**Compiled Results**

For different values of core density probability (cd), porosity (phi) and generation probability (ps), synthetics networks were generated using the QSGS algorithm.

Outputs corresponding to different cd values at phi = 0.45 and ps = 0.02

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| --- | --- | --- |
| cd_0.02 | cd_0.05 | cd_0.1 |

Outputs corresponding to different phi values at cd = 0.01 and ps = 0.02

|  |  |  |
| --- | --- | --- |
| phi_0.40 | phi_0.45 | phi_0.50 |

Outputs corresponding to different ps values at phi = 0.45 and cd = 0.05

|  |  |  |
| --- | --- | --- |
| cd_0.05 | ps_0.05 | ps_0.1 |

Here, cd - core density distribution probability

Phi - porosity

Ps - generation probability

Synthetic generated using QSGS algorithm were used as input in Network extraction algorithm with element spacing 0.000001 and 0.000000001

dx - element spacing used in pnextract

Output of pnextract was used as input for openpnm and following histograms were obtained

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| --- |
| dx = 0.000000001 |
| cd = 0.1 phi = 0.45 and ps = 0.02 |
| Total Number of pores before trimming 46  Number of conected pores after trimming: 46 |
| cd_0.1_Reshaped_array_throat_length |
| cd_0.1_Reshaped_array_Pore_radius |
| cd_0.1_Reshaped_array_throat_radius |
| cd_0.1_Reshaped_array_Coordination_number |
| cd = 0.02 phi = 0.45 and ps = 0.02 |
| Total Number of pores before trimming 3333  Number of conected pores after trimming: 3333 |
| cd_0.02_Reshaped_array_Pore_radius |
| cd_0.02_Reshaped_array_throat_radius |
| cd_0.02_Reshaped_array_throat_length |
| cd_0.02_Reshaped_array_Coordination_number |
| cd = 0.05 phi = 0.45 and ps = 0.02 |
| Total Number of pores before trimming 499  Number of conected pores after trimming: 499 |
| cd_0.05_Reshaped_array_Pore_radius |
| cd_0.05_Reshaped_array_throat_radius |
| cd_0.05_Reshaped_array_throat_length |
| cd_0.05_Reshaped_array_Coordination_number |
| phi = 0.40 at cd = 0.01 and ps = 0.02 |
| Total Number of pores before trimming 4442  Number of conected pores after trimming: 4442 |
| phi_0.40_Reshaped_array_Pore_radius |
| phi_0.40_Reshaped_array_throat_radius |
| phi_0.40_Reshaped_array_throat_length |
| phi_0.40_Reshaped_array_Coordination_number |
| phi = 0.45 at cd = 0.01 and ps = 0.02 |
| Total Number of pores before trimming 5755  Number of conected pores after trimming: 5755 |
| phi_0.45_Reshaped_array_throat_length |
| phi_0.45_Reshaped_array_throat_length |
| phi_0.45_Reshaped_array_throat_radius |
| phi_0.45_Reshaped_array_Coordination_number |
| phi = 0.50 at cd = 0.01 and ps = 0.02 |
| Total Number of pores before trimming 7697  Number of conected pores after trimming: 7697 |
| phi_0.50_Reshaped_array_throat_length |
| phi_0.50_Reshaped_array_Pore_radius |
| phi_0.50_Reshaped_array_throat_radius |
| phi_0.50_Reshaped_array_Coordination_number |
| ps = 0.1 at phi = 0.45 and cd = 0.05 |
| Total Number of pores before trimming 303  Number of conected pores after trimming: 303 |
| ps_0.1_Reshaped_array_throat_length |
| ps_0.1_Reshaped_array_Pore_radius |
| ps_0.1_Reshaped_array_throat_radius |
| ps_0.1_Reshaped_array_Coordination_number |
| ps = 0.05 at phi = 0.45 and cd = 0.05 |
| Total Number of pores before trimming 322  Number of conected pores after trimming: 322 |
| ps_0.05_Reshaped_array_throat_length |
| ps_0.05_Reshaped_array_Pore_radius |
| ps_0.05_Reshaped_array_throat_radius |
| ps_0.05_Reshaped_array_Coordination_number |

dx = 0.000000001

|  |
| --- |
| phi45cd001ps1\_Reshaped\_array |
| Number of pores before trimming 2360  Number of pores after trimming: 2360 |
| phi45cd001ps1_Reshaped_array_Pore_radius |
| phi45cd001ps1_Reshaped_array_throat_length |
| phi45cd001ps1_Reshaped_array_throat_length |
| phi45cd001ps1_Reshaped_array_throat_length |