Condensation of Moist Air in Heat Exchanger Using CFD

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Abstract : This work presents results of moist air condensation in heat exchanger. It describes theoretical knowledge and definition of moist air. Model with geometry of square canal was created for better understanding and post processing of condensation phenomena. Different approaches were examined on this model to find suitable software and model. Obtained knowledge was applied to geometry of real heat exchanger and results from experiment were compared with numerical results. One of the goals is to solve this issue without creating any user defined function in the applied code. It also contains summary of knowledge and outlook for future work.

Keywords : condensation, exchanger, experiment, validation

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