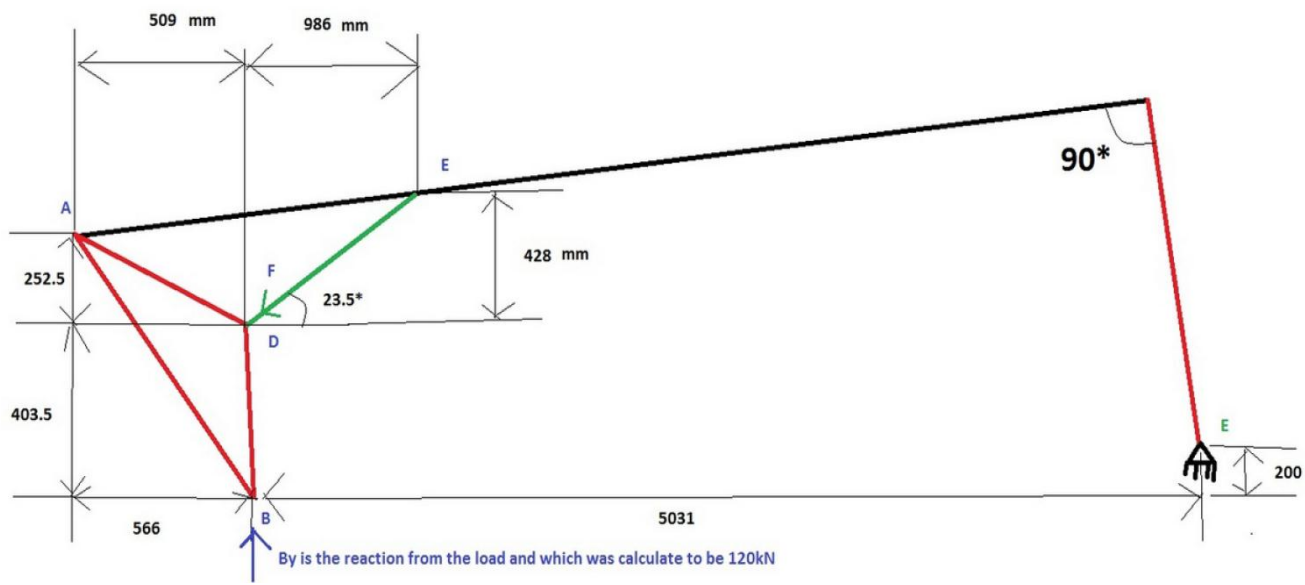


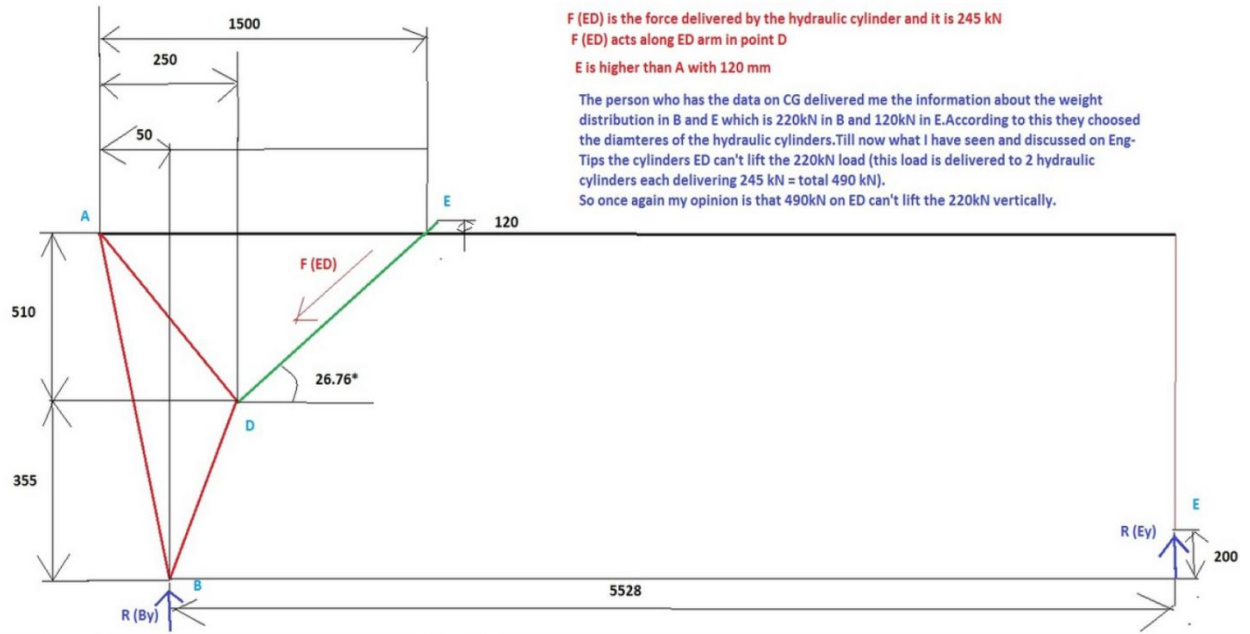
These two Loki Railroad truck skeletons are used as input for calculations

F is the force of the hydraulic cylinder which is developing 245 kN

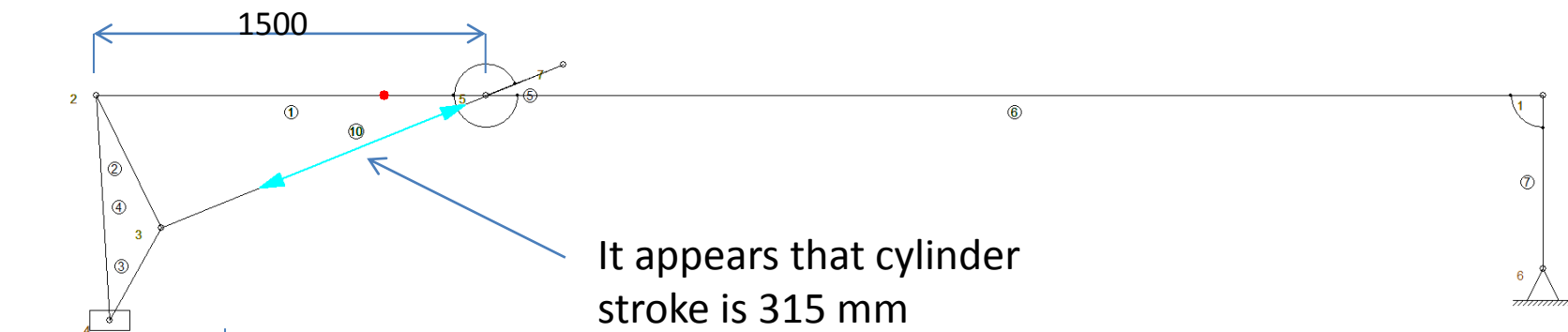
Cyl in



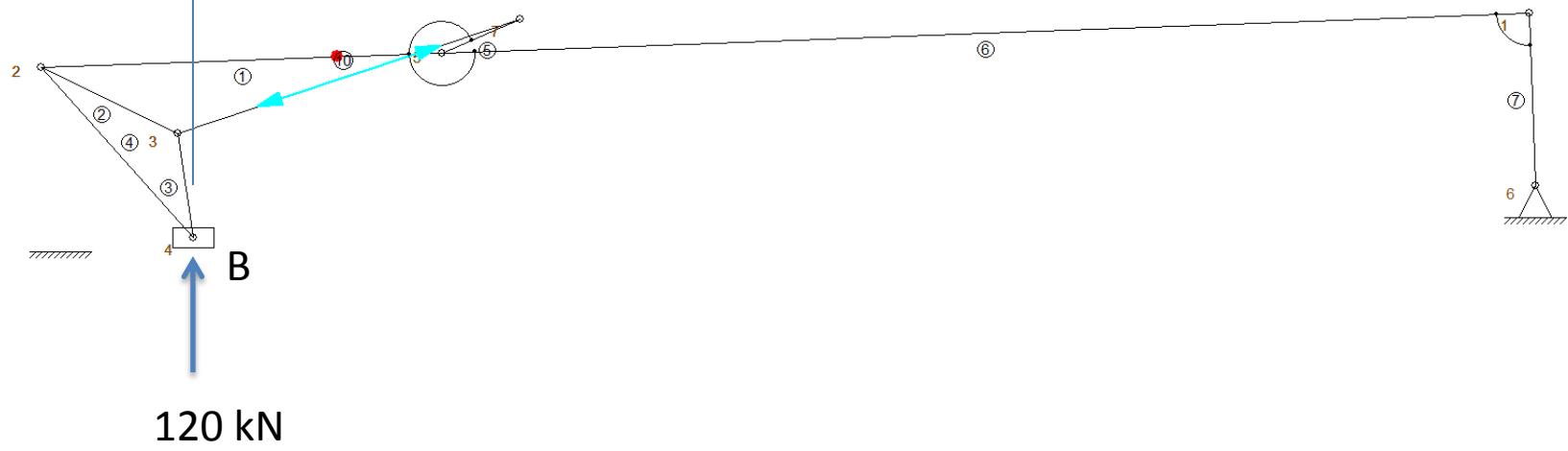
Cyl out



Loki skeleton modelled into Sam software.
Mass in red dot is given such mass and location that the vertical reaction force in B = 120 kN as per instruction from Loki.

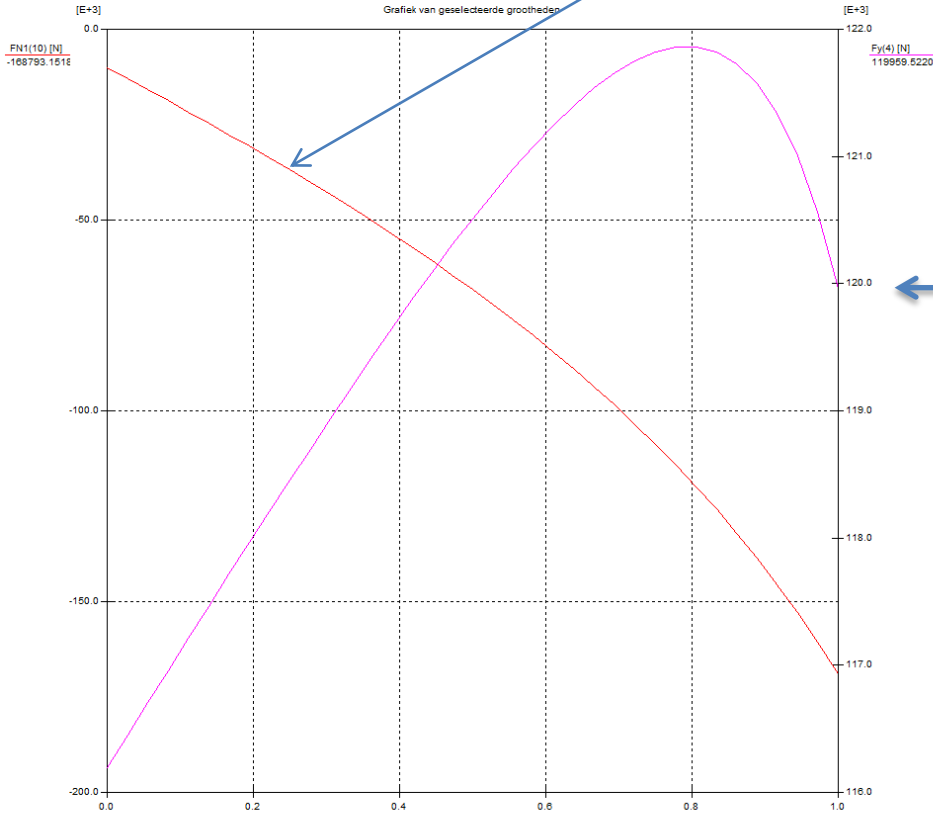


Hor bogie stroke = 497 mm (that is 5528 minus 5031)



Resulting force plot and mechanism

Red curve is
required cylinder
force



F_B



Fy(4), purple curve =
reaction force in B

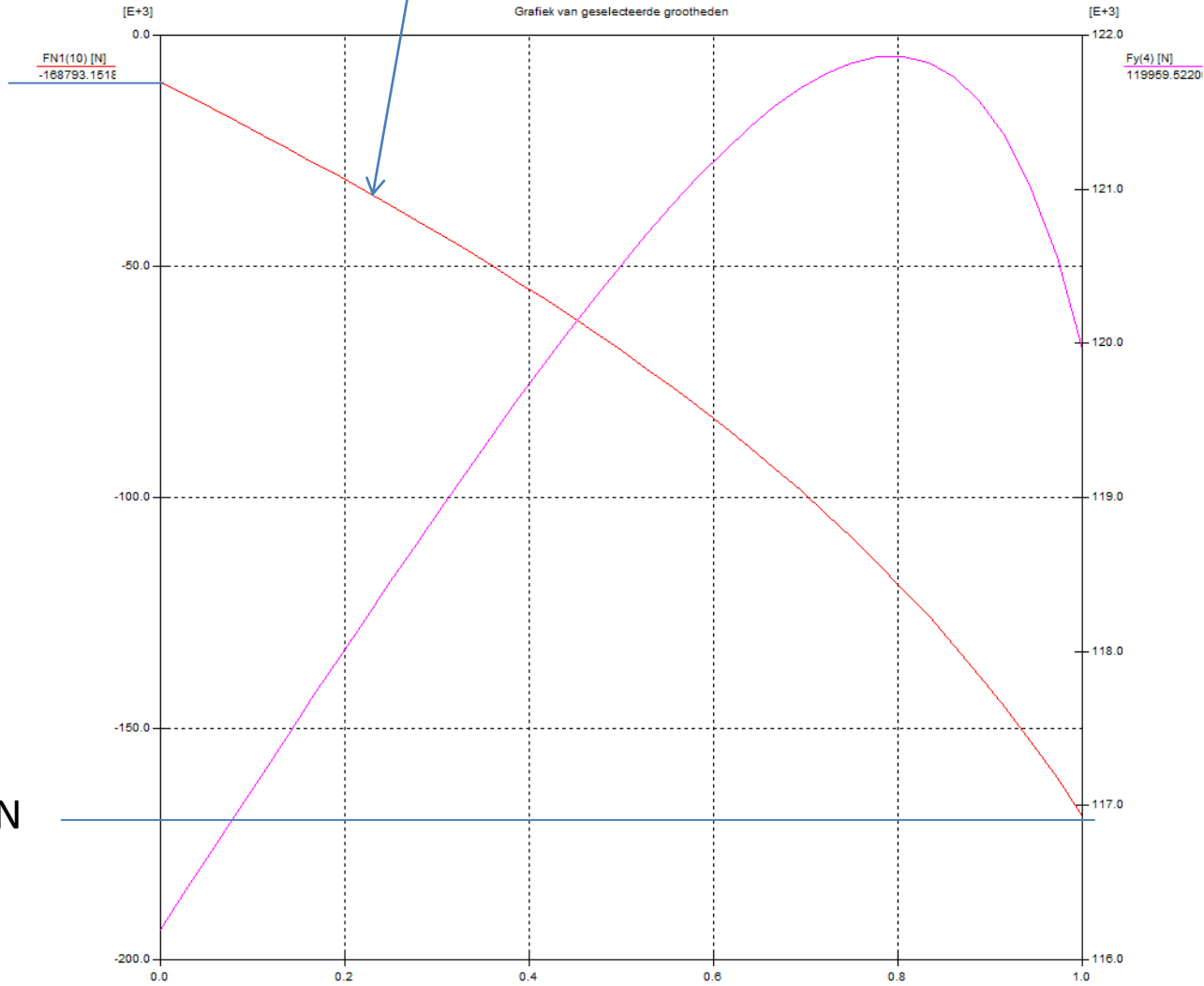


Red curve is
required cylinder
force

Resulting force plot close up

-10 kN

-168 kN



Cyl out
(10kN)

Cyl in
(168kN)

Tijd [s]
1.00000

Resulting forces and displacements plot

