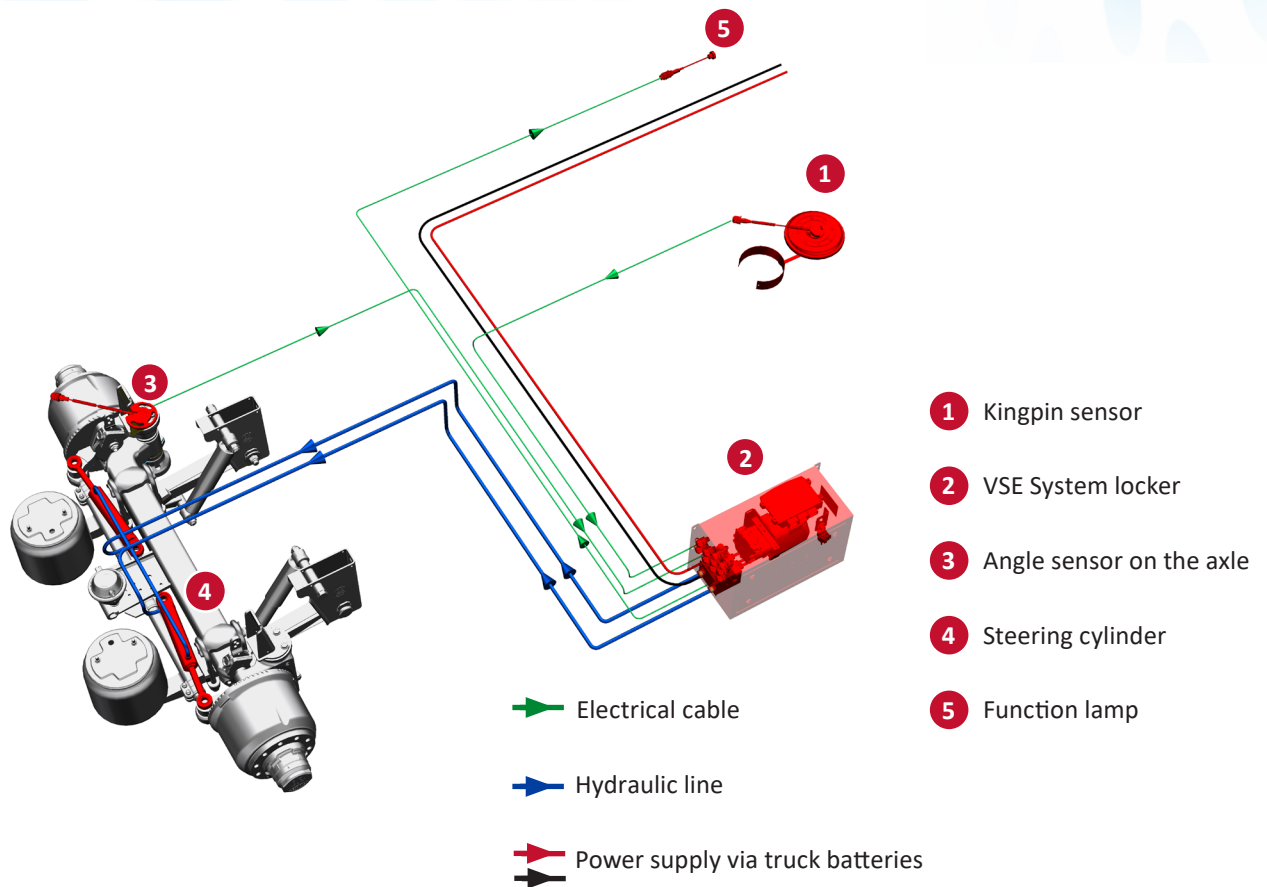


The working of VSE Smart Steering



How VSE Smart Steering works

Driving forward:

Step 1: When the truck/trailer combination turns, an angle is created between the truck and trailer. The angle sensor at the kingpin (1) measures the angle because the flag of the kingpin moves with the fifth wheel during steering.

Step 2: While driving forward, the system transmits the angle between the truck and trailer to the VSE system locker (2). The system locker contains software that uses the angle between the truck and trailer to calculate the required steering angle for the steered axle.

Step 3: The software in the system locker (2) controls the steering cylinders (4) on the self steer axle. The steering cylinders steer the self steer axle until the sensor (3) indicates that the correct steering angle (calculated by the software) has been reached.

Step 4: The trailer then steers the desired turn with a self steer axle.

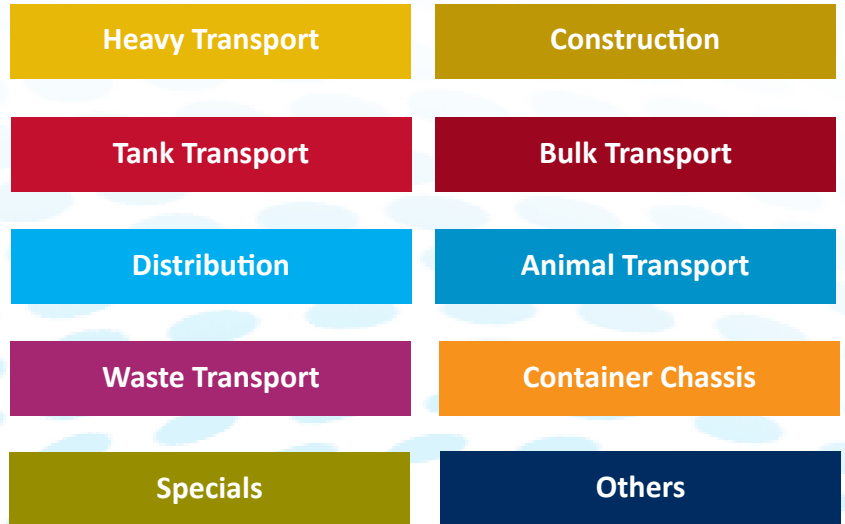
Driving in reverse:

When reversing, the system applies the same principles as when driving forward.



VSE specialist in every segment

VSE Smart Steering is suitable for any type of trailer with a self steer axle. VSE distinguishes these ten segments for VSE Smart Steering:



VSE in practice

When you equip your trailers with VSE products, you not only add new possibilities and flexibility to your trailer, you also significantly reduce your fixed costs.

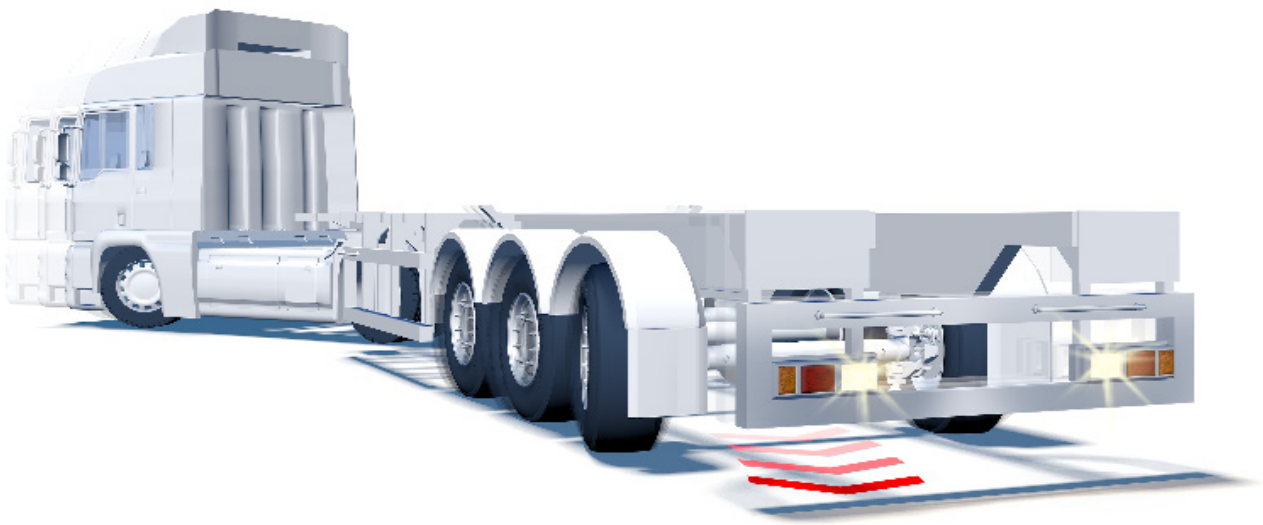
Feel free to ask us about the possibilities and applications, no strings attached.



For more information visit our website: www.v-s-e.com



VSE Smart Steering: Reach every loading and unloading point with more load



What does VSE Smart Steering offer?

VSE Smart Steering is the new steering assistance system that enables a self steer axle to steer in reverse in a straightforward manner. In addition, VSE Smart Steering improves the performance of the self steer axle during forward steering.

The big advantage is that it is now possible to make a trailer with a self steer axle more efficient and suitable for a broader range of loading and unloading situations. After all, the rear axle no longer has to be set to a fixed position when driving in reverse.

In addition, with a self steer axle you can reach multiple locations without manoeuvring. This saves you a lot of time and provides more options at loading and unloading locations!

The benefit for you as a carrier

Manoeuvrability

You can now also steer in reverse with a self steer axle at a competitive price!

Durability

Improved loading and unloading times with a trailer fitted with a self steer axle!

Improved performance

Steering performance is independent of road condition and axle load. This is because the self steer axle is actively steered.

Can be retrofitted

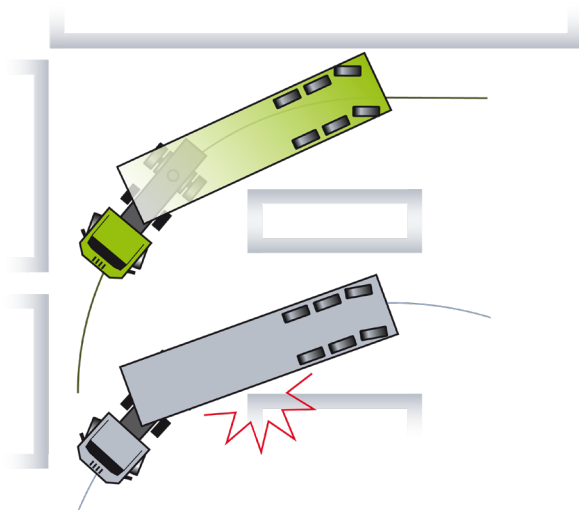
The system can also be added on later!

Improve loading and unloading times with a self steer axle!

A self steer axle is a solution for carriers who want to reduce fuel consumption and tyre wear. In addition, a self steer axle results in a smaller turning circle. Unfortunately, this only applies to forward driving. When reversing, the self steer axle must be locked. This increases scrubbing and the turning circle. The self steer axle can only be locked in the centre position, which requires driving several metres straight forward. A driver must therefore think ahead when arriving at the loading or unloading point. The solution: VSE Smart Steering!

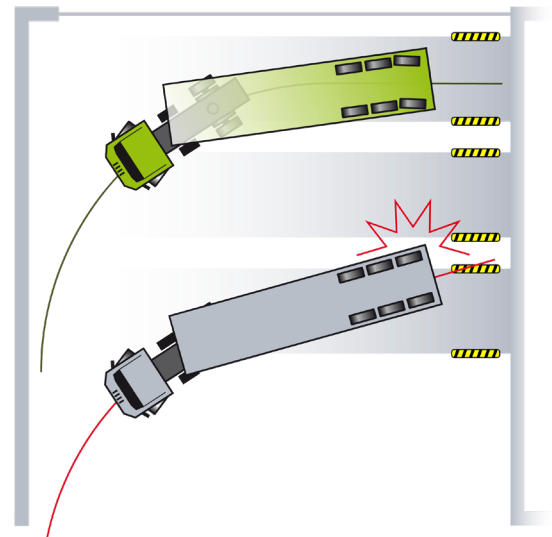
Don't waste valuable time!

DRIVING FORWARD



You have the same steering angles in forward and reverse. This means you can always drive out of any spot you have backed into.

DRIVING IN REVERSE



You enjoy easy manoeuvring in reverse during loading and unloading, in contrast to a self steer axle. After all, with a self steer axle you have to jockey back and forth. So VSE Smart Steering saves you time!

More possibilities than with a turntable!

Systems with turntables have one thing in common: they are all heavy and take up a lot of space! This results in higher fuel consumption and less load capacity. VSE Smart Steering solves this problem without sacrificing manoeuvrability!

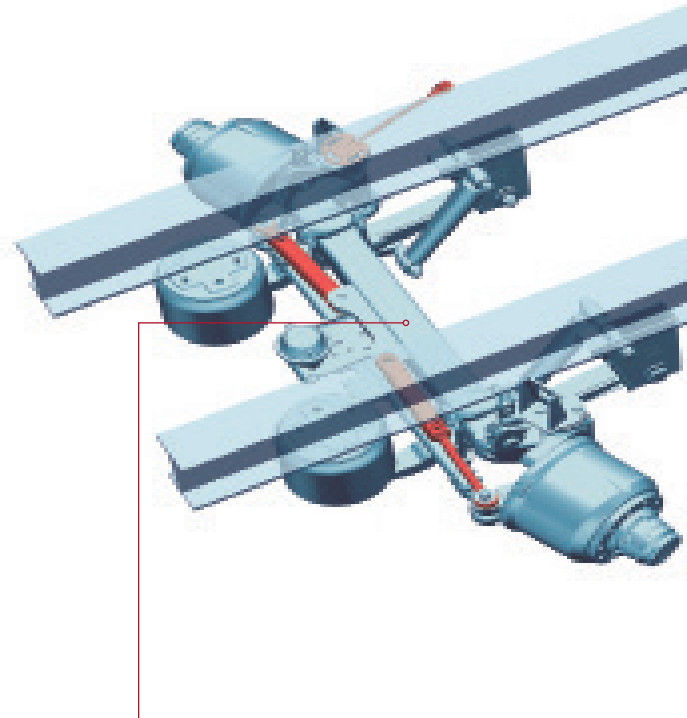
Because VSE Smart Steering is lighter and more compact, you save fuel and have more load capacity.

Unique possibilities with VSE Smart Steering

- Because VSE Smart Steering is over 300 kg lighter than a steering system with a turntable, you save 1% on fuel!
- VSE Smart Steering requires no extra height, so no loading height is sacrificed. This system does not use turntables.

No more high maintenance costs!

- VSE Smart Steering has no lubrication points.
- No extensive, regular maintenance of the system, to replace a turntable for example.
- The annual VSE inspection allows you to avoid unnecessary maintenance costs. Consult our website for more information.

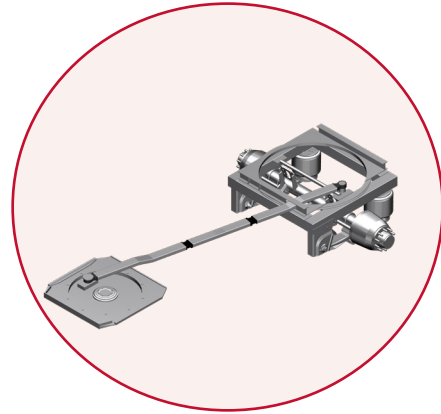


WITH VARIOUS AXLE BRANDS:

VSE Smart Steering is available in combination with all leading axle brands. More information can be found on our website.

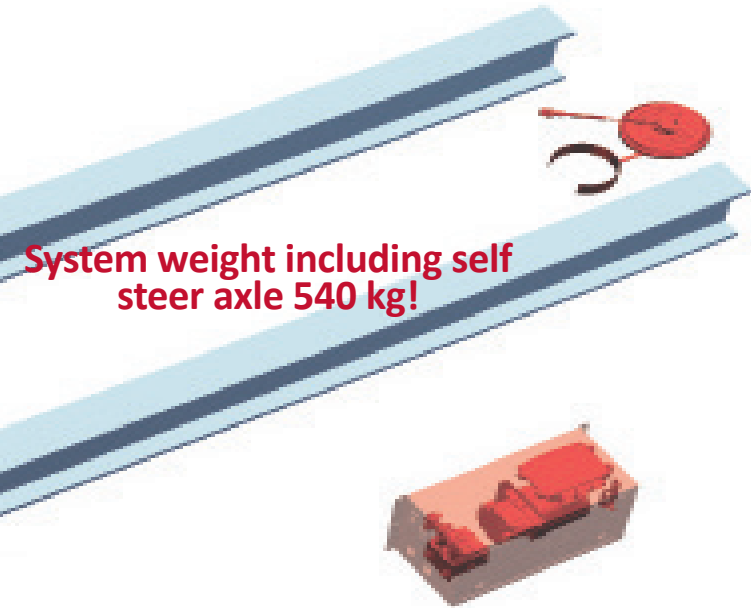


**System weight including rigid axle
880 kg!**



A steering system with a turntable has a minimum weight of 880 kg (including rigid axle). The extra weight means your truck uses more fuel. Moreover, this system is very high maintenance. Just consider all the lubrication points and replacement of the turntable.

**System weight including self
steer axle 540 kg!**



**Some advantages for
you as a trailer builder**

Smart system

The system is compact, installs quickly and is suitable for any type of trailer with a self steer axle.

Innovation

Easily add additional innovation to the trailer with a unique, patented system.

Installation

Assembly without special arrangement of axles

Standard chassis

No chassis modifications, in contrast to mechanical steering systems.

Technische specificaties

System weight without axle	40 kg
Configurations	1 self steer axle
Axle brands	all
Temperature range	-30 to +40 degrees Celsius
Cylinders	2 with existing locking system
	Track rod cylinder
Steering system active	up to 25 km/h