Dynamic Simulation of Brazed Plate-Fin Heat Exchangers

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ABSTRACT

In this paper a dynamic simulator of Brazed Plate-Fin Heat Exchangers (PFHE) ProSecTM is presented. A rigorous model is used which allows one to represent the very broad range of configurations for this kind of equipment. A DAE solver (DISCo) is used with a sparse direct solver (MA38) to handle the large number of equations. Applications for control and design are highlighted through an industrial case study involving shutdown.