

WORKHORSE

Bodybuilder J C Payne constructs dropside bodies on chassis grossing at from 3.5 to 26 tonnes, says head of sales, Scott Hadley. The Aldridge, West Midlands-based business turned out 300 in 2021, alongside a variety of other body types, and output looks set to increase this year. "We've already got 140 on our books," he reports.

Ninety-five percent of them are constructed with alloy sides and tailgates. Typically 400mm high, they are comparatively light, which makes them easy to raise and lower, do not corrode, and need no paint. "In one or two instances, however, we've been fitting GRP [glass-reinforced plastic] sides in a further bid to save weight, especially at 18- and 26-tonnes," says Hadley. Relying on an internal honeycomb structure for strength, they are 28mm thick, and appear to be robust in service. They may also be less likely to be stolen than their valuable alloy counterparts. The latter are often protected by theft-resistant hinges, which make them less easy to remove illicitly.

On that point, both the hinges and the catches which secure the sides and tailboard should be kept clean and checked regularly to ensure they move freely and have not been damaged. Hinges and catches can be included in the driver's daily check, with any faults reported so they can be rectified.

Be it bags of gravel or cement, roof joists or paving slabs, every load transported in a dropside has one thing in common: it's heavy. Body designers must save weight without compromising durability or safety, reports Steve Banner

At the lighter end of the weight scale, dropsides tend to be equipped with birch ply flooring around 15mm thick and coated with an anti-slip phenolic film. Says Gary Lawrence, quality manager at bodybuilder VFS: "It's not as heavy as a steel floor, and can be treated as a sacrificial component. If it gets damaged then it's easy enough to unscrew it and replace it."

Go up to 18- or 26-tonnes, however, and JCP is more likely to fit a heavier duty 22mm- to 28mm-thick hardwood floor, again with a slip-resistant coating.

Bodies may sit on galvanised steel runners and bearers, with some bodybuilders employing powder-coated high-strength steel, which offers



a weight saving. The floors VFS fits are accommodated by a powder-coated high-strength steel frame.

Load tie-down ring capacity varies in line with the nature and weight of the cargo and the weight of the chassis. Says Hadley: "We've fitted rings that can handle up to 6.0 tonnes."

Producing dropside bodies for 3.5-tonners with one-piece, 15mm-thick, birch ply slip-resistant decks, Ingimex builds tie-down rings into the body's peripheral aluminium side extrusions. Each one is tested to 800kg, says the firm, and meets the requirements of EN 12640, the European standard for lashing points on commercial vehicles.

Ingimex also installs an embossed steel panel to protect the rear of the cab if cargo breaks loose and shifts forwards. It is designed to meet EN 12642 XL, the European load containment standard. The panel forms part of a 400kg-capacity gantry that can help transport ladders, planks and pipes.

In this context, it is worth noting that the extruded-aluminium sides and tailboard have been tested to a burst load of 1.7 tonnes. "They are





designed to outperform steel welded equivalents," Ingimex states.

VFS employs a high-strength steel headboard to defend the back of the cab. Says Lawrence: "We profile it to give it the necessary toughness."

CHANGES

Perhaps one of the biggest changes in dropside body design over the years has been the amount of extra equipment some customers specify – extras that can add weight and eat into the vehicle's payload capacity, but are often viewed as essential for safety.

At its most basic, this can involve a step on the inner face of one or both of the sides or the tailboard, which can be folded down when the side is lowered to make access to the cargo bed easier. Arrest rails are increasingly specified around bodies to prevent falls from height once workers have climbed into the load area.

West Midlands bodybuilder Bevan Group offers the Safe-T-Drop fall arrest system, which is designed in such a way

that it has to be used and cannot be removed from the vehicle. Supplying components for fire protection systems, Shawston International has specified it on dropsides it has sourced from Bevan. Says Shawston operations director, Shaun Imrie: "It's definitely the best I've seen."

Says Hadley: "We're also finding that we're being asked to organise the installation of cab-top warning beacons, tow-bars and tail-lifts." All are items which customers would have arranged to have fitted themselves in the past, he adds, once they had taken delivery of the vehicle. The tail-lift's platform can also act as the dropside's tailboard.

To this list can be added lockable toolboxes, which are bolted or welded into place. Leave expensive power tools lying around on the open deck of a dropside, and they are likely to be stolen. Says Lawrence: "Twenty-five percent of our customers specify options, and a lot of them want tool lockers mounted behind the cab."

In Bevan Group's case, the equipment can include heavy-duty cranes capable of lifting palletised loads of bricks among other items.

VFS dropsides are regularly equipped with lightweight cranes sourced from Penny Hydraulics; its range encompasses models that can lift items weighing anywhere from 150kg to 2,650kg. Some of the bigger-capacity models in the Penny line-up that VFS's customers specify require part of the body's floor to be

cut away, and a galvanised sub-frame installed so that the forces involved when the crane is deployed are transferred directly to the vehicle's chassis. Provision may also have to be made for the fitting of a stabiliser leg.

An example at the heavier end is a pair of 6x2 Mercedes-Benz Arocs chassis supplied to Merkko by Marshall Truck & Van and fitted with Horton Commercial dropside bodies (pictured below). The rear-mounted, remote radio-controlled cranes are by HMF and fitted with Kinshofer brick and block grabs.

THE BASIC OPTION

While some dropside buyers may look for a specification that is unique to their requirements, others are happy with something more basic with limited scope for variation – just so long as they can obtain it quickly.

Most light commercial vehicle manufacturers offer ready-bodied ready-to-go-to-work chassis in a line-up that invariably encompasses dropsides as well as tippers and Lutons. The body warranty typically matches the warranty on the chassis in terms of mileage and duration, with the supplying dealer the first port of call if anything goes wrong.

While the chassis will be imported, the body will almost certainly be UK-built. With factories in Hampshire and West Yorkshire, VFS for example supplies Renault with a dropside body for the Master 3.5-tonner, with 400mm-high alloy sides, a steel panel and grille to protect the cab, and slip-resistant flooring (pictured above). Load length are up to 4,300mm. More recently, Renault has introduced a dropside conversion on the 3.5-tonne battery-electric Master E-Tech chassis; and VFS is again the body supplier. **TE**

