

Kaiser. Performance counts.



**Eco 3.0**

Reliable in the toughest conditions



**COMBINED SEWER CLEANING  
& WATER RECYCLING**

# Eco 3.0

## Benchmark for water recycling

The Eco 3.0 stands for the latest generation of the Eco-Combi series which sets new standards in the area of efficient sewer cleaning with water recycling. Very compact dimensions thanks to an extremely short wheelbase, modern design and the combined hose boom are the most striking new features along with the proven high-power components KDU, KWP and ROTOMAX.

This vehicle has a maximum jetting capacity of 400 litres a minute and a maximum water pressure of 200 bar. The vacuum pump delivers a maximum air flow rate of 3100 m<sup>3</sup>/h. The combined jetting and suction hose boom can take a suction hose length of up to 20 m and enables an extremely low overall height of less than 3.5 m. The flexibility of the boom - offering swivel and telescoping functions as well as up and down movements – further expands the working range.



## KAISERtronic

The consumption-optimised hydraulic system reduces fuel consumption amongst others by adapting the suction power in accordance with the vacuum rate. In the recycling mode, the water flow rate is also automatically adapted to the available water supply. Cleaning quality is enhanced by the constant jetting hose drive with speed control. Additional interfaces make it possible to link up with recording and information systems for the planning and organisation of sewer maintenance.

## Greater operating comfort

The information display with integrated analysis system gives the operator qualified feedback on current performance parameters. Data such as jetting hose metre counter, vehicle weight and component status are transmitted directly to the radio remote control and presented in graphical form on the display. The display and control of the water pressure at the jetting nozzle also make sewer cleaning considerably easier.

## No worries – diagnosis made easy

With KAISERteleservice remote diagnostics, the service engineer can log into the vehicle control system via a modem, access all current data and perform the necessary troubleshooting. He can even modify parameters when necessary. Downtime is reduced to a minimum or even eliminated altogether.





## ALL DETAILS AT A GLANCE



Tipping system



Suction/pressure changeover valve



Combined suction and jetting hose boom KSR70



Design package



Hose rack - hydraulically tiltable via remote control



ROTOMAX filter system



Control panel



Lock ring

## TECHNICAL SPECIFICATIONS AND EQUIPMENT

	3-Axle Truck (26 to)	4-Axle Truck (32 to)
Sludge/fresh water volume (l)	7600/2700	10100/2700
Payload (kg)	9200	13500
Dimensions		
L x W x H (mm)	8750 x 2500 x 3450	9950 x 2500 x 3450

### Radio remote control

- Suction boom control
- Hose reel control
- Vacuum and high-pressure water pump control including pressure adjustment
- Tank cover, lock ring and tipping function
- Start/stop and speed control for diesel engine

### With display for

- Pressure monitoring for vacuum and high-pressure pump
- Water volume and water pressure at the jetting nozzle
- Jetting hose metre counter with totalling function
- Operating status and operating hours of main components
- Diesel engine speed and consumption\*
- Axle load for chassis with air suspension\*

\* Chassis-dependent

### KAISERtronic regulation and control system

- Up to 25% less fuel consumption
- Eco and Power Mode: Multistage regulation of jetting performance
- Automatic start/stop
- Hose level-dependent speed control of jetting hose reel
- Monitoring of jetting water flow rate
- Vacuum-dependent control of suction volume
- Intelligent oil cooler control
- Integration of chassis operating data
- KAISERteleservice remote diagnostics

### High-pressure system

- KAISER high-pressure water pump KDU148 with a jetting capacity of 320 litres per minute and a maximum pump pressure of 200 bar
- ROTOMAX water recycling system with backflushing device
- Jetting reel with capacity of 220 m 1" or 150 m 1¼" HD jetting hose
- Tank and filter cleaning nozzles

### Options

- Jetting capacity 350 and 400 litres per minute
- Winter protection, optionally up to -5° or -15° Celsius
- Hand reel with capacity of 40 m or 80 m ½" HD jetting hose
- Telescoping jetting hose boom

### Vacuum system

- KAISER liquid ring vacuum pump KWP1600i with a suction capacity of 1600 m³/h and a maximum vacuum of 0.85 bar
- Changeover head for fast switch from suction to pressure mode
- Combined suction and jetting hose boom KSR70; DN125 suction hose ca. 17.5 m extendable, 180° swivel, telescoping plus up and down function

### Options

- Suction capacity 2000/2400 or 3100 m³/h
- DN150 suction hose ca. 11.5 m extendable, 180° swivel, telescoping plus up and down function

### Tank superstructure

- Tank in stainless steel
- Fresh water chamber with built-in vacuum pump
- Separator with automatic drainage
- Tank cover with lock ring
- Tipping system for complete emptying of the tank

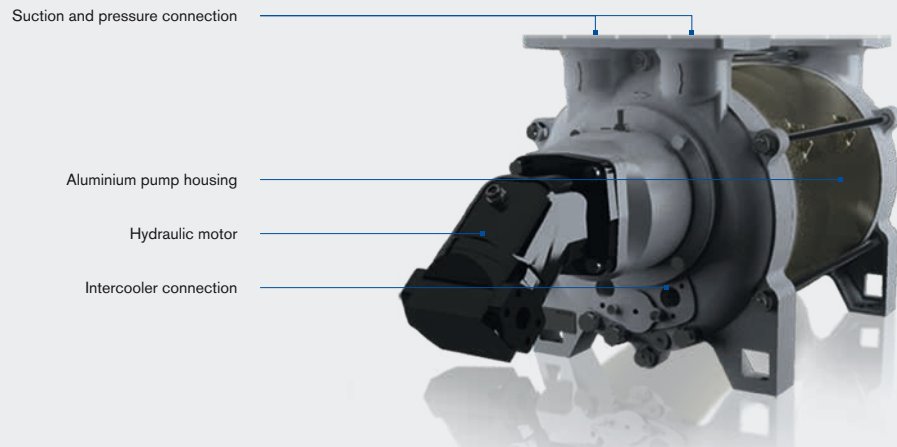
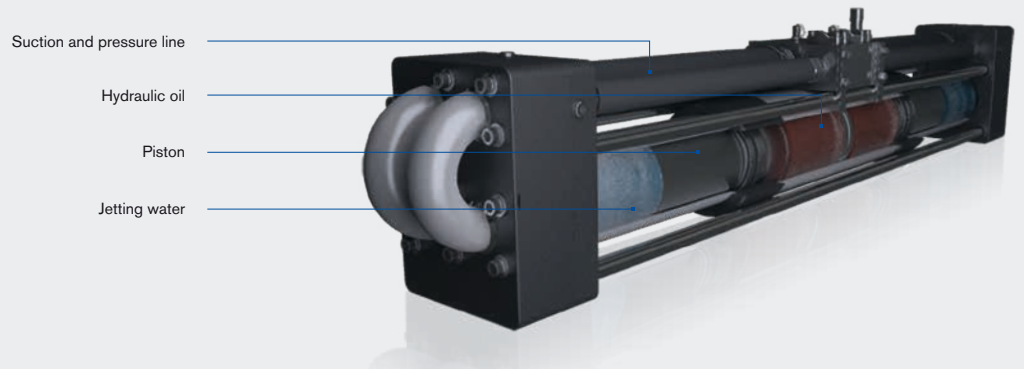
### Options

- Design package

## COMPONENTS AND TECHNOLOGY

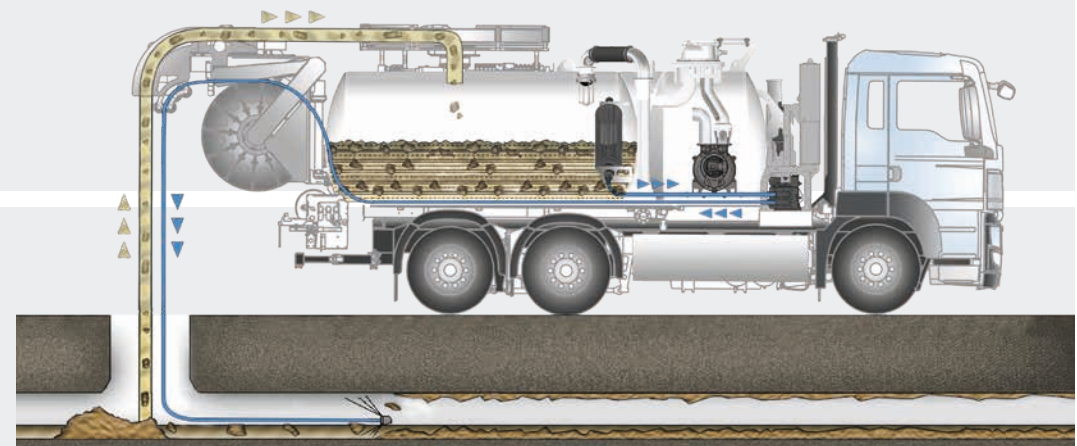
### KAISER pressure transformer KDU – Jetting pump

The pressure transformer principle developed by KAISER proves its worth in daily use as the perfect solution for cleaning sewers, especially when combined with water recycling. The KDU is a hydraulically driven jetting pump that directly converts oil pressure into water pressure. Pressure and flow rate can be set independently of one another.



### KAISER liquid ring pump KWP – Vacuum pump

As early as the mid-1980s, KAISER developed the first water ring pump in a light construction for mobile applications. In the KWP housing, an eccentric rotor produces a ring of water using centrifugal power. Volume changes in the rotor chambers ensure that air is sucked in and compressed. This construction type features high resistance to dirt particles and is ideally suited to vacuuming wet and dry media.



### KAISER ROTOMAX - water recycling system

The centrepiece of the ROTOMAX water recycling system is an oscillating rotary filter drum. Built into the front part of the sludge tank, this one-stage filter system separates solids from sewer water. The filtered water is channelled directly (without settling basin) to the KAISER pressure transformer for further jetting operations. Runs to refill with jetting water are dispensed with, fuel and water consumption reduced.



**THE PATENTED KAISER WATER RECYCLING SYSTEM SAVES  
24,000,000 LITRES OF FRESH WATER PER YEAR AND VEHICLE.**

## THE RIGHT KAISER PRODUCT FOR YOUR APPLICATION

### RECYCLING VEHICLES



AquaStar

Eco 3.0

EcoCycler

CityCycler

CityCleaner

### WATER TREATMENT VEHICLES



AquaStar WT

KoIDry

### COMBINATION VEHICLES



Elegance 2.0

AquaStar

Combi Eur-Mark

Tornado

MicroCombi

BasicLine

### JETTING AND VACUUM VEHICLES



Tornado

Elegance 2.0

Twister

Special vehicles

### DRY VACUUM VEHICLES



Cerberus

Hercules

### HYDROVACS



CV-Series

Urban X

### MOBILE WALKING EXCAVATOR



S12 Allroad

S10

S8 Allroad / S8

S2

### ROAD-RAIL EXCAVATOR



S22RR



The international focus on modern environmental technologies has led to the growing importance of efficient, high-performance vehicles for sewer cleaning and industrial disposal. The KAISER Group is the leading player in the world market.