



# MobyDick Rail



## Frutiger-Molinari provide:

- Proven solution
- Worldwide service network
- Turn-key solution

## Project set-up / Scope of supply:

- Upon request: Problem analysis
- Visit by one of our specialists
- Elaboration of basic layout and budgetary offer
- For a fixed price a detailed concept including drawings, tender documents and detail proposal of the washing system will be delivered
- Delivery of the washing system.  
On request the project management is taken over or the solution is delivered as turn key project

## Technical Features:

- Cost reduction
- Removal of solids
- Water recycling
- No spillage of solids on tracks

## Technical Data of standard System:

- (Tailor Made Systems on request)
- Type of system: drive through
  - Length of wash platform: 939 cm
  - Pump capacity: 7'200 l/m
  - Recycling Tank capacity: 40'000 l
  - Weight of system: 11'000 kg
  - Rated power: 22 kW

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## The efficient solution to clean locomotives and wagons

**FRUTIGER** and **MOLINARI**, both middle sized Swiss companies, enter a strategic alliance to solve the problem of heavy soiled freight wagons. **FRUTIGER** with his brand **MobyDick** is the worldwide provider of Wheelwashing and Demucking equipment for trucks and heavy machinery. **MOLINARI** is a well-known provider of engineering and project management solutions for the worldwide rail industry. Jointly the two companies combine the expertise and market approach to become a problem solver for an important challenge of the rail industry.

### The challenge

During the loading process of coal or bulk goods a part of the material falls outside of the wagons and rests on the substructure as well on pipes and edges of the wagon. This material falls off as the train enters the rail network on a distance up to 5 km from the point of loading, obviously causing different types of problems:

- Downtime for cleaning the tracks
- Points failure combined with risk of accident
- Environmental hazards

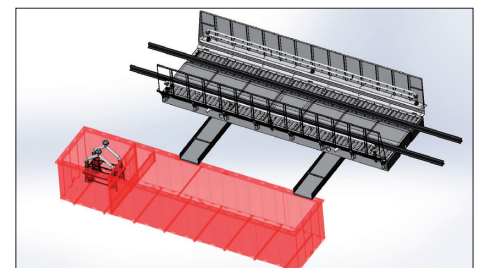
### Proven solution

The **FRUTIGER** and **MOLINARI** propose a solution to this long lasting problem: The washing technology is based upon the know-how of the MobyDick Wheelwashing facilities for trucks adopted successfully throughout the

world. In case of truck wheelwashing the goal of the washing is not the clean truck but the clean road. The approach for rolling stock is very similar.

The goal of the washing is to remove the heavy material and to transport this material into defined settlement tanks. Based on the experience of more than 3'500 Wheelwashing and Demucking systems, **FRUTIGER** developed a concept of high volume and low pressure washing of locomotives and wagons.

The train with the bulk wagons drives slowly through the washing facility where out of a well defined arrangement of nozzles up to 10'000 liters per wagon are sprayed. The huge amount of water combined with bottom and side nozzles, which are partly oscillating, insures a wash-off of all loose material. The strong water flow transports the material into the settlement tanks. As a result of a simple sedimentation, supported by the use of flocculent, an effective water recycling takes place. The water flows through wash plate and overflow into a pump chamber where it is constantly reused. Currently projects in Switzerland, UK and Poland are being prepared.



[www.molinari-rail.com](http://www.molinari-rail.com)

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