

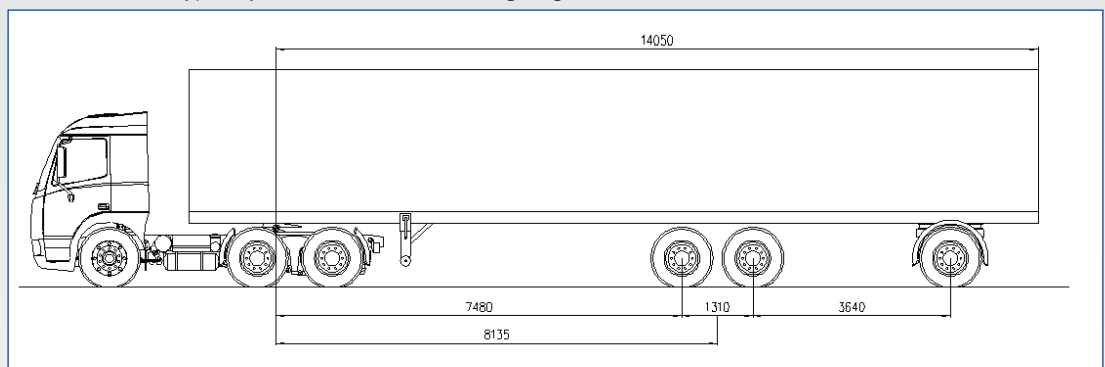
Trial of longer semi-trailers in the UK

It has been announced that the DfT are to allow long term trials of longer semi trailers in the UK from January 2012. There will be a limit of 900 units with an increase in length of up to 2.05m and 900 units of an increased length of up to 1m. Trailers taking part in this trial will operate under Vehicle Special Orders, under section 44 of the Road Traffic Act 1988. It is anticipated that to maintain operational flexibility operators will choose either one steering axle or two steering axles dependent on their individual needs.

Trailers shall comply with current turning circle requirements and have a maximum dimension from the king pin to steering centre of bogie of 8.135m for trailers 2.550m wide & 8.114m for trailers 2.60m wide.

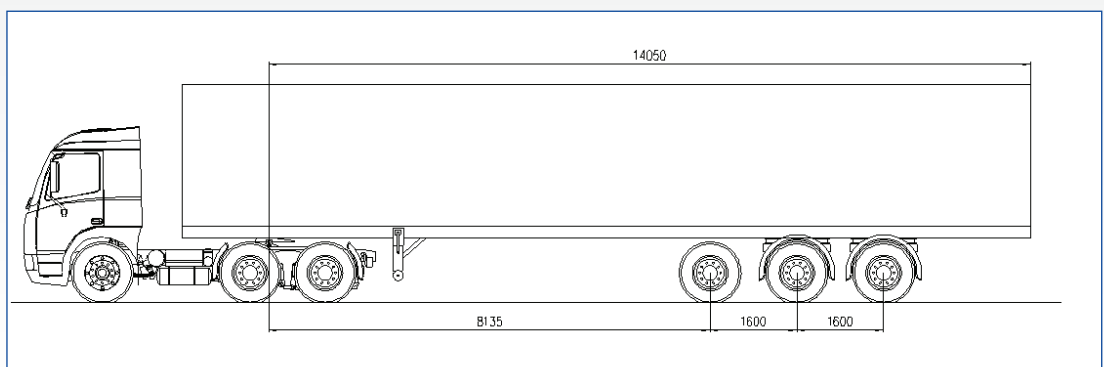
TRIDEC can offer operators and trailer builders a number of solutions dependent on their specific requirements. For the 15,65m long trailers we would suggest possibilities: 1 axle steered, or 2 axles steered.

1 axle steered The steering centre of the trailer can be a maximum of 8.135m from the king pin. With single axle steering this is the dimension between the king pin and a vertical line equidistant between the two fixed axles. The distance between axle two and three is dependent on the required GCW and bogie load. If the full 24 tonne bogie load and 44 tonne GCW is required, then the distance could be between 3.40m & 3.70m. A typical combination would look similar to the example below. For lower GCW the distance between axle 2 & 3 could be typically 1.90m, and the steering angle circa 26°.



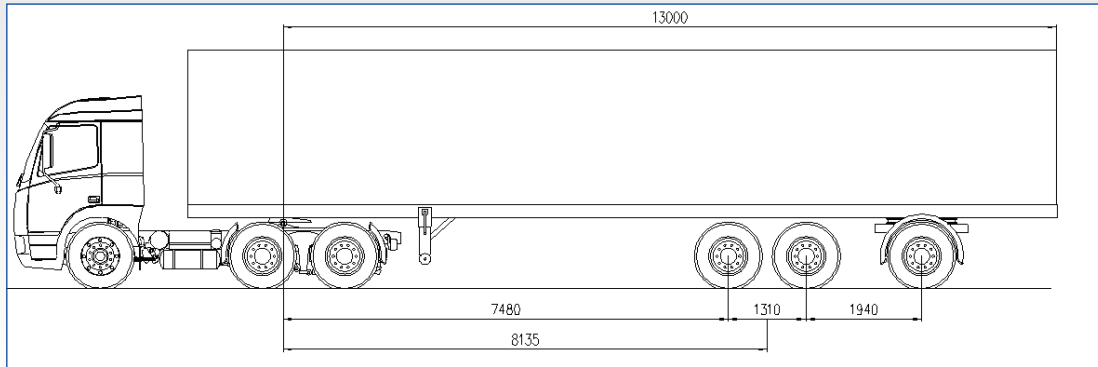
Steering angle 40°

2 axles steered The steering centre (rigid axle) of the trailer can again be a maximum of 8.135m from the king pin. The dimension between axles is dependent on the weight distribution required. With the axle spread shown it should, dependent on vehicle construction, be possible to achieve 24 tonne on the bogie. Other axle positions and spreads may be used, providing additional operational flexibility.



Steering angles 15° & 32°

For **14,60m** trailers we can suggest steering 1 axle. Dependent on specification it should be possible to achieve 24 tonne on the bogie with the following axle configuration.



Steering angle 26°

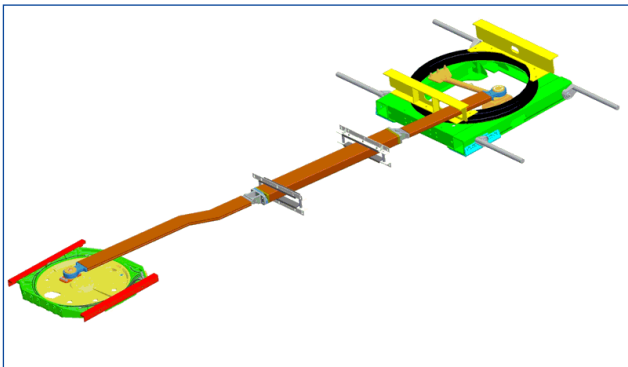
Depending on individual requirements, these, and other axle positions are possible to meet particular operating parameters & axle loading patterns. It is the trailer builders' responsibility to ensure that axle loads comply with C&U regulations.

Two types of mechanical steering system are available:

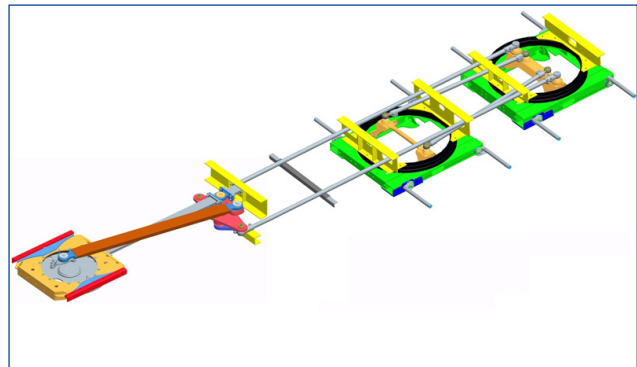
- **TR / TR-V (Twin Rod)**
- **TD (Single Rod)**

For straight frame semi trailers on distribution applications we suggest the TD, 1 or 2 axle steering system.

For off road applications or step frame trailers we recommend the TR or TR-V system.



TD steering system



TR-V steering system

Self Steering axles are allowed under the proposals, however TRIDEC cannot comment on their suitability, other than point out that steering angles are less than available using TRIDEC steering systems and that when reversing they are locked and operate as a normal fixed axle.

Further information available from JOST GB Limited. Telephone: +44-(0)1617-630200 or visit www.jostgb.co.uk

