

# Toilet Systems



*Always on track*



Glova is a **European vacuum toilet system** manufacturer and an important key player in the rail industry, offering engineering and consultancy for toilet refurbishment and overhaul. Glova provides a range of toilet systems in order to facilitate the customer needs as well as meeting the overall design aspects of the toilet cabin.

## Comfort

### Vacuum toilet family

Technically the Glova toilet systems can be divided into two groups:

1. Compact toilets with all technical parts attached onto the toilet unit itself.
2. Central vacuum toilet systems where vacuum is generated near the waste tank.

Both systems have their advantages and both can be made into reliable functioning systems. The overall system layout often determines the best solution suitable for the installation.



### Reliable toilet units

The Glova toilet systems are basically line replaceable units unless the system configuration directly prevents it like on Central Vacuum Systems.

Toilet systems are not safety hazards on trains but the lack of comfort often have a high focus among the passengers.

For those needing to use a toilet non-functioning or dirty toilet cabins really lower their general impression of the whole travel experience.



### Tradition dictates function

Using a toilet system is not purely practical but also influenced by cultural heritage and the area you have grown up.



### Compact units

By far the largest portion of vacuum toilets units used today are compact units either wall hung or standing on the floor.

### Oriental system

The oriental styled toilets are typically linked to bidet shower function rather than toilet paper. Glova can supply them as corner models as well as the side model seen here.



### Scandinavian tradition

Another tradition based system is the use of porcelain toilet bowls instead stainless steel. Especially in Norway, Denmark and Sweden there are a majority of train toilet systems having porcelain toilet bowls. More than 30 years of experience claim that it is solely when servicing that they have seen broken bowls.



## Service

### Life cycle benefits

Despite the Glova toilet systems having different configurations, the majority of the spare parts to be serviced are identical.

This minimizes the needed stock and it makes maintenance as well as education of the maintenance staff easier due to the similarity across the toilet family. Combined with the high reliability of the Glova toilets, it all maximizes the life cycle benefits.



### Preferences for interface valves

Within rail business many of the train operators have build a preference for a specific type of interface valves.

The fact is that not all type of valves work equally well in different environment.



### Your choice

At Glova we can actually supply five different solutions as well as a mix of valves where this would be an advantage. Whether the wish is toggle lever valves, pinch type valves, rotation disk valves or linear operating disk valves we have them in production and available. But we cannot recommend all types for all environments.

