**Facit Classroom exercise 2.**

**Task 2.1 Stratified flow**

1. **Height of the liquid layer**

With D=0.2m and 20% liquid content measured by vertical ray, the height of the liquid layer should be: hL=0.2x0.2=0.04m

1. **Liquid holdup**

From compendium:



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**Script**

clear

d=0.2; %diameter

r=d/2;

hl=0.04;

angle=2\*acos(1-hl/r)

yl=1/pi\*(angle/2-cos(angle/2)\*sin(angle/2))