



TAKE ONE European Truck

The new Actros from Mercedes Benz has been with us for a while, but this year it gets an upgrade with the addition of some new technologies and the mirrorcam system.

After a number of ups and downs and a long period when the truck was not particularly fashionable, this latest version of the Actros has had considerable success since its Australian arrival in 2016. There are a number of reasons for this success, not least it's frugal fuel use and also a long-term change in the attitudes of the trucking industry in Australia, which is seeing European cabovers increasing in market share.

From the driver's point of view, test driving a truck like the Actros, is simply a matter of making sure they know what all the buttons on the dashboard do and then working out how to set it up correctly before setting off down the road. It is possible to drive this model in a semi-autonomous way. Much of the time on long runs all the driver has to do is steer the truck and keep an eye out. The automated systems do the rest.

The truck on test is probably the ideal B-double prime mover in this model range. It is an Actros 2663 with the StreamSpace cabin, which includes a flat floor. In fact, this particular cabin is laid out in the SoloStar configuration, which Mercedes-Benz have introduced as an option, but not many truck buyers have shown a lot of interest.

The SoloStar seems well worked out. The bunk folds up to the rear wall of the cabin. On the passenger's side there is a seat underneath bunk which fold up so that the seat-back is resting against the folded up bunk. The side wall of the cabin is cushioned so that there is a, sort of armchair in the corner of the cabin. This leaves the space where the passenger seat normally lives as clear open space.

This means there is a comfortable seat for the driver when resting, but a passenger has to do without a passenger door window. The space created is



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welcome in a European cabin, where it is always at a premium, but it will probably not spark much interest among Aussie drivers.

The engine in this truck is the OM473, rated at 625hp (460kW) and this puts out 3000 Nm (2230 ft lb) of torque. This engine is based on the same engine block and many other engine components as the Detroit DD 16 used in the Freightliner range.

Approaching the truck, the driver will see the familiar tall Actros shape, but

also notice that there is something a little different about this truck. The introduction of the mirrorcam option is an Australian first. As to whether the Australian trucking industry will be willing to accept this new concept? The jury is still out. There is no doubt about the improvement in the aerodynamics and also in visibility for the driver by fitting this new system.

In fact, the introduction of the mirrorcam has been on the cards for some time, as European hauliers seek fuel economy and as safety systems becomes more important. Add in the fact that video cameras and video processing computers become smaller, lighter and cheaper, and they become inevitable. Over the next 10 years they are likely to become an option on every heavy duty truck, before becoming standard when we finally get used to them. By that time cameras, instead of mirrors, are likely to be ubiquitous on all vehicles.

CLIMB ON UP

Climbing up into the cab is literally that, climbing up four steps and then up again onto the flat cabin floor. It is quite a way up there, but all of the handles are well designed and the steps themselves are easy to negotiate.

While settling into the driver's seat the full array of electronics available in this truck becomes obvious with two large screens, one directly in front of the driver and one to the left, on firing up the truck they light up in all their glory.

This is clearly the way that the truck interior design is going to be in the future, even the new Kenworth has an LCD screen on the dashboard with an option to show analog instruments. In this brave new world, most drivers will still choose conservatively and configure the screen directly in front of them with the usual tachometer and speedometer left and right, plus fuel gauge, with indicators of gear selected, trip and odometer in the middle.

The screen also shows which automated systems the driver has activated and how they have been set. This will show whether the active cruise control is activated and what distance the driver has set as the closest it can get to the vehicle in front.

There is a lot to learn about all of these systems which are available in the Actros. A certain amount of training on handover

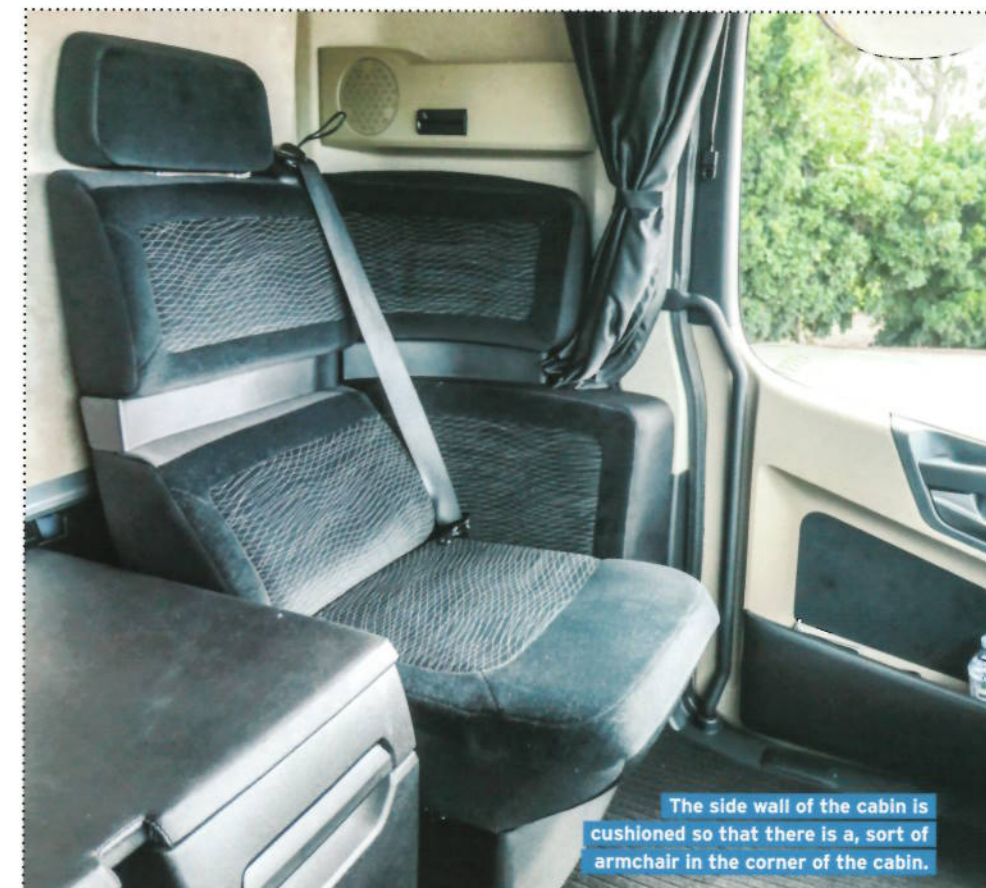
is vital for any driver taking over this truck. Although many of the controls are relatively intuitive, for many drivers, the sheer volume of different systems which can be turned on and off may be confusing. Clear and concise training and instructions will solve any problems.

The screen in front of the driver can be adjusted and controlled via the buttons on the steering wheel. The screen to the drivers left is more about items like entertainment systems and other information for the driver.

After starting the truck, the parking brake release is simply a large switch. The transmission is controlled by a stalk on the right hand side of the steering

Mercedes-Benz engineers finally got the transmission right, they really did get it right.

Surprisingly, the safety pack, which includes all of the safety systems, is an optional extra. This pack includes Lane Keep Assist, Attention Assist, Active Brake Assist 5, Proximity Control Assist and Automatic Main/Dipped Beam and Cornering Light. In these very safety conscious times including this set of equipment in your options list would seem to be a no brainer, as long as the operator can be certain that their drivers will not simply switch all of the automated systems off as soon as they sit down in the driver's seat.



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The 2663 with the StreamSpace cabin, which includes a flat floor.

DRIVING EXPERIENCE

What we are examining in this test is the driving experience in the Actros using as much of the automated, automatic and other safety systems as possible. This may not be the choice of all of the drivers who end up in this driving seat, but all of these systems are on offer. We are trying to examine exactly how all of them can work together, they're all turned on and this driver will note how the systems react to

column. Most of the time the driver will need simply to leave it in the drive position and let the computer technology do most of the work.

This G330 12 speed PowerShift transmission is well proven and this basic technology is now used throughout the Daimler heavy truck range. At the beginning, the early Actros models struggled with automated manual transmissions, but when the



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different driving conditions.

The basic active cruise control which Mercedes-Benz call proximity control has been with us for some time. In fact, this driver drove an early version of the system in Mercedes-Benz Actros on the autobahns of Germany over 16 years ago. This system is much smoother now than it was at that time and the mix of camera and radar produces great results.

In urban conditions the driver simply pushes the accelerator to go and hits the brake to slow. Once out on the open highway it's a simple matter of setting the maximum speed, for the section of road and ensuring that the following distance is set at a reasonable number of seconds and any over run is limited to two or three km/h.

This model is fitted with the optional Predictive Powertrain Control, which means that the system is loaded with topographic maps of the main highways of Australia and this will inform the cruise control about the road ahead. This means that the AMT may select a lower gear just at the foot of a climb, or cruise control will cut torque just before the crest of the hill to allow the forward momentum of the truck to take the combination over the top of the rise and use the downward grade to pick up speed again.

Also available is the eco-roll system, which will disengage the clutch when the system recognises that the current speed can be maintained without any input from the power train. Recent examples of these types of systems have begun to be more

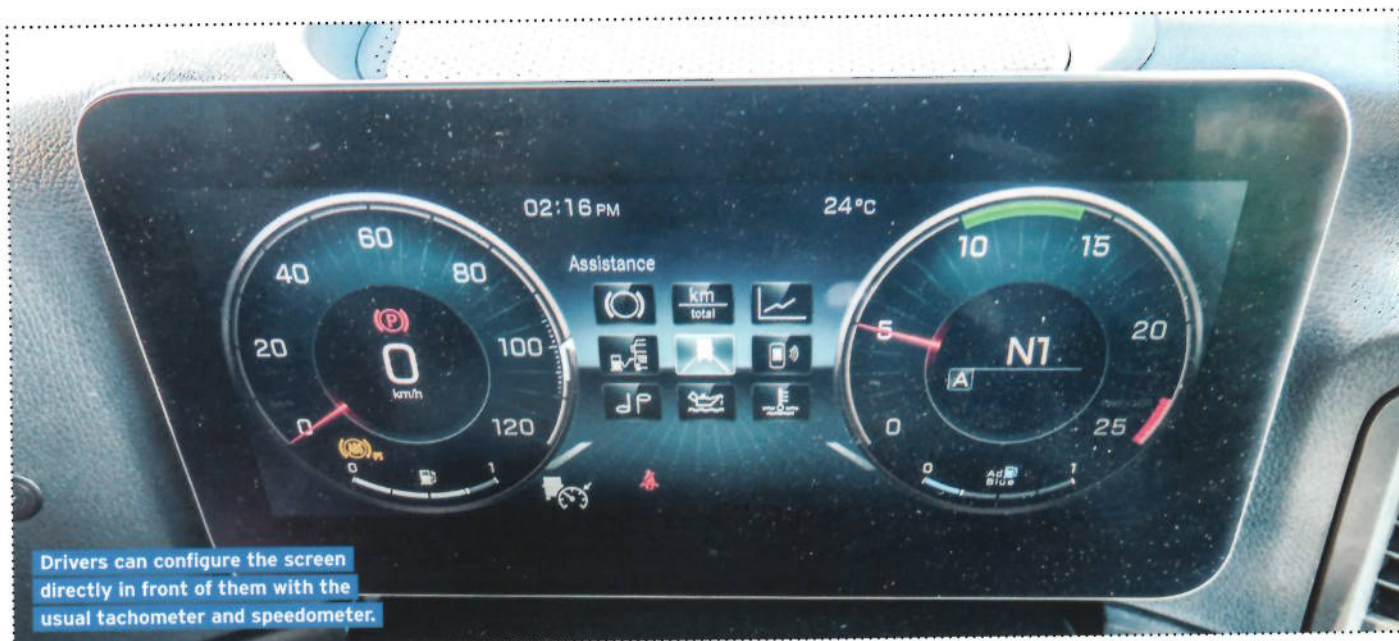
effective than they were when they first came out. Now, you can expect the system to take advantage of any situation where there is a slight incline and disengage the clutch allowing the rpm levels to drop to around 600.

VIRTUALLY SEAMLESS

The way all of these systems work together is virtually seamless in the Actros. This is the trick to getting a state-of-the-art truck right. A lot of these automatic driving systems are generic and they come from different suppliers, but it is in the way that they are integrated into one system, which makes them more effective and also more useful to the driver, ensuring they are more likely to use most of these automatic systems in their normal daily driving.

This appears to be the essence of what we are looking for in a modern top-end highway prime mover. Many of the systems are very similar across different brands, but the brand which can make all of these different components work together holistically is the one which will be more attractive to drivers and operators.

In terms of integration, Mercedes-Benz have got a lot of things right. Some of the electronic safety or driving systems may not be perfect, and we may see them disappear in the next few years. However, altogether and over time Benz seem to have got quite a lot of this integration correct. **IID**



Drivers can configure the screen directly in front of them with the usual tachometer and speedometer.