



Dhollandia now offers tail-lifts with a loading range from 500kg to 2,000kg. Its latest model is the DH-VOCS (far left), a full rear closure tail-lift with integrated rear frame and top flap that shaves off weight for Luton vehicles. Left: the company's latest tuck-away lift, designed for vehicles up to 12-tonnes gvw, with a semi-level ride platform, which starts level, before tilting downwards.

# Weightwatchers

With Euro 6 tractor units heavier than their predecessors, the hunt is on for weight reductions to improve payload. John Challen finds out how tail-lift manufacturers are getting in on the act

The tail-lift sector over recent years could be described as in a state of evolution, rather than revolution. But the assumption that manufacturers are resting on their laurels, with established product ranges, is wide of the mark. Most are looking to help operators with lighter equipment to compensate for expected overall increases in vehicle weight, driven by the requirements of the impending Euro 6 engine emissions legislation.

DEL, for example, is working to regain some of that lost payload with its lightest tuck-under lift, the 1,000kg DA1000MP. Despite a clear weight reduction, there is no impact on quality for this lift – designed for vehicles of five tonnes and above – says customer services and marketing manager Paul Kelly. “We’ve examined ways in which we can adapt the weight of our lifts, or change the installed weight to build in extra payload,” he states. “The weight of the existing installed lift was 340kg, but Euro 6 has given us the opportunity to go back and redesign it.”

The biggest change is the lift arm, he explains. Typically a solid steel section, DEL engineers have removed the middle, but maintained strength in the important areas – namely the ends and the arm bend. “We’ve saved 58kg from the lift, by stripping it down, using a 3D design package to guide improvements,” reveals Kelly. Corrosion protection is another key consideration, with galvanised steelwork featuring alongside the aluminium

platform, and a lifting ram that is fully closed when stowed, to protect the pistons from corrosion, while also reducing the risk of leakage.

The development of that lift also led DEL to look at the rest of its range, in search of similar weight reductions. “Our 1,000kg column lift has undergone a similar experience and we’ve saved 65kg, bringing the overall weight down to 250kg,” says Kelly. “We’ve changed the sliders, the sections of the platform, basically looking at anywhere we believed we could save weight, without compromising durability, strength or quality for Euro 6.”

For smaller vehicles, there is also another new DEL product, serving the 3.5-tonne market. A 500kg short column lift now fits on the back of a Luton truck. One of its advantages is that there is no need to remove rear lights and fixings to attach the lift – meaning installation time is reduced.

## Going up in the world

Another company in on the act is Dhollandia, which now offers tail-lifts with a loading range from 500kg to 2,000kg. Its latest model is the DH-VOCS, again looking to make vehicles as light as possible and hence maximise payloads. A full rear closure tail-lift with integrated rear frame and top flap, this 185kg product has a wider aperture for Luton vehicles than normally provided with a standard shutter door configuration. It also claims to be the lightest lift in the 3.5–7.5-tonne gvw range.



Above: tail-lift training at Ratcliff Palfinger. The firm made a name for itself with the KTL corrosion protection process, and is now engineering products to reduce vehicle weight

“Vehicle chassis are getting heavier, so anything we can do to bring lighter tail-lifts to the market will help,” states Chris Lay, business unit director at D Hollandia. “For rental companies – which predominantly take cantilever products – weight is critical. We’ve looked at different materials and constructions to keep weight down, and we will continue to look at ways of improving them,” he adds.

“All of the lifts we fit today offer a bolt-on system, to some degree,” continues Lay, hinting at flexibility available to operators who may wish to mount D Hollandia lifts on different vehicles in their fleets. “Going back 10 to 15 years, they would all be welded on to the vehicle, but there are not the skills in that area anymore. Nor are they required in the industry.”

D Hollandia also introduced a tuck-away lift in April this year – the DH-RP.10. This lift is designed for vehicles up to 12-tonnes gvw, and features a semi-level ride platform, which starts level with the vehicle floor, before tilting downwards as it lowers to the ground. There is also the option of an automatic tilt at ground level.

The new tuckaway features many galvanised parts, something that Lay confirms is becoming more commonplace within its range of lifts, especially its cantilever and retractable offerings. “We now have a standard of galvanising the lift frames, which, in some of our harsher markets, is a big bonus for operators. In the UK, operators have also been happy with the changes, and we have subsequently raised the quality of our products to a new level,” he asserts, adding that even those that aren’t galvanised are still protected. “We’ve KTL-dipped and powder-coated tail-lifts in the past, and some of them are still produced to that specification.”

### Tail-lift protection

Talking of KTL, it has been a busy six months at Ratcliff Palfinger, the company that made a name for itself with this protection process. Another lightweight tuck-away lift, Ratcliff’s 1,000kg load limit RP10 is just one of several products introduced by the company this year. It offers a platform depth of 1,200mm, and tips the scales at

just 299kg, even with the inclusion of a KTL-painted steel platform to add rigidity.

“A wider range of van lifts for both commercial and passenger applications, including various platform types and sizes, means we can now offer a lifting solution for every type of van,” states Beverley Jackson, head of sales at Ratcliff Palfinger. And she adds that this includes lifting capacities ranging from 350kg to 500kg and meeting the latest health and safety regulations.

On the column lift side, development will be driven by “a need to provide greater efficiency and effectiveness to specific customers and market segments,” she continues. “Chassis-mounted products developed with our sister company MBB Palfinger will lead to the introduction of further models for the UK in the near future,” she adds.

Back on KTL, Jackson says there are environmental benefits, too. “Our powder-coating process eliminates VOCs [volatile organic compounds] associated with other product finishes,” continues Jackson. “There are no solvents; it is easily recycled; and research has produced powders that cure at lower temperatures, so reducing energy consumption.”

But there’s plenty of choice in the tail-lifts sector, and the devil is in the detail. Maxon, for example, which offers tuck-under, cantilever and slider tail-lifts, has now added a 1,500kg tuck-under lift, the Max15T. Developed for the UK and US markets, three depths of platform are available, all low in height, with fully-welded aluminium plank sections and fitted with twin automatic trolley stops.

In this case, the folding and unfolding processes are assisted by Maxon’s moving roller arm assembly and balanced springs. Meanwhile, operation by two lift cylinders on the same centreline as the lift frame arms reduces offset forces and friction within the hydraulic cylinders and other load-bearing components.

The company says more products will soon follow – including variants of the Max Slidelift model. A 1,500kg flat steel platform trailer slider lift, with a larger folding alloy platform and 2,000kg capacity derivatives, are already available. Lifts designed for aero-skirted semi-trailers, and truck chassis installations are next on the agenda. **TE**