the frost-protection with the outer water tank being heated by the internal sludge tank and vice versa, depending on loading conditions. The frost protection system also improves operating conditions, resulting in lower maintenance works.

Technology

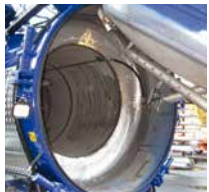
The high pressure system comprises a KAISER pressure transformer KDU with a jetting capacity of 340 to 500 litres per minute and a maximum water pressure of 200 bar. The vacuum system consists of a Roots compressor with a suction performance of 1500 to 2700 m³/h. Both performances of vacuum and water pump can be optimally adapted to the respective working conditions and once preset facilitate operating conditions and increase efficiency.

The well-proven and reliable KAISER ROTOMAX filter system forms the core of the recycling system. The filter is situated in the front part of the sludge tank, hence providing a short supply line to the water pump.

Due to the hydraulic load sensing system power is optimally adapted to the current requirements. The IQAN system monitors and controls the various processes, which makes work significantly easier. The optional G11-Bluetooth adapter for connecting a smartphone to the IQAN is a convenient tool for the operator and the service-staff to optimize efficiency of the vehicle.



DETAILS AT A GLANCE



Tank-in-tank



Hose cassette



Tipping system



Heated front compartment



Suction boom



Covered hose reel



Street washing bar



Rear control panel with IOAN display



Side control panel



Remote control



ROTOMAX filter system

TECHNICAL SPECIFICATIONS AND EQUIPMENT

	3-Axle Truck	4-Axle Truck
Fresh water/sludge tank volume (l)	6000-8000/ 6000-12000	7000-14000/ 8000-12000
Vehicle dimensions L x W x H (mm)	9600x2500x3600	10300x2500x3450
Wheelbase (mm)	4300+1350	3900+1350+1300

Freeze protection

- > For operating down to -30° Celsius
- > Heated back compartment for hose reel and gate valve protection
- > Heated front compartment for high-pressure water and vacuum pump
- > Heated side compartment for water lines and equipment
- > Short and covered tubes and lines

Options

- > Water circulation
- > 220V fan radiators

Control system

- > IQAN control system with CAN BUS
- > Side control panel
- > Rear control panel with display
- > Optional: GSM module for remote maintenance
- > Optional: Bluetooth smartphone app for remote connection

Remote control

- > Suction boom and hose cassette
- > Suction hose reel
- > Jetting hose reel
- > Vacuum and jetting pump
- > Start/stop and speed control of the truck engine
- > Suction/pressure mode changeover
- > Gate valves

High-pressure system

- > KAISER high-pressure water pump KDU162 with a jetting capacity of 340 litres per minute and a max. pressure of 200 bar
- > Jetting hose reels with a capacity of 150 m 1" and 80 m 1/2" high-pressure hose
- > Tank cleaning nozzles

Options

- > Jetting performance of 400 up to 700 liters per minute in combination with KDU148
- > Jetting hose 200 m 1 1/4", 120 m 1/2", 80 m 3/4"
- > Water recycling system ROTOMAX with backflushing device
- > Street washing bar
- > Water heater "Hot-Box"
- > Meter counter for jetting hose

Vacuum system

- > Hibon Roots-compressor VTB810XL with a suction performance of 1800 m³/h and a maximum vacuum rate of 90%
- > Hose cassette with suction hose 15 m DN100
- > Lightweight suction boom

Options

- > Suction performance of 2700 or 4600 m³/h
- > Additional hose reel with suction hose 30 m DN75
- > Hose cassette with suction hose DN125
- > Suction boom with 2.2 m extension
- > Spiral suction boom

Tank body

- > Tank made of stainless steel EN 1.4301
- > Tank-in-tank fresh water and sludge compartment
- > Hydraulic tipping
- > Hydraulically operated rear door

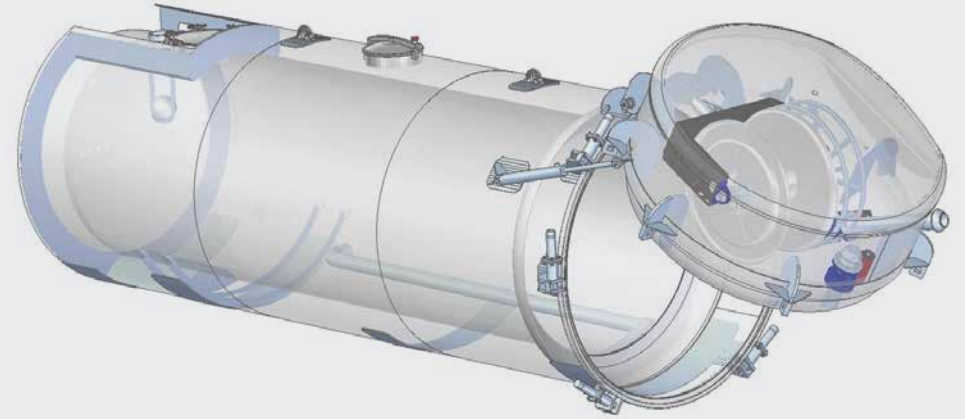
Options

- > Tank made of acid-proof steel EN 1.4401
- > Sludge tank divided into 2 different compartments
- > Tank in ADR execution

COMPONENTS AND TECHNOLOGY

Tank-in-Tank

The water tank is located outside the vacuum tank. This design offers an ideal weight distribution independent of the filling level. The concave rear door of the vacuum tank together with a hydraulic protection hatch made of aluminium form a protected compartment for the jetting-hose reels and the valves located in the rear. In the heated rear compartment, the jetting hose reel unit is well protected against frost and dirt. The vacuum tank bottom and suction valves are mounted in the heated compartment. As the couplings are mounted outside, they can still be used without opening the hatch.



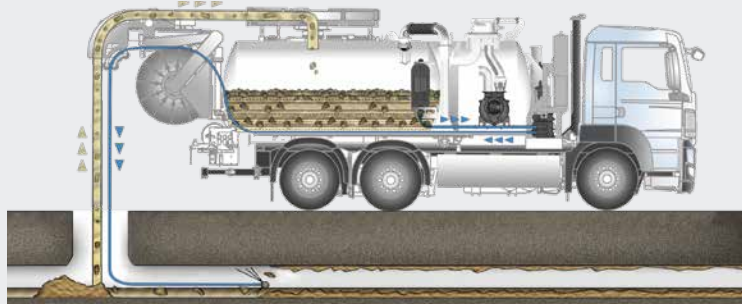
High-pressure water system



KDU high-pressure water pump



Jetting hose reel



KAISER ROTOMAX water recycling system

Vacuum system



Vacuum compressor



Durable long-reach suction boom



Spiral suction boom



Suction hose transportation reel

Accessories



Water heater "Hot-Box"



Auxiliary transfer pumps

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**PROVEN AND RELIABLE CONCEPT
FOR NORDIC CONDITIONS**

FOR YOUR APPLICATION THE SUITABLE KAISER PRODUCT

RECYCLING VEHICLES



Top performance and reliability under the most difficult sewer conditions.

- AquaStar
- Eco 3.0
- EcoCycler
- CityCycler
- EcoCombi
- CityCleaner

WATER TREATMENT VEHICLES



Water treatment by means of flocculation.

- AquaStar WT
- KoIDry

COMBINATION VEHICLES



Flexibility to handle a wide range of applications.

- Elegance 2.0
- AquaStar
- Combi Eur-Mark
- Tornado
- BasicLine

JETTING AND VACUUM VEHICLES



Designed to meet the highest performance requirements in the respective field.

- Tornado
- Elegance 2.0
- Twister
- Special vehicles

DRY VACUUM VEHICLES



High-performance vacuuming of dry and wet materials.

- Cerberus
- Hercules

HYDROVACS



High productivity with a rugged and reliable technology.

- CV-Series
- Urban X

MOBILE-WALKING EXCAVATOR



Impressive technology to master tough challenges.

- S12 Allroad
- S12 4x4
- S10
- S2

ROAD-RAIL EXCAVATOR



Perfectly matched to the application of the railway environment.

- S22RR

Subject to change without notice. Technical specifications may change, depending on the chosen options and accessories. All photos and diagrams are for illustration only.