

Thermal-Fluid System Modeling and Analysis

The AxSTREAM® Advantage

Flexible program that can be used in conjunction with other AxSTREAM® modules or as a standalone program successfully.

Multidisciplinary program that can be used to model both turbomachinery and non-turbomachinery systems.

Extremely cost-competitive compared to similar programs.

Global technical support by more than 75 engineers.

Streamlined user-interface makes learning a nonissue.

Constant updates are being added, and new features can also be integrated upon request.

Process Automation and Autonomy via AxSTREAM ION™ and AxSTREAM.AI™.

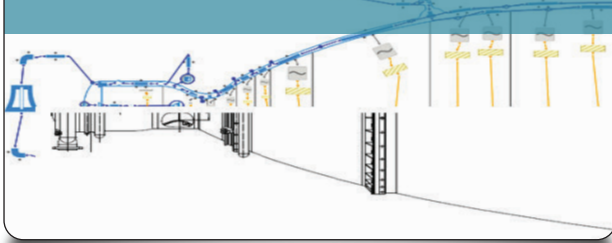
Software | Consulting Services | Training

AxSTREAM NET™ was developed to model thermal fluid networks in an intuitive interface that provides users with fast and accurate analysis results. Its flexible drag and drop component library allows users to create any hydraulic and/or heat transfer system.

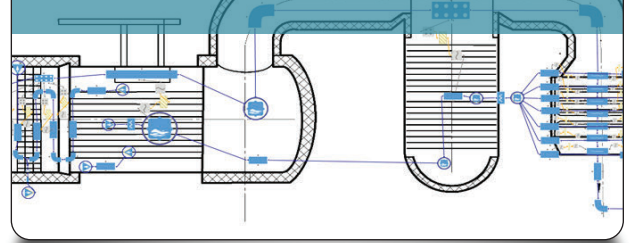
- Simulate secondary flows and heat transfer at steady and unsteady (transient) conditions.
- 3D geometry is not required, and analyses can be performed before any designs are finalized.
- 1D system modeling means less time spent performing calculations and less required processing power.
- An unlimited number of configurations can be created from the expansive components library.
- Available fluids include ideal gasses, customized mixtures, compressible and incompressible fluids, and NIST RefProp fluids like sCO₂ as well as other fluid databases.
- Customizable capabilities thanks to scripting.
- Processing abilities:
 - Simulate a wide range of components from bearing to gas turbines and rotor cavities in one massive library.
 - Automatic report generation for each analysis.
 - Data exchange with other software, and can run in batch mode.

AxSTREAM NET™ Applications

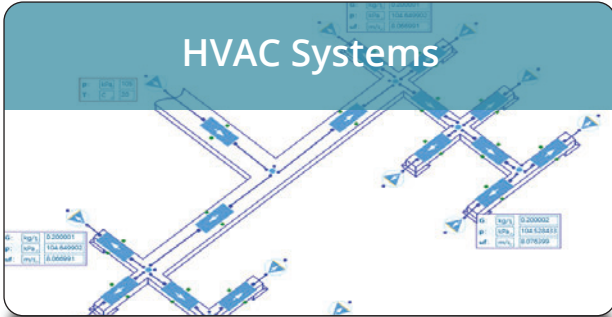
Rocket Nozzles



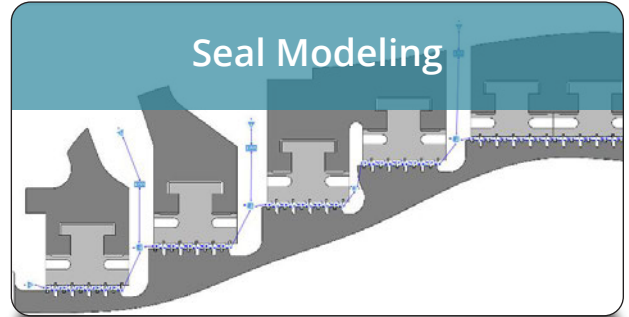
Boiler Systems



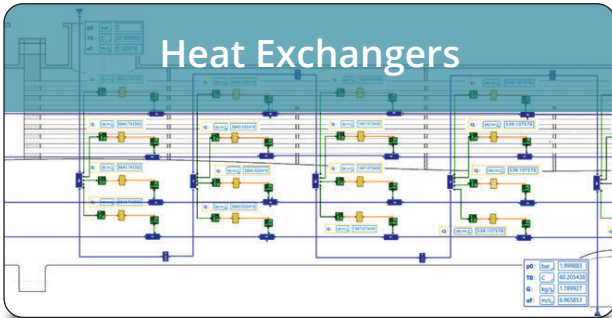
HVAC Systems



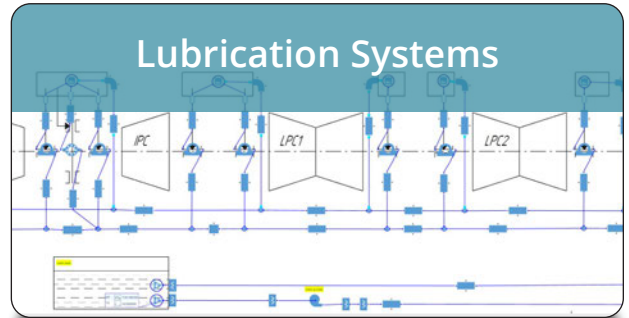
Seal Modeling



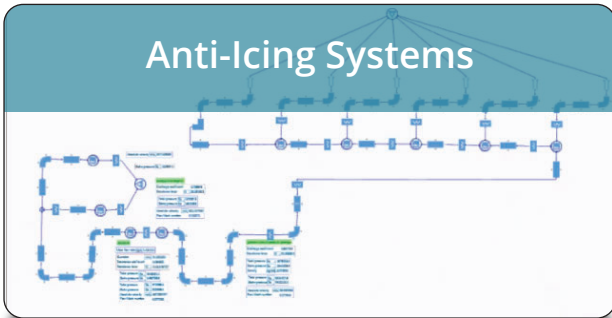
Heat Exchangers



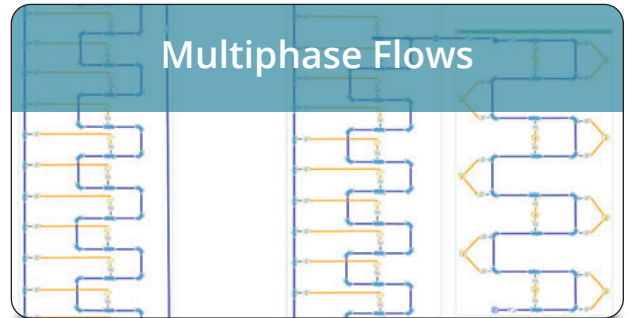
Lubrication Systems



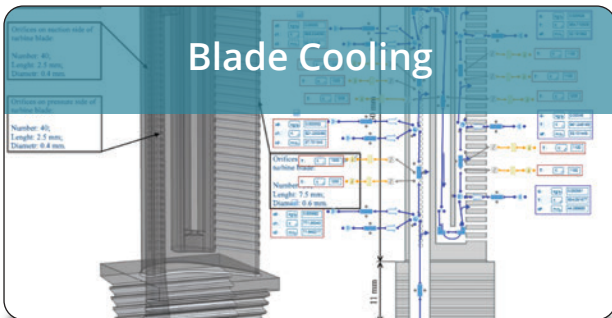
Anti-Icing Systems



Multiphase Flows



Blade Cooling



Secondary Flows

