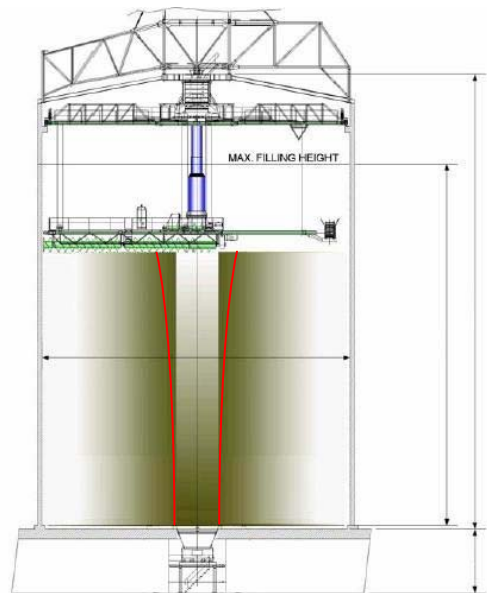


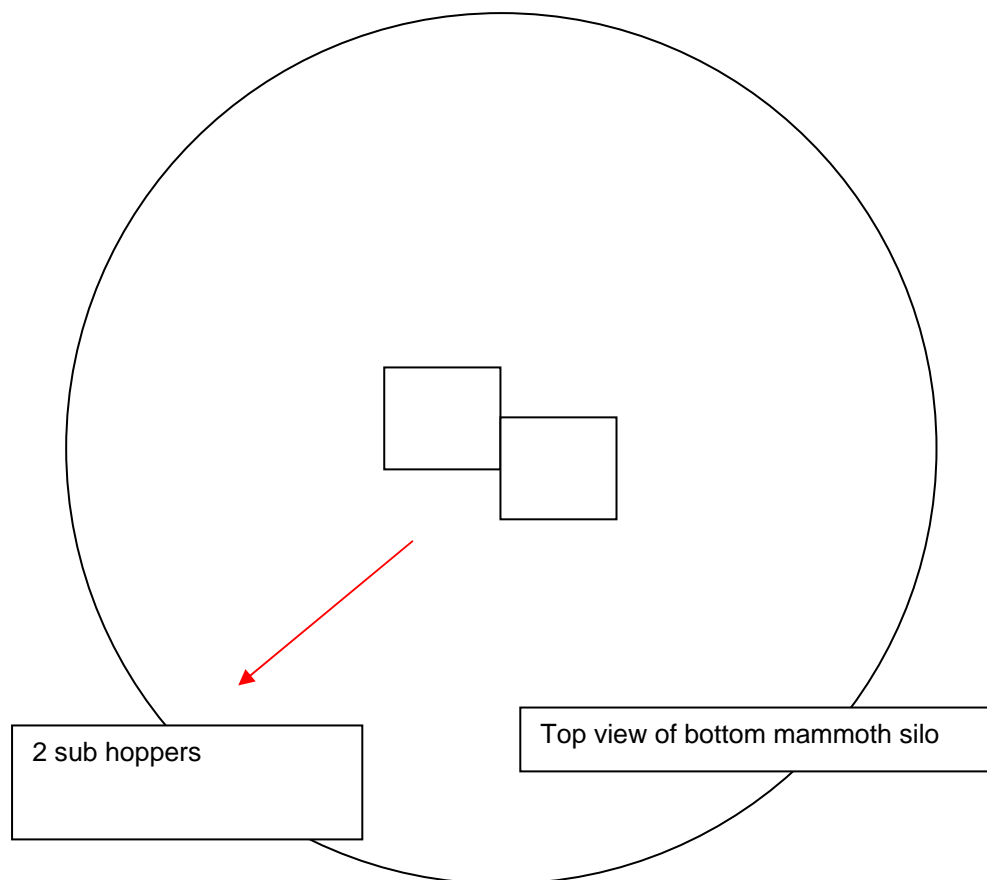
Max fill height 40 metres
Diameter 50 metres



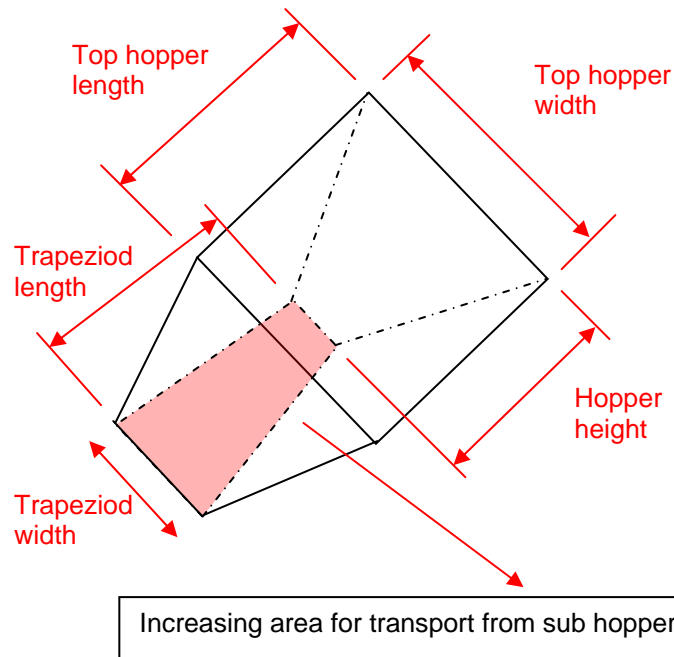
I already calculated pressures, minimum outlet diameter of the mammoth silo and minimum required material channel diameter.

minimum required material channel diameter = +/- 4,4 metres.

I suppose I will get a configuration like below, because the diameter will most likely be too big to fit in 1 hopper with 1 feeder.



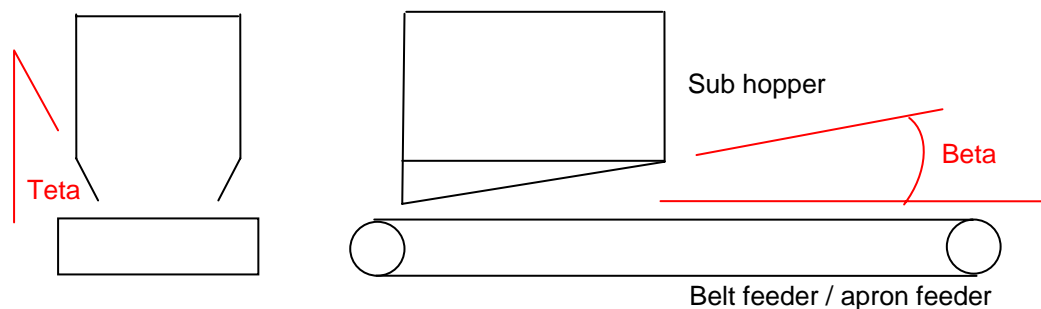
Drawing of the sub hopper (2 needed) :



Unknowns :

- Top hopper length
- Top hopper width
- Trapezoid length
- Trapezoid width (common : $3 \times \text{width} = \text{length}$)
- Hopper height
- Angle alpha which makes the trapezoid going more narrow

Another option might be to use an inclination at the trapezoid outlet (Beta) to increase the effective area to the feeder, like in the picture below (front view + side view) :



In this case the the new unknowns to be determined are :

- Height , Width of the sub hopper
- Angle Beta
- Angle Teta