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# Simulation algorithm for operation processes in pipelines of intricate spatial configuration and its software implementation

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*Modern software used to calculate hydrodynamics and heat and mass transfer allows writing user software to automate numerical calculations. The authors propose the term "virtual booth", which describes an algorithm to build such software and its code. This article describes an algorithm to automate the simulation of thermal-hydraulic processes in pipelines of intricate spatial configuration, and the procedure features of developing the appropriate software in STAR-CD 4.16 software package by applying JAVA programming language.*

**Keywords:** pipelines, algorithm, automation, Star-CD, Java.

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