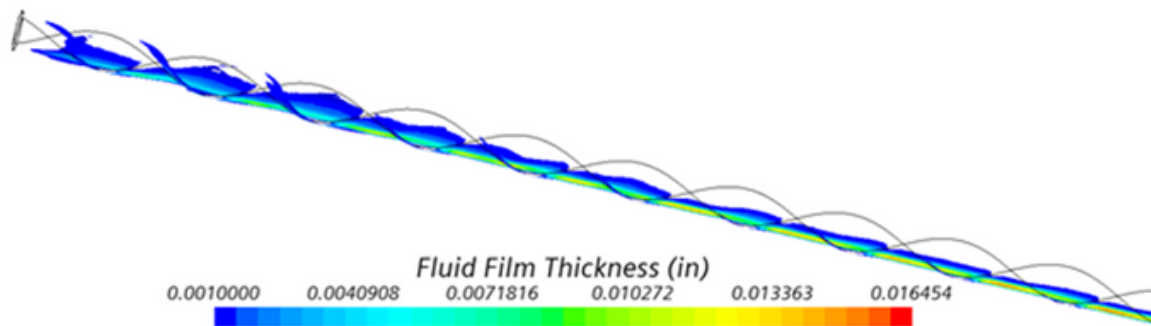

Toward Optimal Secondary Furnace Heat Exchanger: Modeling of Furnace Combustion Gas Condensation

Project Number 21-02



PROJECT TEAM:

Students: Hyunjin Park;
Faculty: Aaron Alexander,
Christian Bach

Goal

Develop predictive lookup tables and correlations for heat transfer and condensation in furnace secondary heat exchangers

Outcomes/Deliverables

This project will deliver:

1. a lookup table of heat transfer value for a range of tube diameters, inlet temperatures and mass flow rates, and trubulator twists;
2. correlations for heat transfer and condensation developed from the lookup tables