Release Notes

INSTED Ver. 8.3.1

TTC TECHNOLOGIES, INC.

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Release Features

INSTED Ver. 8.3.1

The latest version of INSTED (Ver. 8.3.1) includes the following bug fixes and enhancements to INSTED 8.3.

Bug Fixing for Plate-Fin Solver

- For Plate-Fin module in INSTED 8.3, when one stream using REFPROP fluid and the other stream using user-defined custom fluids, the custom fluids data cannot be correctly interpolated by INSTED solver and the following error message will be shown:

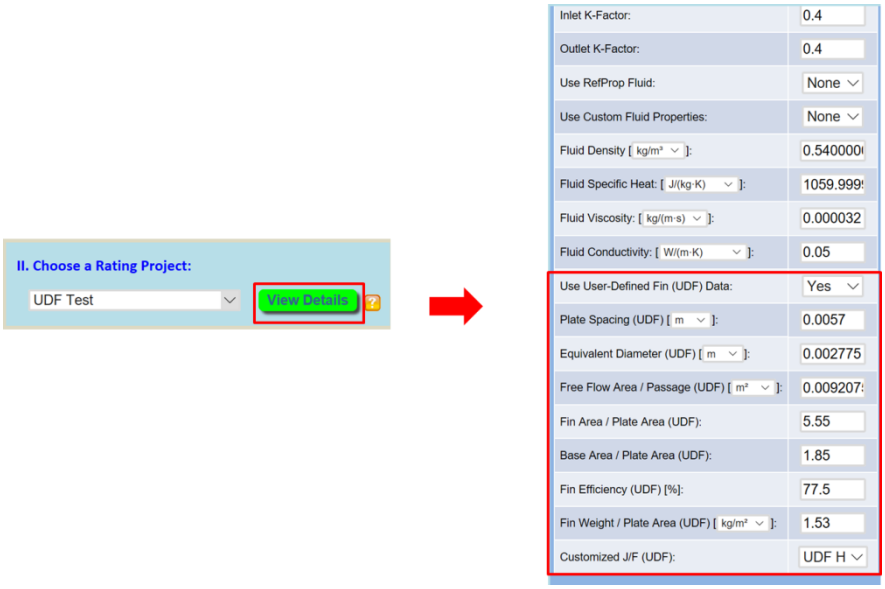
  This bug has been fixed in INSTED 8.3.1.

Bug Fixing for INSTED UI

- In INSTED 8.3, when exporting a plate-fin rating/sizing/optimization project with user-defined fin data into a XML project file, the user-defined fin data will be missing in the exported project file. This bug has been fixed in INSTED 8.3.1.
- In INSTED 8.3, user-defined custom J/F data can be deleted in the “Project Management” even when the J/F data is being used for an existing plate-fin rating project as a part of user-defined fin data. Accidently delete this J/F data will make the rating project failed to compute. In INSTEAD 8.3.1, this bug has been fixed in INSTED 8.3.1.
- In INSTEAD 8.3, when deleting multiple projects in “Project Management”, the last checked project will not been deleted. This bug has been fixed in INSTED 8.3.1.

Enhancement for INSTED UI

- For Plate-Fin multiple rating, sizing, and optimization modules In INSTED 8.3.1, user can directly input/change user-defined fin data for the reference rating project by clicking “View Details” button, as shown in the following picture:


II. Choose a Rating Project:
UDF Test
View Details
Inlet K-Factor: 0.4
Outlet K-Factor: 0.4
Use RefProp Fluid: None
Use Custom Fluid Properties: None
Fluid Density [kg/m³]:
Fluid Specific Heat: [J/(kg·K)]:
Fluid Viscosity: [kg/(m·s)]:
Fluid Conductivity: [W/(m·K)]: 0.05
Use User-Defined Fin (UDF) Data: Yes
Plate Spacing (UDF) [m]: 0.0057
Equivalent Diameter (UDF) [m]: 0.002775
Free Flow Area / Passage (UDF) [m²]:
Fin Area / Plate Area (UDF): 5.55
Base Area / Plate Area (UDF): 1.85
Fin Efficiency (UDF) [%]: 77.5
Fin Weight / Plate Area (UDF) [kg/m²]: 1.53
Customized J/F (UDF): UDF H