

Manoeuvring a rig along tight routes, through busy intersections or into small spaces is often tricky for even the best of drivers, but it doesn't have to be ...

Imagine a 22 m truck and trailer that can turn like a car. Not possible? Of course it is. You don't even need a special horse, just some extra steering axles ... on the trailer. And not a special imported unit, either – you can now buy a locally made trailer, fitted with one of the leading trailer steering systems available: the Tridec trailer steering system.

Part of the JOST group, Tridec is now offered locally. "We are the only supplier in South Africa that supplies a trailer steering system to local trailer builders," says Christo de Clerk, product manager: Tridec Steering at JOST South Africa. The company has supplied units to Cobalt Engineering, Henred Fruehauf (SA Truck Bodies), Ilcor Trailers and Martin Trailers.

De Clerk is, understandably, enthusiastic about the offering. "The system allows you to build a local trailer to local standards that will provide optimal loading and stability. Local buyers can now buy what they need, not what's available overseas."

One of the company's most recent installations has been for abnormal-loads haulier Transcor, for which the Tridec HFE system has been fitted to a six-axle trailer built by Martin Trailers.

The HFE system works off a steering wedge fitted to a standard 38c fifth wheel skid plate (which means the fifth wheel and the trailer turn together). This is connected to two hydraulic cylinders at the back of the trailer that are mechanically connected to the steering axles, which apply the right amount of counter-steering to the trailer's axles.

The trailer thus follows a similar path to the truck, which means that the turning

radius and swept path are greatly reduced. And because the trailer axles turn it's wheels do not scrub on the road surface, thus reducing tyre wear, fuel consumption and vehicle maintenance.

"The system is extremely responsive and gives absolute control," says De Clerk. "But drivers need to get the feel for it. If you put in too much steering angle, the trailer will push out too wide and you'll take out what ever is on the right of the vehicle!"

Graham Leith, MD of Transcor, says his drivers love the system. "These trailers are interesting because they behave differently to the conventional trailers, but once the drivers see what the trailers can do they don't want to stop using them."

Being fully computerised, Tridec is intelligent, too. For example, it has a built-in over-speed sensor that deactivates the system at speeds over 20 km/h. It also incorporates the Tritronic2 remote control, which is able to independently increase or decrease the steering angle. "The ability to independently steer the trailer with the Tritronic system is a paradigm shift," Leith notes.

Tritronic2 can also control an extra five hydraulic and 8 electric functions. "You can programme a hooter, lights, hydraulic landing legs, lead on ramps – anything," enthuses De Clerk. "It also has a 'Go button' – press this and the whole rig will straighten up by itself!" he smiles.

De Clerk is also keen to point out that the system is not driven by the horse, having its own hydraulic pump and twin 12v batteries. This does, however, need a 70 mm² power cable, connected to the truck, to keep the batteries charged.

"The trailer is no longer just mechanical; there are a lot of sophisticated electronic components in it. These units require back up, and the service from Christo and Tridec has been 100 percent," Leith says.

To that end, De Clerk adds that Tridec is fully backed in South Africa by JOST, which offers a one-year warranty on the system which can be extended when the trailer builder sends back the warranty form.

"The way forward is modern technology; we need to embrace it even if it is more expensive, but one must view a trailer as a long-term asset rather than a short-term expense. The advantage is definitely there and we are looking at buying more Tridec-equipped trailers, probably five-axle units," concludes Leith. **IFOCUS**



Graham Leith (left), MD of Transcor, and Christo de Clerk, product manager, Tridec Steering at JOST SA.



PARADIGM SHIFT