



Top Performance for flexible applications.

COMBINED SEWER CLEANING & WATER RECYCLING

# AquaStar

#### **Efficient performance**

The KAISER AquaStar offers a perfect combination of performance and versatility. The KDU jetting pump delivers water at a rate of 320 to 500 litres per minute (with a double KDU up to 800 litres) and water pressure of up to 200 bar. The large-size hose reel can accommodate a 300 m jetting hose. On the KAISER vacuum pump the maximum air throughput is 3100 m<sup>3</sup>/h (with a double KWP up to 6200 m<sup>3</sup>/h). Due to the selection of various suction booms, the vehicle can be optimally adapted to the respective implementation requirements.

#### Versatility

- > With ROTOMAX, AquaStar represents a benchmark for the industry in the high-performance recycling sector.
- > With a tiltable divider door, the vehicle can vacuum up and dispose of two different media.
- > A dry vacuum device permits the pick-up of dry material.
- Streets can be cleaned with high-pressure water from wash bars.
- The ADR equipment is used for the disposal of dangerous waste materials.



#### **KAISER**tronic

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 KAISER*teleservice* 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**



Jetting boom with KSA11 extension



Lock ring



Hydraulically tiltable divider door



Suction/pressure changeover valve



Tiltable hose rack



Street washing bar

# **TECHNICAL SPECIFICATIONS AND EQUIPMENT**

	2-Axle Truck (18 to)	3-Axle Truck (26 to)	4-Axle Truck (32 to)	5-Axle Truck (40 to)
Sludge/fresh water volume (I)	6200/1800	10600/1800	12600/1800	14800/1800
Payload (kg)	3500	9200	13800	19400
Dimensions L x W x H (mm)	7900 x 2500 x 3450	8900 x 2500 x 3500	9550 x 2500 x 3600	10300 x 2500 x 3500

### KAISERtronic regulation and control system

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

#### **Radio remote control**

- > Suction boom and jetting boom control
- > Variable hose reel and winch 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\*

### High-pressure system

- KAISER high-pressure water pump KDU148 with a jetting capacity of 320 litres per minute and a maximum water pressure of 200 bar
- > Jetting hose reel with capacity of 300 m 1" HD jetting hose
- > Jetting hose boom with 180° swivel drive
- > Tank cleaning nozzles

#### Options

- > Jetting capacity 350/400/500 or 800 litres per minute
- > ROTOMAX water recycling system with backflushing device
- Auxiliary hose reel with capacity of 120 m <sup>3</sup>/<sub>4</sub>" HD jetting hose, optionally designed for recycling water
- > Hand reel with capacity of 40 m or 80 m 1/2" HD jetting hose
- > Telescoping jetting hose boom
- > Street washing bar

### Vacuum system

- KAISER liquid ring vacuum pump KWP1600i with a suction capacity of 1600 m<sup>3</sup>/h and a maximum vacuum of 0.85 bar
- > Changeover head for fast switch from suction to pressure mode

### Options

- > Suction capacity 2000/2400/3100/4000 or 6200 m3/h
- Telescoping suction boom KSR10, 1,45 m extendable, 300° swivel, up and down function
- Spiral suction boom KSR22, DN125 suction hose ca. 12.5 m extendable, 300° swivel, telescoping plus up and down function
- Suction boom KSR73 with combined suction and jetting hose boom, DN125 suction hose ca. 17.5 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

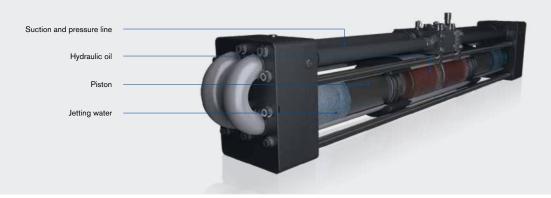
#### Options

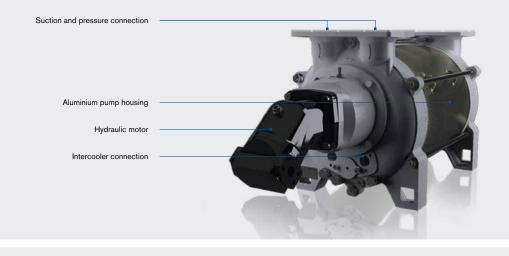
- > Tank in ADR-execution
- Hydraulically tiltable divider door
- > Sludge tank and tank cover in high-quality stainless steel V4A
- > Dry suction device
- Tiltable hose rack with billboard

# **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.



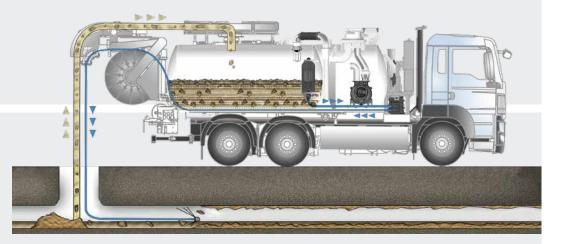


#### **KAISER ROTOMAX - water recycling system**

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.

#### 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.



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



# FOR YOUR APPLICATION THE SUITABLE KAISER PRODUCT

**RECYCLING VEHICLES** 

WATER TREATMENT VEHICLES

VEHICLES

COMBINATION

JETTING AND VACUUM VEHICLES

**DRY VACUUM** VEHICLES

**MOBILE-WALKING** EXCAVATOR

**ROAD-RAIL EXCAVATOR** 



Top performance and reliability under the most difficult sewer conditions.



Water treatment by means of vacuum distillation or flocculation.



Flexibility to handle a wide range of applications.



Designed to meet the highest High-performance performance requirements in vacuuming of dry and the respective field. wet materials.



Impressive technology to master tough challenges.



Perfectly matched to the application of the railway environment.

AquaStar	AquaStar WT	Elegance 2.0	Tornado	Hercules	S12 Allroad
Eco 3.0	VakuumDestillation	AquaStar	Elegance 2.0	Fenix	S10
EcoCycler	KolDry	Combi Eur-Mark	Twister	Cerberus	S2
CityCycler		Tornado	Special vehicles		
EcoCombi		BasicLine			
CityCleaner					

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