



# HEAT EXCHANGER LIBRARY



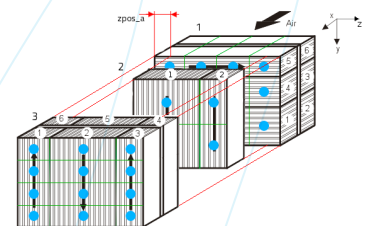
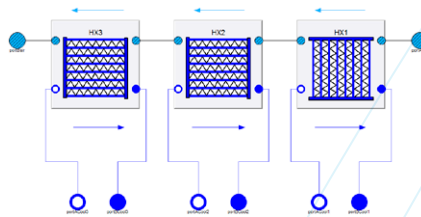
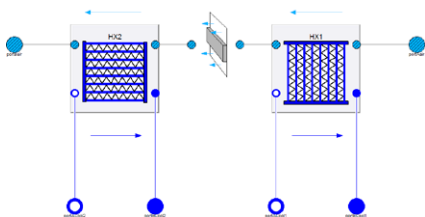
- Geometry-based heat exchanger design and stacking Integration of detailed, geometry based heat exchanger models in cooling and heating system models.

**H**eat Exchanger Library is targeted to heat exchanger design, dimensioning, and stacking. The Heat Exchanger Library contains flat tube heat exchanger models supporting several flat tube and louvered fin designs. The models accounts for effects of inhomogeneous air flow and temperature distribution and it is possible to model heat exchanger stacking along the air flow path.

The library is suitable for studying the effects of heat exchanger dimensioning and positioning on cooling performance. Heat Exchanger Library has native interfaces to Air Conditioning Library, Vapor Cycle Library, and Liquid Cooling Library for complete thermal management design. The models can be coupled to CFD-derived boundary conditions on the air side, bridging the gap between CFD and system simulations.

## KEY FEATURES

- Geometry based heat exchanger models for system simulations
- Friction and heat transfer models for louvered fin designs
- Captures effects of inhomogeneously distributed inlet air flow
- Coupling to CFD data
- Modeling of heat exchanger stacks with different heat exchanger geometries, sizes and positioning



**Modelon**