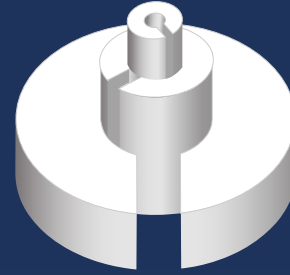
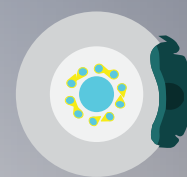
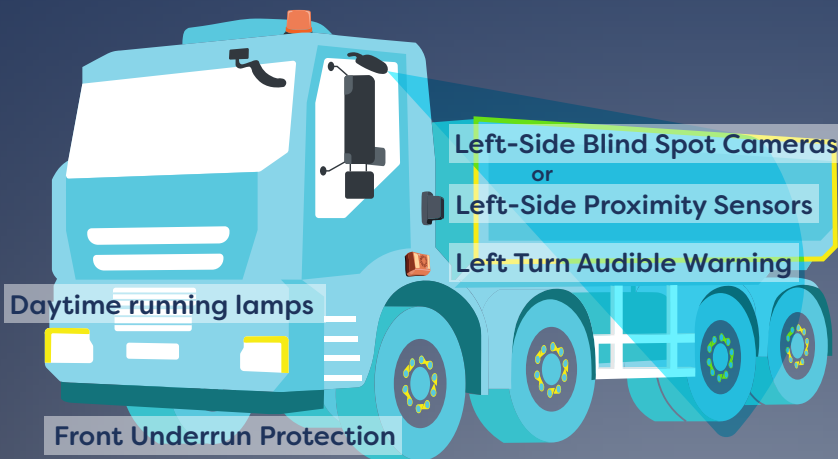


CLOCS-A

Heavy Vehicle Silver Standard



A higher standard of equipment that is preferred for heavy vehicles complying with CLOCS-A technical requirements. Similar to UK CLOCS and broadly aligned to current NSW/VIC government major projects. Accreditation to Silver also requires prior accreditation to Bronze.



ABS - For Trailers

ABS - For Trucks

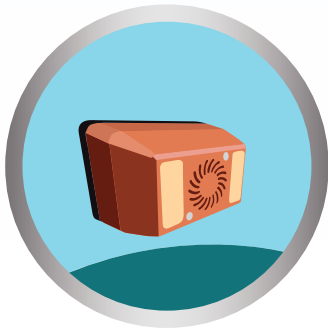


Daytime running lamps

Have 2 compliant daytime running lamps fitted to the front of the truck.

Pro: Low tech but reliable and effective means of increasing road safety as they substantially raise the visibility of motor vehicles to other road users.

Con: The combined cost of parts and fitting may be significant at the higher end.

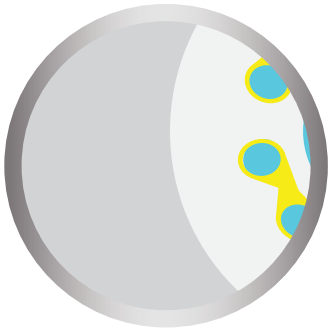


Left Turn Audible Warning

Fit a speed-sensitive left turn indicator that incorporates a recorded (spoken) audible warning message able to be heard by cyclists and pedestrians near the to left side of the vehicle.

Pro: It provides a bespoke audible warning to vulnerable road users, in contrast to other more typical visual measures.

Con: May not be able to be heard by motorcyclists wearing a crash helmet.



Front Underrun Protection

Have trucks over 12 tonne GVM fitted with a conforming Front Underrun Protection Device (FUPD).

Pro: Helps prevent smaller vehicles from running under the front of a truck in the event of an incident.

Con: It is important the FUPD does not interfere with the vehicle's functionality when installed.

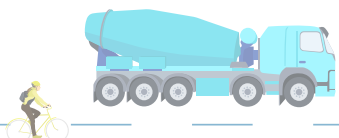


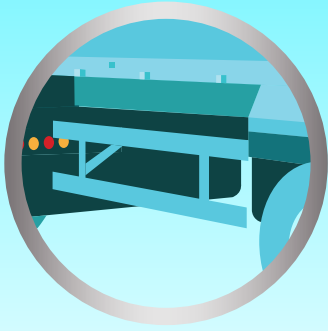
Side Underrun Protection Device – Trucks

Have trucks fitted with a conforming Side Underrun Protection Device (SUPD).

Pro: Helps to minimise the risk of pedestrians, cyclists and motorcyclists from falling under the sides of a heavy vehicle and being run over by the rear wheels.

Con: It is important that the devices do not unreasonably interfere with the vehicle's functionality when installed.





Side Underrun Protection Device – Trailers

Where a trailer is included in a heavy vehicle combination, have the trailer fitted with Side Underrun Protection Devices (SUPD).

Pro: Reduces the likelihood of Vulnerable Road Users from entering under the sides of a trailer and being run over by the rear wheels.

Con: additional tare weight and cost, and reduced accessibility to some equipment that may be directly behind the device.

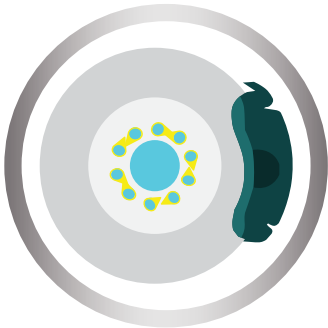


Rear Underrun Protection

Have the rearmost heavy vehicle unit fitted with a compliant Rear Underrun Protection Device (RUPD).

Pro: RUPDs prevent lighter vehicles from running under the rear of a heavy vehicle and being damaged by the heavy vehicle's unyielding structure.

Con: Cons relate to additional tare weight and cost.

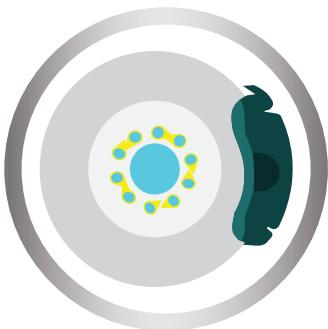


Anti-lock Braking System – For Trucks

Have trucks fitted with an Anti-lock Braking System (ABS).

Pro: Helps to prevent wheel lock-up during braking and thus assist the driver to maintain directional control - particularly on wet or slippery surfaces.

Con: ABS was not designed to reduce stopping distances and under some circumstances may increase it.



Anti-lock Braking System – For Trailers

Where a trailer is included in a heavy vehicle combination, have the trailer fitted with an Anti-lock Braking System (ABS).

Pro: By eliminating trailer wheel lock-up the system helps to reduce the occurrence of trailer swing and jack-knifing.

Con: Relatively expensive compared to other measures.





ADR 80/03 Emission Standard (Euro V)

The use of post-2010 model trucks with engines that comply with ADR 80/03 emission standards.

Pro: Will contribute to a reduced incident of disease and premature deaths attributable to air pollution (compared to older vehicles complying to lesser standards).

Con: Adds weight, takes space and may use more fuel



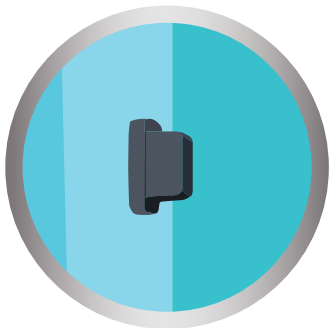
Left-Side Blind Spot Camera

Fit a camera system and in-cab screen to the vehicle to monitor the presence of left-side blind spot objects.

Pro: They can provide the driver with considerable confidence and improved safety when driving large trucks in urban environments that may include Vulnerable Road Users near to the vehicle.

Con: The presence of the in-cab monitor may be a source of driver distraction.

OR



Left-Side Proximity Sensors

Fit a proximity sensor and alarm system to the vehicle to monitor the presence of left-side blind spot objects.

Pro: Compared to a blind spot camera system, proximity sensors offer the advantage of not requiring the driver to continually monitor a screen.

Con: Proximity sensors do not inform the driver if the object is a car, truck, cyclist, motorcyclist or pedestrian.

