

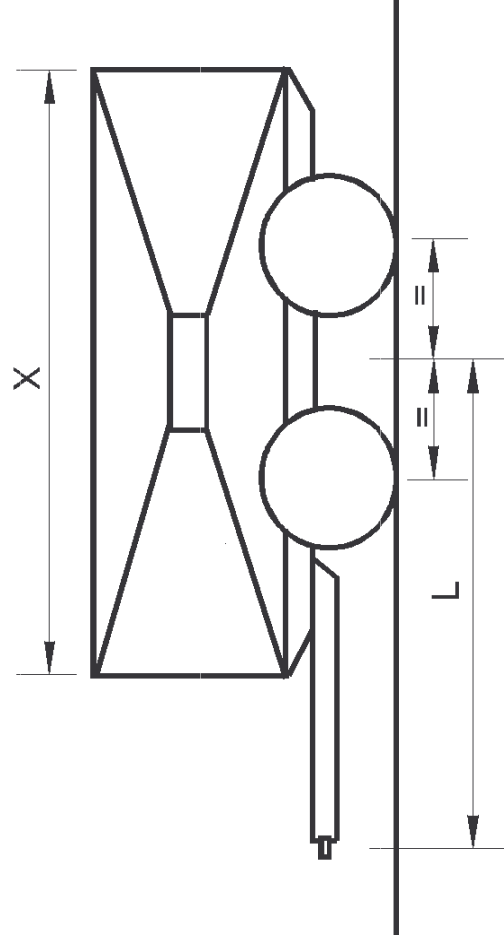
Reference :

D, D_c, V value trade-off formula (Mr. Svensson)

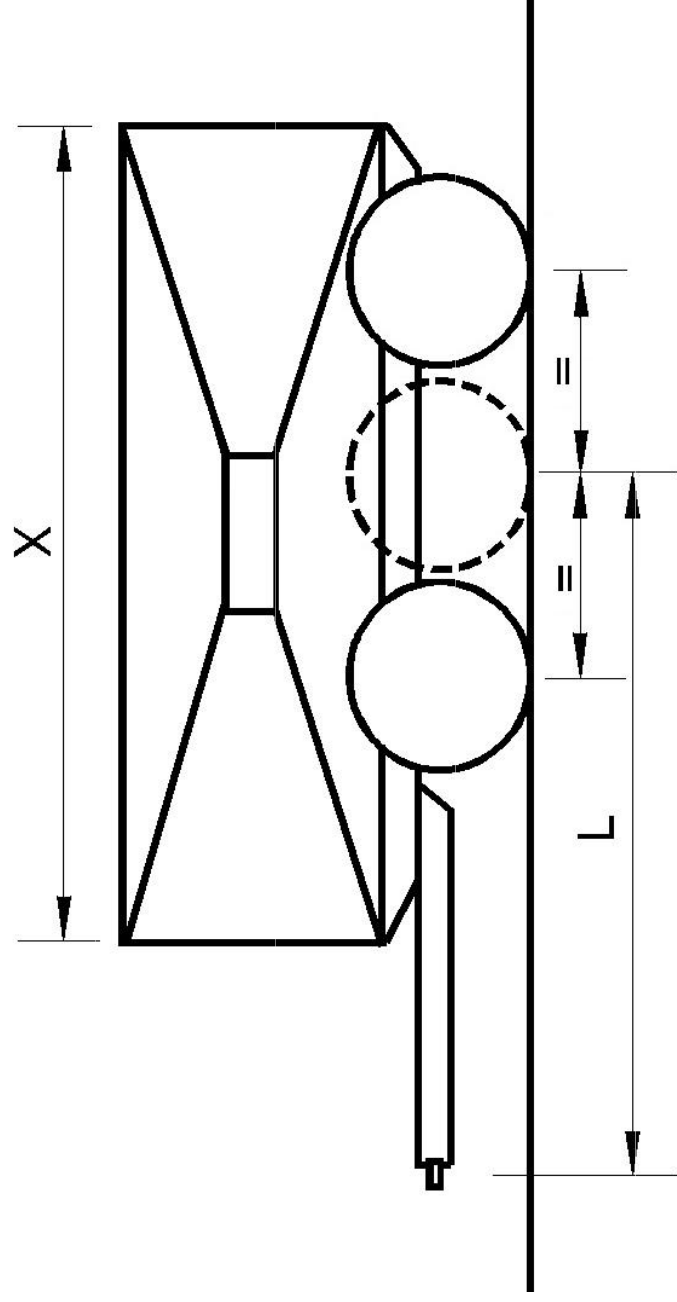
Consideration around the V value calculation formula and some
Central Axle Trailer applications

Definition in R55.01

“Centre axle trailer” means a trailer having a drawbar which cannot move in a vertical plane independent of the trailer and having ***an axle or axles positioned close to the centre of gravity of the trailer, when uniformly loaded.***



**In some applications the approximation to a single central axle in the V value calculation formula is too restrictive.
Below is a picture of a formally “Central Axle Trailer” with 2 or 3 axles.
The distance between the extreme axles can reach 2800 mm.**



Application of actual V value formula to the described application it too severe.



A 3 axles CAT as pictures with 32 t mass calculated with actual formula Can gives as result a **V value up to 150 kN.**

The proposal is to add into the calculation formula a **linear dependence with the axles distance** (and the position of the center of gravity of the trailer).