

Thermoeconomic Analysis Toolbox

Version 1.8 (R2024b) 01-Oct-2025

TaesLab Base Funtions

Read Data Models

Function	Description
ValidateModelTables	Validate the table data model files
ReadDataModel	Read a data model file.
CopyDataModel	Creates a copy of a data model file in another format.
ImportDataModel	Get a cDataModel object from a previous saved MAT file.
ImportData	Import external data to a cTableData from CSV or XLSX files.

Get Thermoeconomic Results

Function	Description
ThermoeconomicModel	Creates a cThermoeconomicModel object from a data model file.
ProductiveStructure	Get the productive structure of the plant.
ProductiveDiagram	Get the productive diagrams of the plant.
ExergyAnalysis	Get the exergy analysis for a plant state.
ThermoeconomicAnalysis	Perform the termoeconomic analysis of a plant state.
ThermoeconomicDiagnosis	Compare two states of the plant and make a thermoeconomic diagnosis
WasteAnalysis	Waste recycling analysis of one state of the plant.
DiagramFP	Get the FP diagrams for a plant state.
SummaryResults	Get the summary results of the plant.

Save Results Tables

Function	Description
SaveResults	Save the results tables into a file
SaveSummary	Save the summary results into a file.
SaveDataModel	Save the data model tables into a file.
SaveTable	Save a table content into a file.

Display Results

Function	Description
ListResultTables	List the results tables and their properties.
ShowResults	Display the results tables in different formats.
ShowTable	Display an individual table.
ShowGraph	Display the graph associated with a results table.
ExportResults	Export the results tables in different formats.

GUI functions

Function	Description
TaesLab	TaesLab main MATLAB app
TaesTool	Compatible user interface for Matlab/Octave.
TaesPanel	Graphical user interface for selecting thermoeconomic model parameters.
ResultsPanel	Graphical user interface for displaying results interactively.
ViewResults	MATLAB app for displaying results tables.