



WNVSYSTEMS

The complete transport washing solution

Drive-Through Wash System Case Study Brochure

Go-Ahead
Group

WNV-Systems Design and development of a new drive through bus wash system for Go-Ahead at Brighton & Hove Bus Company

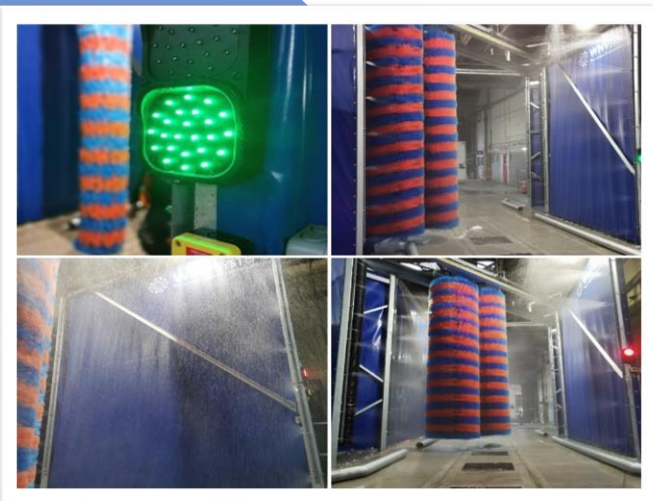


THE COMPANY

WNV-Systems design, deliver, and install commercial vehicle wash systems. We have been developing wash systems for local authorities for over 25 years partnering with numerous organisations.

Working with our partners we have provided solutions to cost effective vehicle cleaning and sanitation.

We offer our partners unmatched after sales service, support, and maintenance options. This gives comfort in knowing we are always here to support them and their vehicle washing needs.



OVERVIEW

WNV systems had been approached several times by many existing customers to supply an automatic drive through bus wash system. As the current systems on the market were proving costly, unreliable, and expensive to repair. WNV systems took the opportunity to design a new type of wash format to clean a large fleet of buses within a short period of time.

WNV-systems have worked for many years with the Go-ahead group providing water reclaims and under chassis wash systems, with a good reputation of build quality and after sales service.

To date Go south coast had been purchasing bus top washes from another supplier and the system was not up to the performance required by the transport operator, with costly installations, poor operation performance, reliability issues and large installations taking up valuable parking spaces.

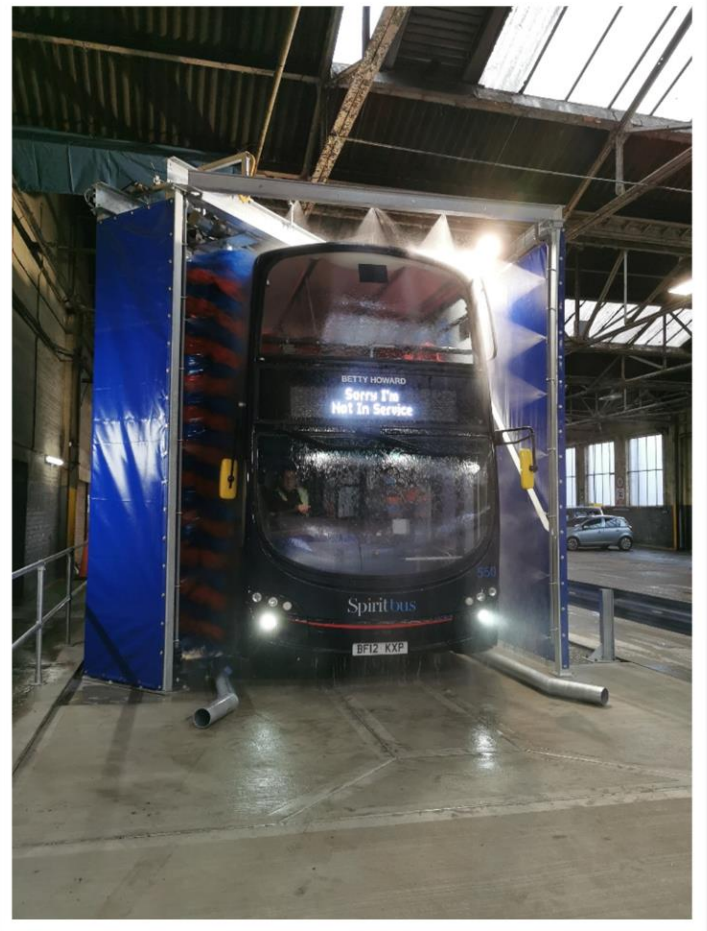
WNV-systems approached Go-south coast with a solution to the current drive through wash situation, after initial meetings and design briefings the Brighton & Hove, Conway street Depot was the perfect site to install and develop the new wash equipment.

SITUATION

The Go-ahead group as a leading company in the bus & coach industry pride themselves on their presentation, not only from a visual perspective but also a vehicle maintenance and longevity perspective.

Having a reliable, effective vehicle wash system is key with a requirement that it is green and environmentally friendly.

Go-ahead approached several wash companies to discuss and quote on replacing their old wash unit, after discussion with WNV-systems our new wash system covered all their requirements. At the planning stage civil works were designed and approved and WNV were awarded the contract to supply and install their new drive through wash system.



The challenges faced were to provide a wash system that could:

- ❖ Clean all 4 sides of a bus to a high standard in an average of 45 seconds.
- ❖ Work constantly over long periods of time with no reliability issues.
- ❖ Reduce the current water usage.
- ❖ Be safe & easy to operate.
- ❖ Installation on as small a footprint as possible.
- ❖ Installation utilising the existing building to house the plant room.
- ❖ Run an electrical supply from the existing distribution board over 130m.
- ❖ Restricted building roof height would restrict the wash height.
- ❖ Implement a safe pedestrian walkway alongside the wash unit with minimal overspray.
- ❖ The equipment needed to be strong and reliable enough to deal with the day to day use of a busy bus depot and used by many members of staff.
- ❖ Lighting within the existing building was poor so flood lighting is required within the wash bay.



IMPLEMENTATION

The initial design of the system required installation of a three-chamber interceptor and ground works to accommodate the water reclamation system. After design stages the civil works were completed, and the framework was erected.

The equipment was installed alongside a new water reclamation unit housed within a plant room after initial testing, commissioning, and adjustments the system proved extremely successful.

Features of the WNV Drive through wash:

- ❖ Integrated water reclaim system.
- ❖ Full clean to the front, rear left and right of buses
- ❖ Wash cycles taking approximately 45 seconds per bus.
- ❖ Reduced wash installation footprint
- ❖ Reduced freshwater usage.
- ❖ Ability to clean buses without having to remove any mirrors.
- ❖ Fully supported service and warranties.

Having worked with WNV for a number of years with their Chassis Wash Systems, their new drive through bus wash has finally given us a dependable system to maintain our buses with a premium quality of clean, alongside this supporting us with their unrivalled service and maintenance. I would highly recommend their drive through top wash.

- Steve Ambury – Engineering Director – Brighton & Hove Bus Company (part of the Go-Ahead Group)



RESULT

The equipment was installed, commissioned, and tested, it has proved to be easy to operate, the driver approaches the wash, it will start automatically and via a traffic light they can proceed to drive through. The cleaning time is driver dependent and will clean a bus to a very high standard in under 45 seconds.

The water reclaim recycled up to 90% of the water collected, clean and then reuse the water. Since installation, the wash equipment has proved extremely successful and has fully meet end exceeded the requirements set out. Advantages include:

- ❖ Easy to operate.
- ❖ Reliability.
- ❖ No need to remove mirrors prior to washing.
- ❖ A reduction in wash bay footprint.
- ❖ Incorporated wash splash screens.
- ❖ Superior quality of clean.

FUTURE INNOVATIONS

Future development for the wash system include driver speed monitoring and tacking, reclaim water quality monitoring systems and water testing.

