

FAUN runway sweeper type TERRAJET 7



mounted on a free of charge delivered chassis, for example

Mercedes Benz ATEGO 1323, wheelbase 3,650 mm

General description

1. Body

Body

The body is constructed in heavy self-supporting welded steel plate; it has a stainless steel bottom. Volume is approx. 7 m³.

Tipping

The tipping is made by a hydraulic cylinder. The tipping angle is approx. 60°. A safety locking hydraulic valve protects the body when lifted against any accidental fall down. A hand stick is installed to secure maintenance and repairing operations.

Air duct

The special form of the hopper and arrangement of the stream in the opening and the fan suction duct result in a circular air stream. Heavier parts are separated from the air by centrifugal force.

Rear door The rear door can be opened and closed by hydraulics. A non-return hydraulic valve secures the rear door when tilted against accidental fall down, following the German regulations UVV. In order to separate the liquid part from the solid part of the refuses, there is a strainer at the inside part of the rear door connected to the outside by a drainage flexible hose. Furthermore you find an inspection door on the top of the hopper.

2. Auxiliary engine, exhaust fan and ancillaries equipment

Auxiliary engine Diesel high rated and economic 6-cylinders engine type **Mercedes Benz OM 906 LA Euromot 2** (approx. 170 KW at 2,300 rpm). An air filter type Pico - Zyklon is mounted on the engine suction in order to protect it from dust.

Transmission The fan and the hydraulic pump are driven through a drive-belt system that can be easily dismantled and tightened.

Fixings The fixing plates of fan and engine of chassis are mounted elastically.

3. Top-level exhaust fan

Fan The high performance fan operates at 3,200 rpm and blows 500 m³ /min. It is made of high wear resistant materials.

Air recycling system The FAUN air recycling system leads the greater part of the air which has already passed through the refuse hopper to the fan and through a flexible duct to the blowing duct. The part of air, which has not been recycled, is driven to the outside through a sound proofed enclosure cowl with common walls to the fan and engine compartment. The top-level fan adopted for the FAUN air recycling system is made of high wear resistant materials.

Advantages: Very low dust emissions because there is only a little quantity of the dusty aspirated air which goes back to the atmosphere. The recycled air being compressed inside the fan is heated. The sweeping characteristics of the sweeper are improved, and it is then possible to sweep under winter conditions when temperature falls below 0°C.

4. Sweeping and suction equipments

The suction nozzle is approx. 2,100 mm wide and mounted at the rear of the vehicle.

Suction nozzle one suction nozzle is connected to the body with two suction hoses

Blow nozzle the blow nozzle is connected to the body with three blow hoses

Roller brush The roller brush is 2,080 mm wide and 400 mm in diameter
2 pneumatic cylinders can lift the roller brush.

The entire suction system is lifted by two pneumatic cylinders when travelling or moving backwards. The system is designed for a work speed of up to 40 km/h.

5. Water spraying

Water tank On the left and right side of the blow air system there are two water tanks, fastened to the sub frame - donkey chassis - through elastic bindings, each tank having a capacity of approx. 600 l. Filling the tank with water is made through a water inlet type Storz "C" - this hydrant inlet follows the regulations. Filling conditions follow the regulations of the DIN 1988 (TRWI). The inside of the tanks is coated to prevent corrosion. The water tank has big openings for inspections.

Water taps The water tap feeds the following water sprays:

- two sprays on each left and right suction channel,
- two sprays on each circular brush, when mounted.
- 1 pipe Storz D for cleaning the hopper, 7 m

The water tap provides water by compressed air, without water pump. The water taps are operated from the cab.

6. Controls and gauges

Inside the cab The controls, gauges and status indicator lamps which are used for the sweeping operations are built near to the operator. Most frequent used functions are arranged on an ergonomic control panel - for example those which are controlling operations like sweeping, spraying and the fan clutch. The auxiliary and truck chassis engines controls are grouped together on a particular control panel. Cooling liquid temperature and oil pressure of the auxiliary engine are indicated optically and acoustically when exaggerating safety thresholds.

7. Hydraulic, Pneumatic and Electric Systems

Hydraulic The hydraulic system for the channel brush and tilting of the body is made of an oil tank, a filter on the back flow, a pump, some hydraulic valves and hydraulic motors.

Pneumatic The pneumatic system for the inclination and adjustment of the sweeping equipments comprises an air tank, some electro-pneumatic valves and pneumatic cylinders.

Electric The electric system which drives the pneumatic and hydraulic valves consists of switchboards, digital and analogical gauges, electro-magnetic safety relays, there is one orange rotating beacon on top of the body.

8. Painting

Body Two-components painting of the body in one RAL-colour

Equipment and subframe The equipment is coated with black painting and yellow and black or red and white stripes.

9. Miscellaneous User's guide

Spare parts catalog

The equipment is marked with the CE label and corresponds to the regulations of the 89/392/EWG standard.

OPTIONS:

2 circular brushes each min. Ø 850 mm diameter. Both are hydraulically powered and their rotating speed is adjustable. Every operation can be controlled inside the cab. The sweepings system width enlarges up to 3000. The max. working speed is 15 km/h.

Lateral blow device consistent of two adjustable lateral blowing nozzles, mounted on each side between front and rear axle. These additional blow nozzles are used to blast away dust, snow etc. The range is 10 - 15 m. The equipment can be lifted and lowered from the cab. Manual swivelable (Note: In case of combination with the option lateral brushes, please confirm wheelbase).

Front mounted magnetic system to pick up metallic, lift over's from the road

Wander hose, diam. 200 mm mounted on the rear door, manual isolation slide gate, water injection valve, end suction pipe 1.000 length