

Wheel washing system MobyDick Flex 400 MB

Art. no. MDK-A300-400MB

Mobile, hot-dip galvanized, water-bearing wash unit with splash guard walls, pump sump tank, recycling tank, pump technology, solid concrete ramps, and a control system.



Illustrations may differ from the actual scope of delivery

Flex 400 MB – A model from our Standard Line

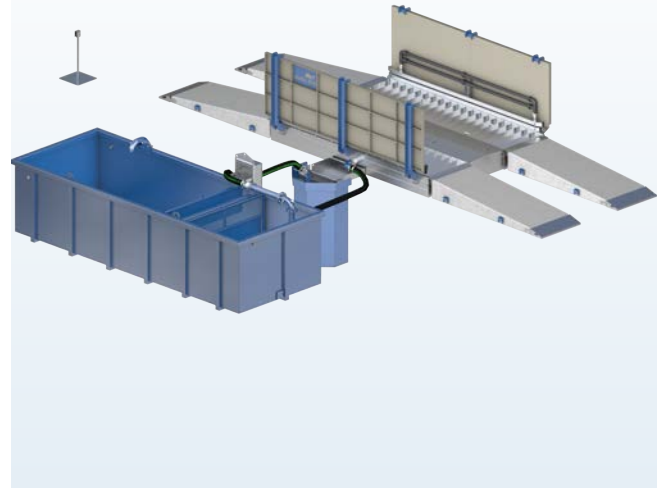
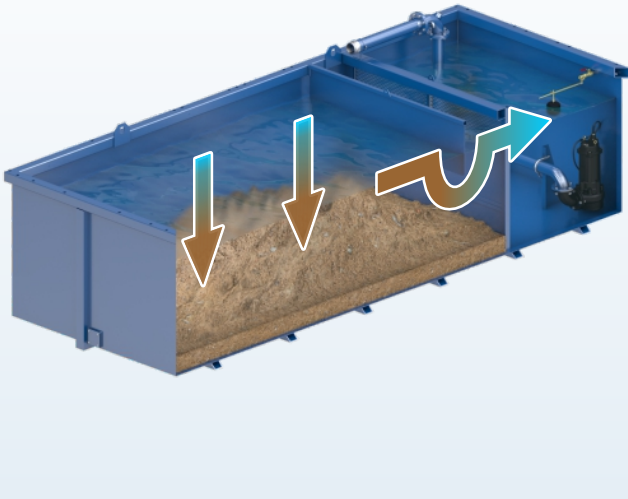
Flex – The modular concept for the construction industry

The wheel washing systems of the Flex series were developed by our engineers specifically for the needs of the construction industry. The basic unit of the modular concept consists of a robust 158 inch long wash unit and a recycling tank. It can be combined with a scraper conveyor, a mobility package or a second basic unit to form eight different wheel washing systems that are 158 or 316 inch in length. All models can be installed quickly and impress thousands of operators around the world.

Function description

A truck drives slowly up the ramps into the wheel washing system. The vehicle identification sensor automatically triggers the washing process. The specially coordinated nozzle system, consisting of a large number of bottom and side nozzles, then ensures the intensive cleaning of all tires and the entire chassis in one wheel rotation. Higher vehicle areas such as windows and rear-view mirrors are not washed, so as to leave the driver's field of vision clear. The kneading effect created by the angle profiles gives the tire treads additional cleaning. The duration of the washing process can be freely selected using the timer relay in the control cabinet, in accordance with the relevant operating conditions. The waste water runs via the return channel from the wash unit to the side pump sump tank. From there it is pumped into the recycling tank by a MobyPump macerating pump. This is where the washed-off solids settle out. The water is fed under a surge wall and over the partition wall with sieve insert into the pump chamber. There it is recycled for further spraying by a robust MobyPump immersion pump. An excavator or suction vehicle removes the settled solids from the recycling tank.

Subject to technical changes



Water recycling

In all MobyDick wheel washing systems the water is circulated in a closed circuit. Water treatment is via sedimentation in the recycling tank. Sedimentation can be accelerated by adding a flocculant. The solids that settle out in the recycling tank should be extracted with an excavator or suctioned out with a suction vehicle at regular intervals (depending on how frequently the system is used).

Specifications (Dimensions see layout)

• Drive-through length	158 in
• Drive-through width	110 in
• Maximum axle load	16.5 tons
• Splash guard wall height	54 in
• Nozzles	130 pcs
• Nozzle Ø	0.28 in
• Recycling tank volume	4760 gal
• Maximum pumping capacity	2×660 gal/min
• Electrical connection values	16 HP/30 A
• Sound emission	< 75 dB
• Weight (ready to ship)	16.0 tons

Scope of supply

- Hot-dip galvanized, water-bearing wash unit
- Splash guard wall per side
- Double side nozzle bars per side
- Hot-dip galvanized return channel for the waste water
- Control cabinet
- Optical sensor to trigger the washing process
- 1 MobyPump immersion pump
- 1 MobyPump macerating pump
- Pump bracket and piping
- Recycling tank 20 B
- Pump sump tank
- 4 Ramps to the wash unit

Areas of application

The Flex 400 MB model can wash up to 100 moderately soiled trucks per day.

Typical operation sites – depending on the number of trucks and degree of soiling – are

- Construction sites
- Gravel plants and quarries
- Concrete mixing plants
- Recycling facilities
- Landfills
- Port facilities
- Food industry
- Cleaning and disinfection
- Other areas on request