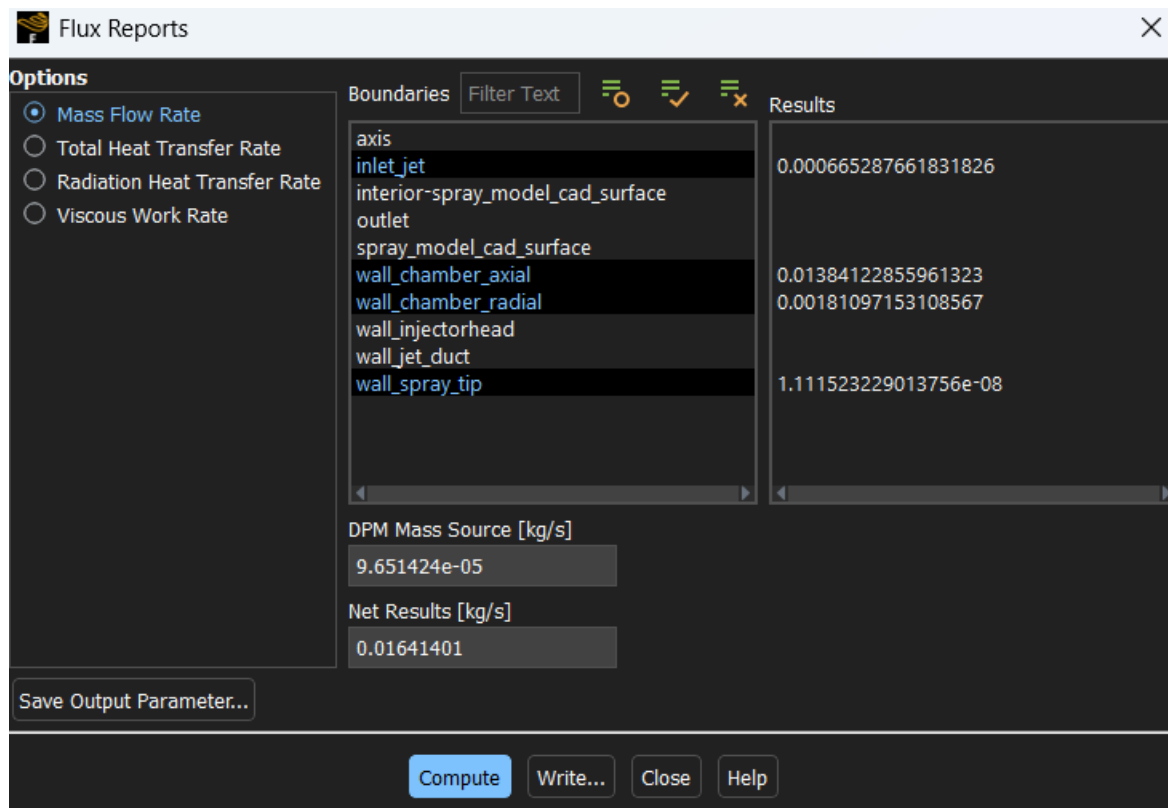


A12 - DPM modeling

Name: Aditya Nilesh Dhamne

Roll No.: 24M0011

Flux Reports

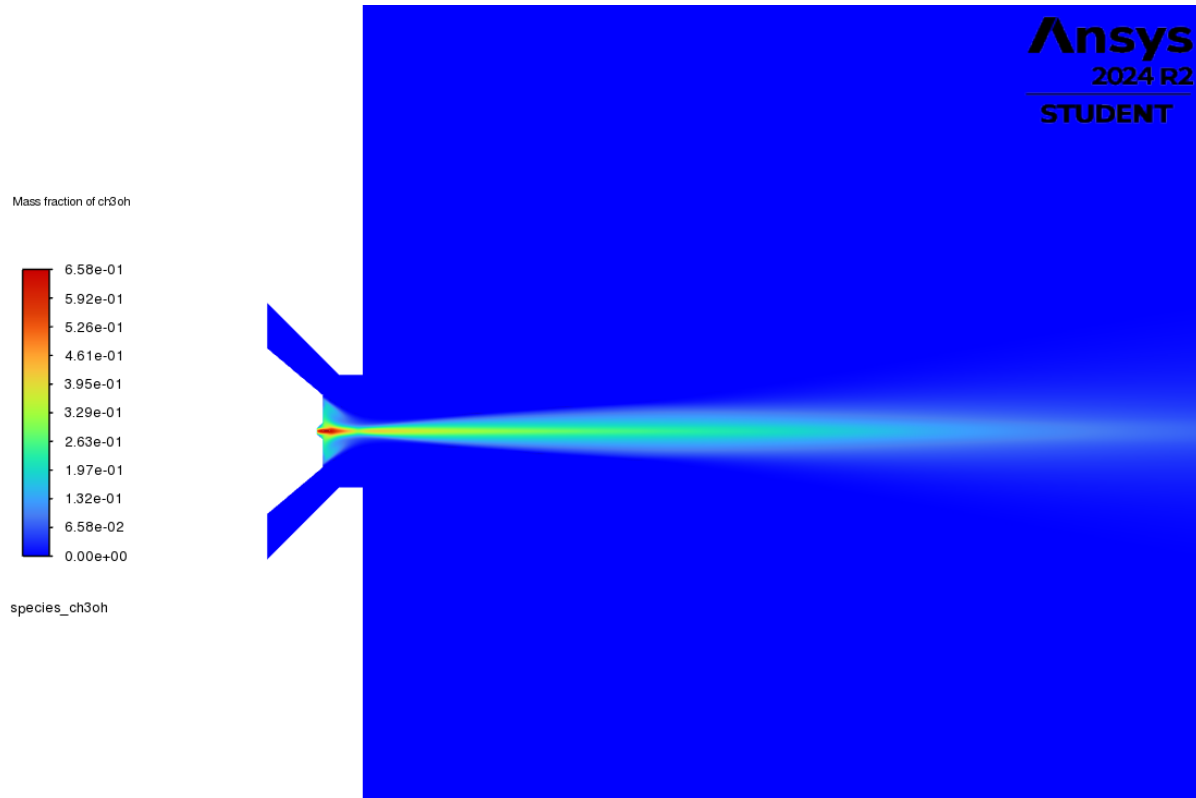


The image shows a software window titled "Flux Reports" with a close button (X) in the top right corner. The window is divided into several sections:

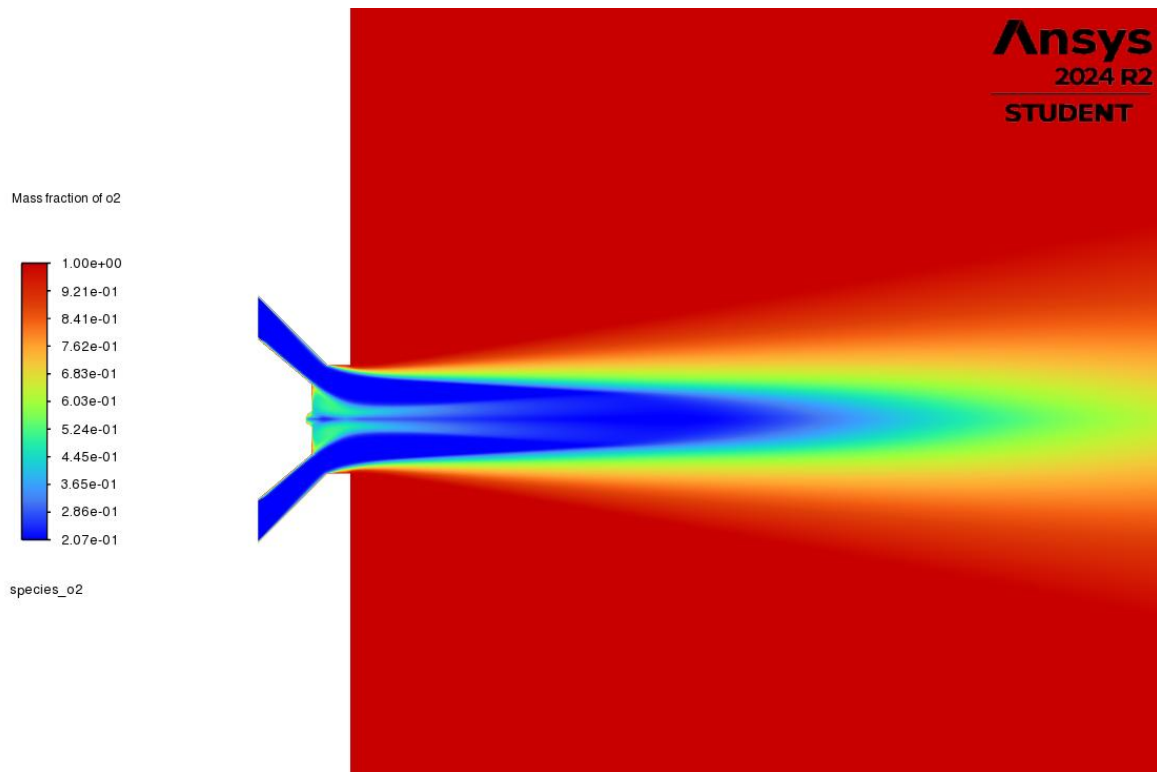
- Options:** A list of four radio buttons: "Mass Flow Rate" (selected), "Total Heat Transfer Rate", "Radiation Heat Transfer Rate", and "Viscous Work Rate".
- Boundaries:** A list of boundaries with a "Filter Text" input field above it. The boundaries listed are: axis, inlet_jet, interior-spray_model_cad_surface, outlet, spray_model_cad_surface, wall_chamber_axial, wall_chamber_radial, wall_injectorhead, wall_jet_duct, and wall_spray_tip.
- Results:** A table showing the results for the selected boundaries. The values are: 0.000665287661831826 for inlet_jet, 0.01384122855961323 for wall_chamber_axial, 0.00181097153108567 for wall_chamber_radial, and 1.111523229013756e-08 for wall_spray_tip.
- DPM Mass Source [kg/s]:** A text box showing the value 9.651424e-05.
- Net Results [kg/s]:** A text box showing the value 0.01641401.
- Buttons:** A "Save Output Parameter..." button is located at the bottom left. At the bottom center, there are four buttons: "Compute" (highlighted in blue), "Write...", "Close", and "Help".

Boundary	Results
axis	
inlet_jet	0.000665287661831826
interior-spray_model_cad_surface	
outlet	
spray_model_cad_surface	
wall_chamber_axial	0.01384122855961323
wall_chamber_radial	0.00181097153108567
wall_injectorhead	
wall_jet_duct	
wall_spray_tip	1.111523229013756e-08

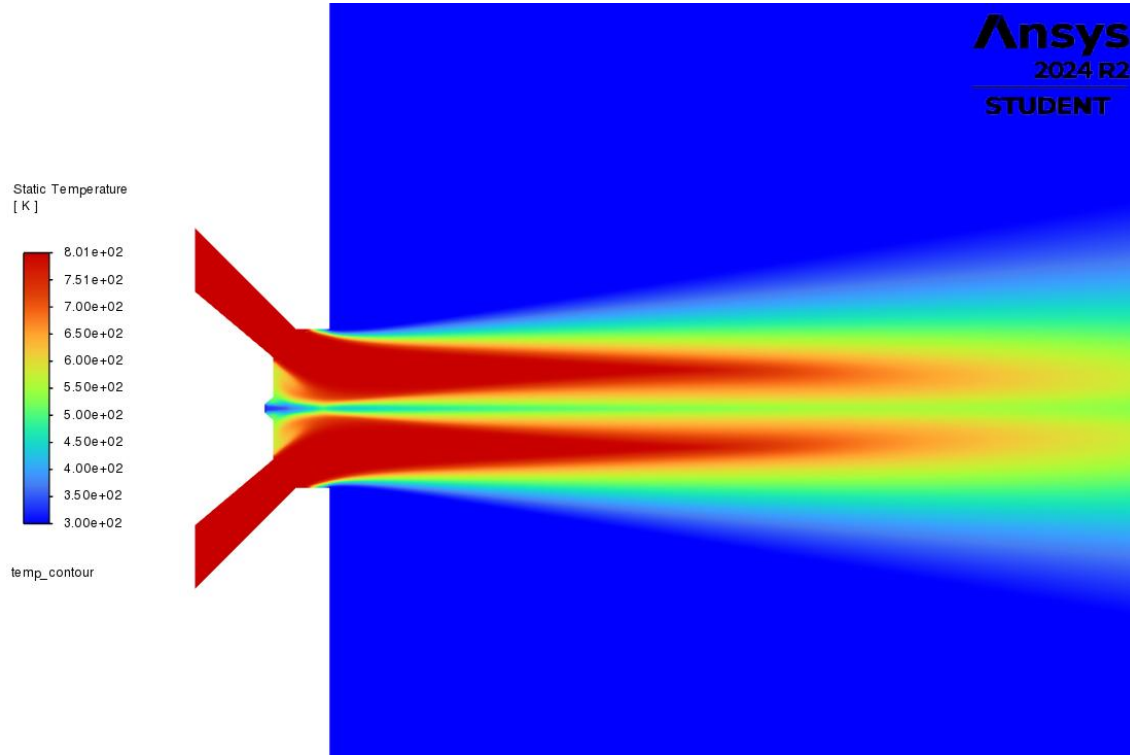
Mass Fraction of ch3oh:



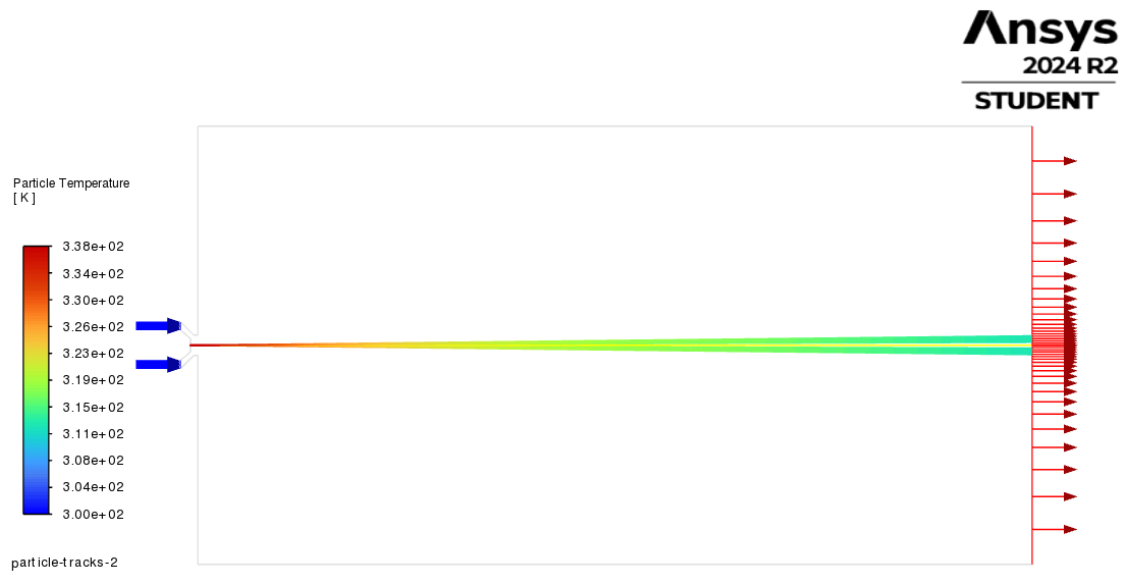
Mass Fraction of o2:



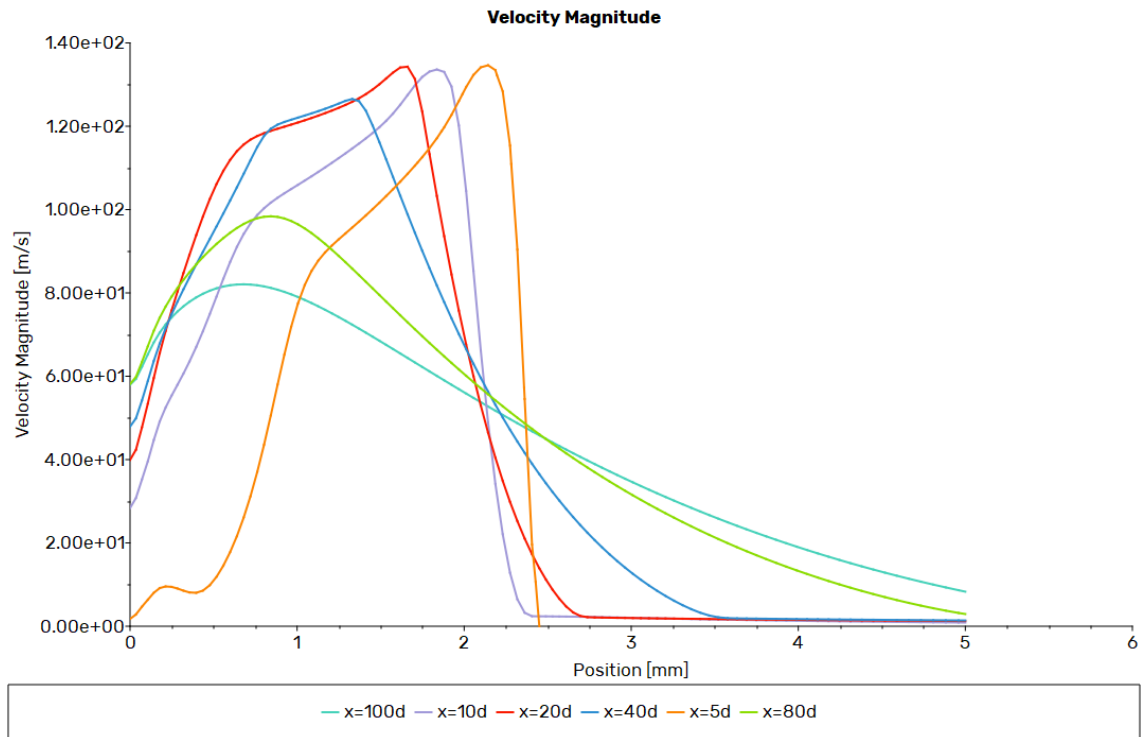
Temperature Contour



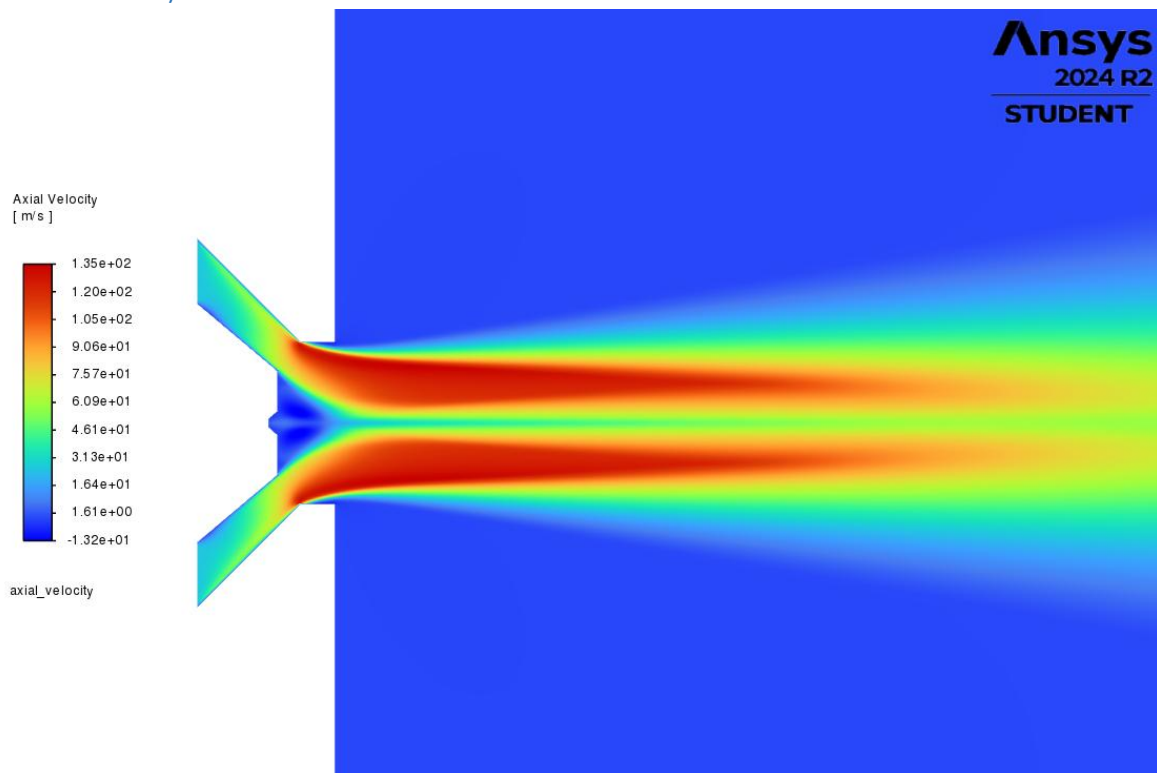
Particle Temperature:



Velocity at different x/D locations:

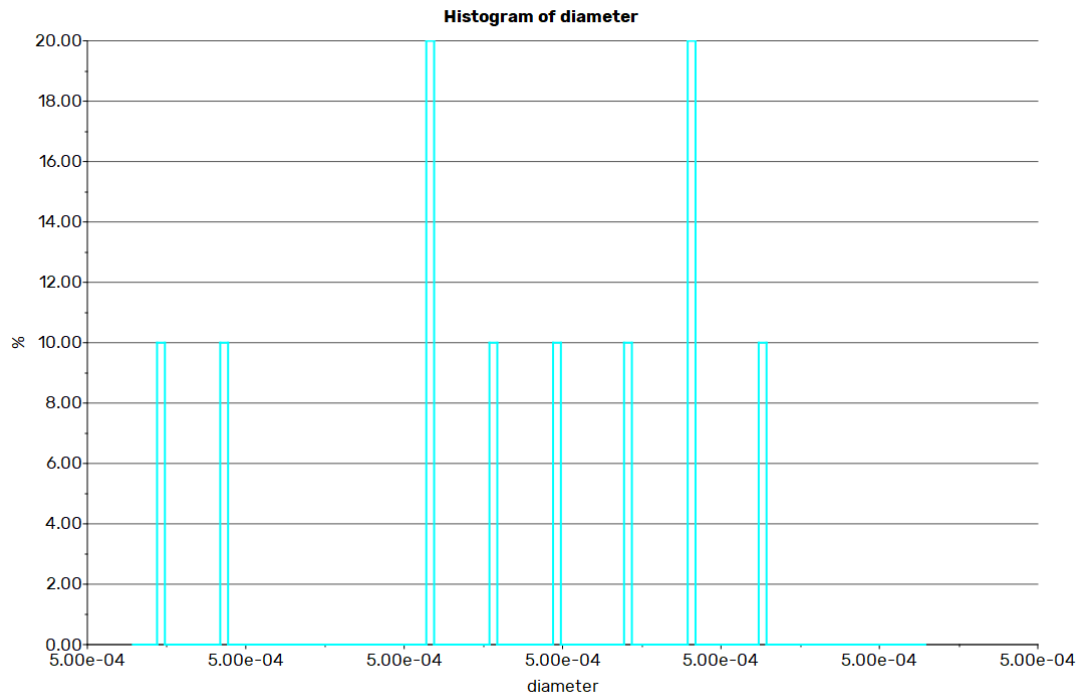


Axial Velocity:

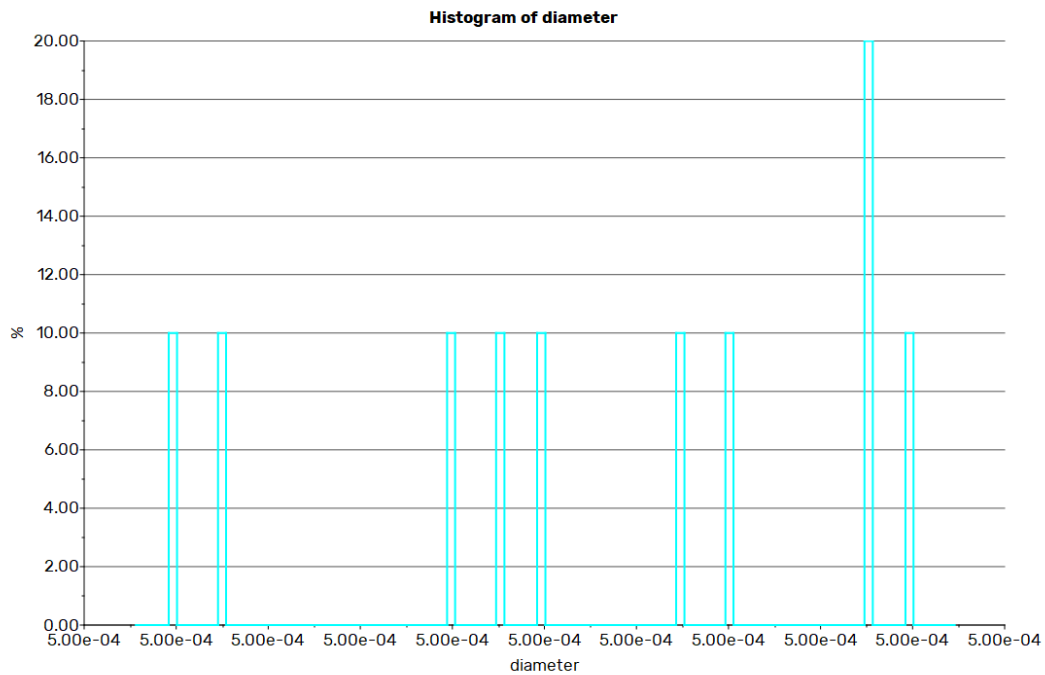


Histograms:

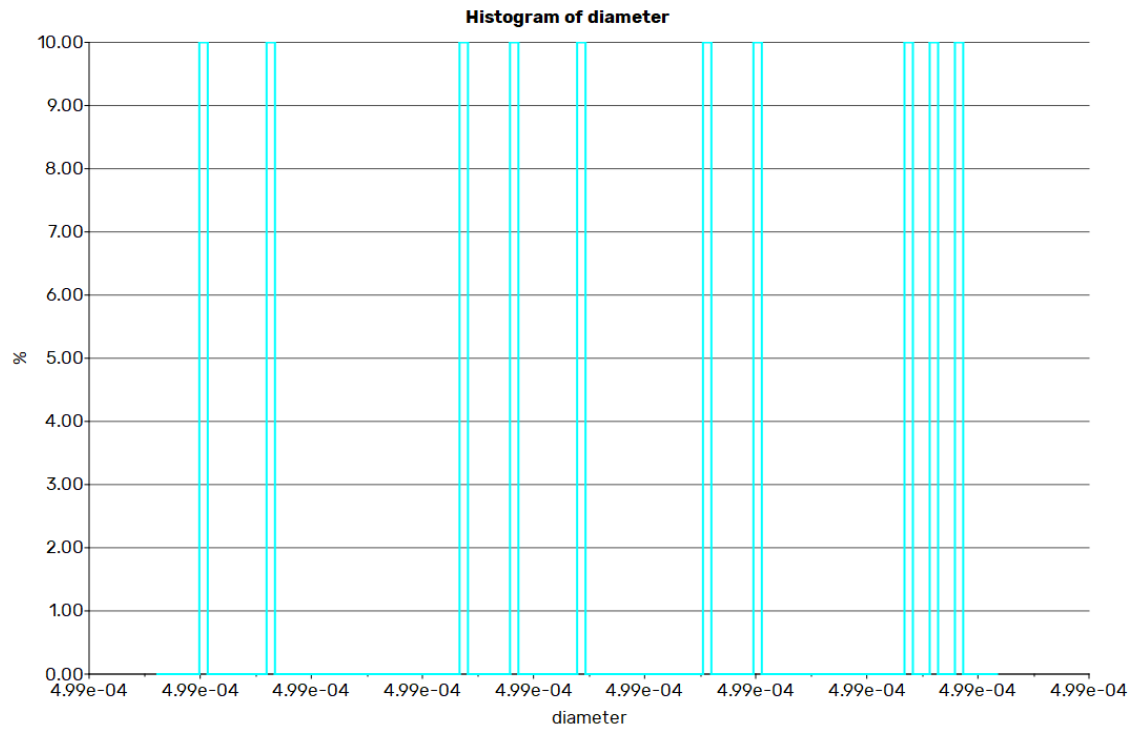
$X = 5D$:



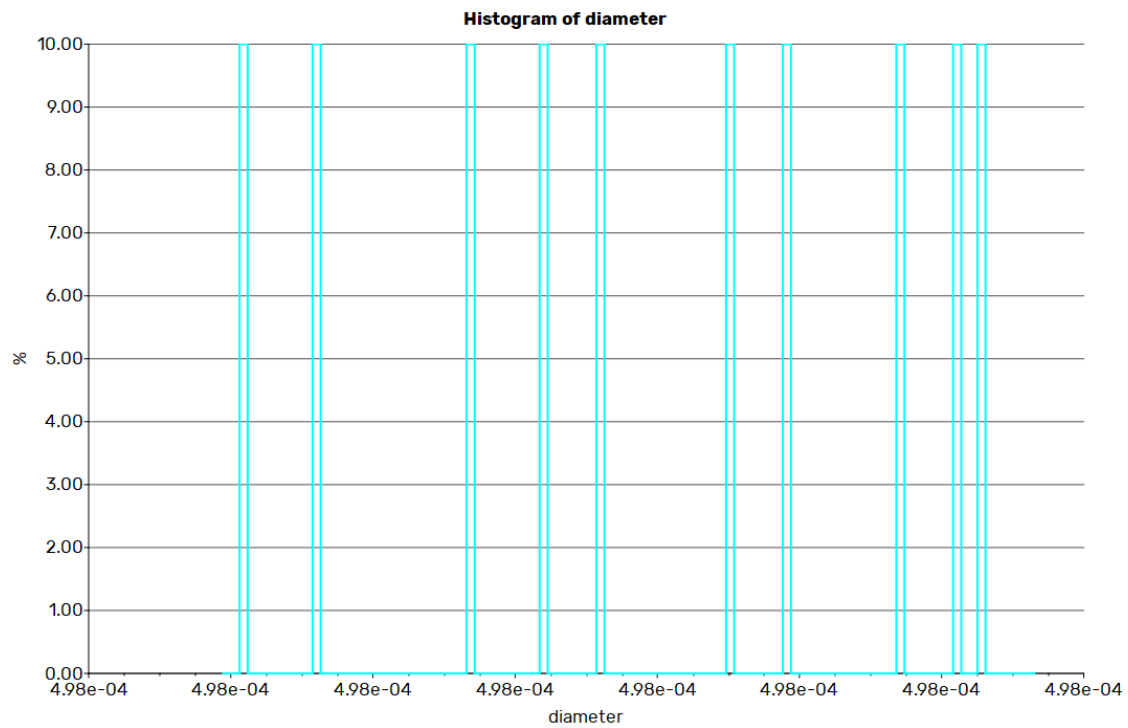
$X = 10D$:



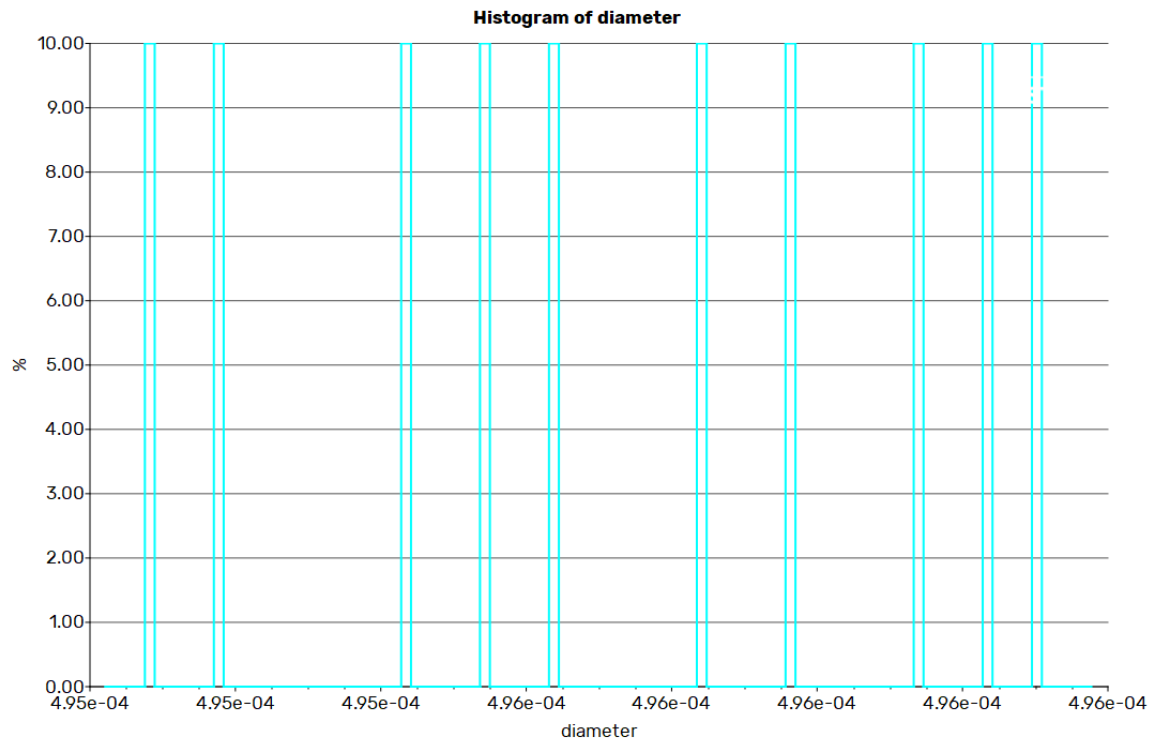
$x = 20D$:



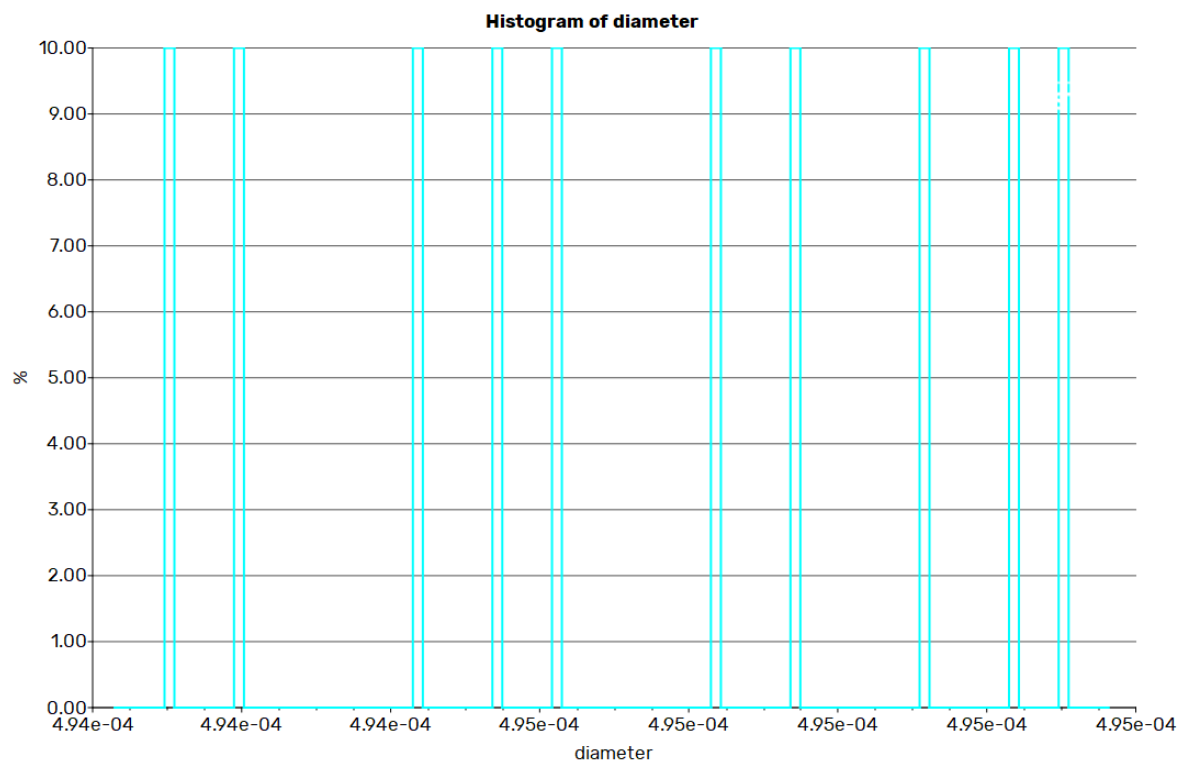
$X = 40D$:



X = 80D:



x = 100D:



Outlet:

