

**To** : AKIN  
**Subject** : AKN-COM Eagle Industrial Combi Equipment

## TECHNICAL SPECIFICATIONS

The superstructure is mounted on **Scania G500 8x4 chassis**, 500 HP, production year of 2019, registrations Year of 2021 (Finland), New condition, km: 15.000 (only used during transportation between TR-FINLAND)

Chassis Number : YS2G8X400K2158001 and YS2G8X400K2159792

### Tank

Volume : Total of 18 m<sup>3</sup>. Divided in two sections: sludge tank 12 m<sup>3</sup>, clean water tank 6 m<sup>3</sup>  
Tank Code : L2BH  
Profile : Cylindrical shape, thickness of 5 mm steel AISI 316 L  
Front & Rear Lids : Bulge according to DIN28011, thickness of 6 mm steel AISI 316 L  
Rear Lid Opening : By an upside hinge, vertically opening type with 2 units hydraulic cylinders.  
Rear Lid Locking : AKN-LOC-WTL wedge type hydraulic locking. (6 units)  
Stiffening Rings : U profiles, as external supports. Same material with tank.  
Level Indicators : Arrow type, both for clean and sludge side. Auto stop sensor for critical limits.  
Tank Lifting : Up to 30 degrees with a hydraulic cylinder mounted to the front side of the tank.  
Tank Cleaning : High pressured cleaning system for tank's sludge section.  
Tank Lock : Tank safety lock pin with warning light for cabinet.  
Discharging Spillway : For the rear of the tank in order to keep the rear bumper clean.  
Breakwaters : 1 unit, made of the same material with tank body, prevents fluctuation of sludge mass in the tank.  
Manhole : Diameter of 450 mm. manhole located over the water tank which can also be used as a secondary filling opening.  
Water Inlet : By a diameter of 2 1/2" manual valve with coupling.  
Water Discharge : By a diameter of 2 1/2" manual valve with coupling.  
Oil Discharge Valve : Manually controlled 3" valve for separation of oil and water.  
Sludge Suction : Double - Pneumatically controlled butterfly type, 4" suction valve with a quick coupling Complete AISI 316 body and inner parts,.  
Sludge Discharge : Double - Pneumatically controlled butterfly type, 4" suction valve with a quick coupling Complete AISI 316 body and inner parts,.  
Outside Painting : Blue RAL 5013  
**ADR Burst Discs** : Berstscheiben Schlesinger Composite bursting discs, Type C  
**ADR Main valve** : Butterfly valve mounted on the top of the tank, before suction line.

**Suction Hose Reel** : AKN-MAH, Mobile arm hose reel, hydraulically moving in all directions, 300° turning, 4" - 16 m flexible suction hose, mounted on the sludge tank, 8m accessibility. (remote control). SS316 8" knife valve for shut off.

**Back Storage Reel** : Located at right side of the tank

**Vacuum Pump** : Jurop PVT400, positive displacement vacuum blower.  
Capacity : 2.600 m<sup>3</sup>/h  
Rotor Speed : 2500 rpm.  
Max Pressure : +2 bar  
Max. Vacuum : % 93  
Drive Type : Driven by an Scania Engine PTO EK740F with Omsi air clutch.  
Vacuum Line : 6" pipes, AISI 316 material

### Safety Systems

I. Safety : Mounted on the top of the tank, plastic floating ball shut off system.  
II. Safety : Mounted on the vacuum installation between 1<sup>st</sup> and the 3<sup>rd</sup> safety means. Consists of

III. Safety : a 70-liter overflow cyclone tank, float ball, and a manual discharging valve and a level indicator glass.

: Mounted on the vacuum installation between vacuum pump and 2<sup>nd</sup> safety mean. Consists of a a stainless steel filter and a discharging valve.

**ADR Spark Arrestor Filters ( 2 units)**

Pressure Relief Valve : Mounted on the vacuum installation, providing the secure working conditions in case of excessive pressure force created in the vacuum tank.

Vacuum Relief Valve : Mounted on the vacuum installation, providing the secure working conditions in case of excessive vacuum force created in the vacuum tank.

Overflow Safety : Provides secure working conditions to prevent sludge materials to reach vacuum pump. When the sludge level reaches to critical value, operator warning buzzer runs and warning light is activated.

**Water Pump** : Pratisoli MKS40, made in Italy. High pressure triplex plunger pump.

Max Pressure : 400 bar

Max Flow : 183 lt/min

Drive Type : Driven by an Scania Engine PTO EK740F with Omsi air clutch.

- Pump body in cast iron
- Crankshaft made of nitrited, hardened and tempered alloy steel
- Guide pistons in surface-treated spheroidal cast iron
- Plungers made of stainless steel with ceramic coating
- Valves made of stainless steel

**Booster Pump** : Jurop CEN 1000, 700 lpm, feeder pump for high pressure.

**Low Water Safety** : Provides secure working conditions to prevent damages that may cause because of low water level in the water tank. When the water level decreases to critical values, low water level safety takes in charge and stops high pressure water pump, decreases truck engine rpm and operator warning buzzer runs.

**System Control** : Siemens SIMATIC 1400 with Profinet Interface (English)

: HMI Control

: Valve Open-Close Warnings

: Pressure Gauges

: Wireless Remote Control for all fuctions

: Secondary Wireless Remote Control for short fuctions

The system is driven by a control panel fixed on the backside of the tank (Left Hand Side) which contains the below sub units.

- Engine cycle indicator
- Tank Control
- Engine gas joystick (+ / -)
- Hydraulic oil pressure indicator
- Vacuum pump control button (on/off)
- Vacuum pump control buttons ( vacuum/disengage/pressure)
- Vacuum-meter indicator
- High pressure water pump control button ( on/off)
- Water pressure indicator
- Projectors control button
- Emergency stop button
- Safety Systems control button

**Reels & Hoses** : Hose reel is placed inside of front cabin, driven hydraulically

Speed Control : Proportional (Festo) speed regulator

Hose : 1/2" – 120 meters

**Jetting Guide** : Bumper Type, Swivelling 180 degrees

**Hydraulic System** : Controls the hydraulically operated functions; rear door opening/closing, etc. Working pressure is 200 bar, max. pressure is 160 bar.  
: Consist of; a gear type hydraulic pump, cooling fan, oil tank with oil filters and level indicators.

**Winter Protection** : Isolated Front Cabinet  
Pipe heaters for clean water line  
Valve heaters for suction and discharge valves  
Hot air blower – for front cabinet - driven by chassis own radiator

**Boiler** : Mazzoni Boiler, 30 lt-500 bar, 12V, Heating the clean water up to 65°C.

### **Ladder & Walking Platform**

Allows climbing to the top of the tank from the rear side; the walking platform has an anti-skid surface; right hand side pneumatic controlled balustrade is mounted next to the platform and prevents falling down with a pneumatic control system.

- It is equipped with interlock system pneumatically operated that when the door is open, the brake becomes active.
- Handrails will be pneumatic type.

**Grounding Drum** : Static discharge-mounted on the rear right tanker side about 15 m length self-spring return made reel craft g-5030 type or its equivalent grounding copper nipples mounted on each tanker side and on the electrical connection bridge for grounding cable connection two holes on the grounding nipples. 3 units grounding rods are mounted.

### **Accessories**

Hose Trays : Along with both sides of the tank, 2 units with shutters and locks, AISI 304  
Warning Lamp : 2 units, one is on the front of the tank, the other is at the rear of the tank.  
Projectors : Exproof, 1 unit with 50 meter extension cable  
Mud guard : Made for the rear wheels of the truck  
Water Filling Hose : 1 unit , dia. of 2 ½"- 20-meter length

- Necessary warning plates and writings (upon request)
- Product code plate at the rear, right and left side
- ADR and class sign holders at the rear, right and left side

**Warranty** : This equipment is under our warranty for any fault which caused by manufacturing, material and worker errors for 1 year after date of delivery.