

Coming clean

Particularly in winter, commercial vehicles pick up road grime all too quickly. Keeping them clean not only improves the appearance of the fleet, but also helps technical inspection and maintenance, finds Steve Banner

Were there a prize for the fleet with vehicles with the cleanest chassis, then it would probably be awarded to the Republic of Ireland's Bus Eireann. Working with workshop lift manufacturer Steril Koni and commercial vehicle washing equipment specialist WNV Systems, it has had a package installed in its Broadstone, Dublin depot that should leave the underside of its buses spotless.

This features a 35-tonne-capacity Skylift with parallel 12m platforms that has been recessed into the wash bay floor along with a WNV Systems automated high-pressure chassis washer.

When the bus or coach is driven onto the platforms, the wash cycle begins. Once it has finished, the vehicle is raised to a height of 1.75m (pictured) so that a technician with a manual pressure washer lance can spot-clean any areas the automatic wash may have missed.

Aside from ensuring cleanliness, combining the lift and the washing system addresses another challenge that many operators face: making the most efficient use of what may be a limited amount of room.

A clean chassis makes life sweeter for technicians who may have to work on it, makes faults that might otherwise be hidden under layers of dirt easier to spot, and is essential if a truck, bus or coach is about to be presented for its test. A tester may refuse a test if a chassis is caked in filth; and leaving it in that state could of course result in premature corrosion.

The package Bus Eireann has adopted is a little unusual, says WNV Systems' managing director Geoff Elbrow, and has yet to be embraced by UK fleets. "We've done a couple of other installations in Ireland to a similar design, though," he observes. British operators would appear to take the view that the automatic chassis wash is thorough enough without spot cleaning, he says.

WNV Systems has programmes tailored to every chassis on the market to ensure that the wash goes backwards and forwards over particular areas that are known to be dirt traps. "The washes we install typically take 25 to 30 minutes to wash an eight-wheel tipper chassis," he says. WNV's washes can be incorporated into prefabricated wash-down pits made by Premier Pits.

With a price tag of up to £38,000, a chassis washer does not come cheap. "If civil works are required, then you could be talking about a total bill of £50,000 to £55,000," Elbrow adds.

If a wash is not installed, however, then somebody is going to have to spend a very long time - far longer



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Geoff Elbrow

than a remedial spot-clean – standing underneath a truck with a pressure washer, with dirt and potentially all sorts of contaminants raining down on them. That is not something a company’s occupational health specialists are likely to be happy about, says Elbrow.

While the size of the capital investment needed may be daunting, taking a truck to a third party with a chassis washer could cost £100 to £150 a time, Elbrow estimates, once the price of the wash and the loss of a driver’s productive time are factored into the equation. “If you’ve got your own wash, though, then it will cost you around £2 to £2.50 a time instead,” he reckons.

The price tag also includes a water reclamation system. “We’ve yet to install a chassis washer without one,” Elbrow says. Such systems are nigh-on essential, agrees Paul Walker, UK business development manager of brush wash manufacturer Wilcomatic, saving on water bills and satisfying the need of businesses to be seen to be recycling wherever possible. “A partial reclamation system will get back up to 55% to 60% of the water used, while a full reclamation system will recover up to 95%,” he contends. The latter has carbon filters that may need replacing quarterly.

BRUSH WASH OPTIONS

Vehicle bodies are, of course, what everybody can see, and fleets regularly rely on brush washes of either the rollover gantry or drive-through type to keep them clean. They can cost £25,000 to £30,000 or more, and again, may require ground works.

Once again, the challenge can be the availability of sufficient space in a congested depot, according to Elbrow. What WNV did for National Express at Heathrow Airport was install a combined drive-through and rollover brush wash that can fit on a wash pad no more than 8m to 10m long, he says. The driver rolls into the wash; the rollover wash cleans



the front of the vehicle; he or she drives forward and the sides are cleaned; then the vehicle is stopped and the rollover wash cleans the rear.

Washes have to be capable of adjusting their brushes to accommodate a variety of different sizes and types of vehicle. That is one of the characteristics of the three-brush rollover Britannia Strong wash, installed in Mid UK Recycling’s Sleaford, Lincolnshire depot by Smith Brothers and Webb some 18 months ago (pictured above). Until it was commissioned, the company cleaned each of its 70 vehicles, including hookloaders and skiploaders, once a week by hand. Its truck fleet operates under the Mountain Transport banner.

Istobal can supply a drive-through brush wash which, it says, can clean a 12m vehicle in under two minutes, and is suitable for wash bay lengths greater than 6m. The risk with drive-throughs, however, is that the driver will try to hurry the process, and could damage the wash or the vehicle, or both. Istobal can install traffic lights to slow things down.

Rollover brush washes tend to be slower than drive-throughs, but Wilcomatic can offer machines that use

a single-pass cycle to deliver a wash in 2.5 minutes. That is the same duration as the wash cycle of a 12m vehicle in WashTec’s MaxiWash Vario Tandem, which uses twin rollover gantries working simultaneously. One washes the front; the other, the back.

While many operators simply want to fetch the dirt off as quickly as possible, others are interested in brush washes that offer a more cosmetically-oriented clean, says Walker. Options include special oscillating jets to clean wheels and soft foam polyethylene brushes to spare expensive paint finishes. Also favoured by some operators in areas with hard water and a lot of limescale is reverse osmosis wash water treatment, Walker says. It ensures that buses and coaches, in particular, emerge from a brush wash streak-free and without white spots peppering their windows.

If an operator does not have the space for even the most compact of brush washes – or the money – then a single, vertical, powered brush that can be guided around the vehicle is an entry-level option. Prices start at around £15,000 and suppliers include JTT Equipment Services.

However, at a typical cost of a few hundred pounds, a mobile cold-water pressure washer is by far the cheapest piece of equipment that can be used to clean a vehicle, short of a mop and a bucket. The danger is that it will be stolen, or reversed over, or freeze solid in bitter winter weather. House one in a wall-mounted cabinet and all these hazards – potentially including trailing cables – will be overcome, but at the price of lost flexibility. Finally, remember that a hot-water machine will be always be better at shifting stubborn grease than its cold-water counterpart. [IE](#)

FURTHER INFORMATION

Transport Engineer Supplier List –
Vehicle/component cleaning equipment:
<https://is.gd/etofez>