





Selection of Fluids for Heat Transfer Applications

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Motivation and Context



- Resulting from the increasingly need for an optimal energy use, heat transfer mechanisms are being widely studied.
- Many new fluids have been studied and their properties described.

• A tool that helps us select a fluid, for each work condition, is, therefore, needed





• Study the properties that influence the fluid's heat transfer the most

Optimize fluid choice for different applications

• Evaluate the implications of ethylene glycol's deterioration for heat transfer application (in collaboration with a company)

Project Timeline

| Gather information | Start collecting data for Steady State | Numeric Simulations, compute results for Unsteady State | Analyze how ethylene glycol's deterioration affects heat transfer |
|-----------------------|--|---|---|
| STAGE 01 | STAGE 02 | STAGE 03 | STAGE 04 |
| | | | |







Thank You

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