CompuTrace® Design Suite
QUICK START GUIDE

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CompuTrace® Design Suite

QUICK START GUIDE

Introduction

Welcome to the new and improved CompuTrace Design Suite. Follow the quick start guide to begin creating electrical heat tracing circuits for piping. Thermon has set the standard in heat tracing design software with the ability to include multiple segments into one connection. CompuTrace Design Suite is now available worldwide.
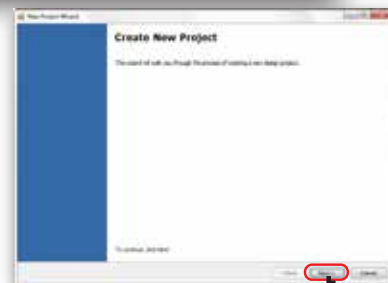
Starting a New Project
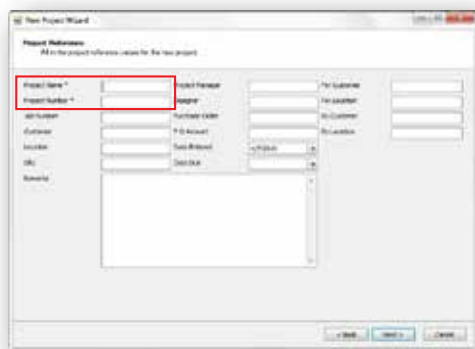
Thermon
CompuTrace
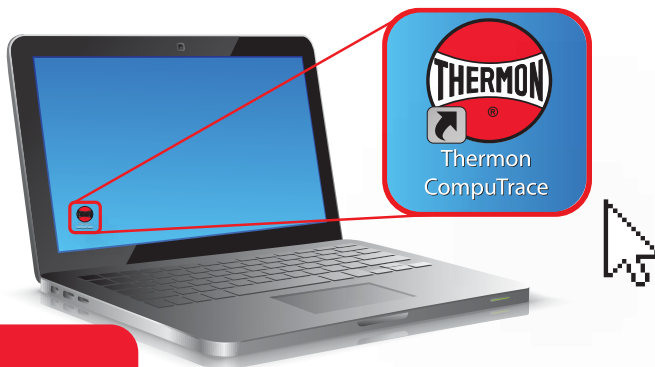
Step 1:
Open CompuTrace
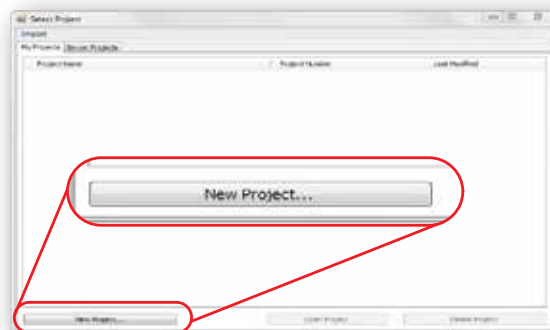
Step 2:
Create a new project

To continue, click next

Step 3:
Complete the 2 mandatory project reference input boxes, "project name" and "project number"

Tip:
Use a unique project name and project number for each project.

Project Name *   Crude Oil Transfer Line
Project Number *   TMC0001
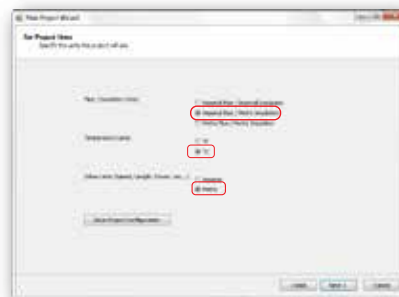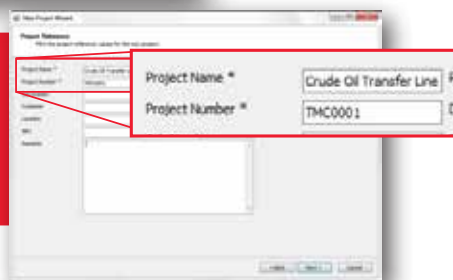
Step 4:
Set project units as Imperial or Metric. This cannot be changed once you have started a project.
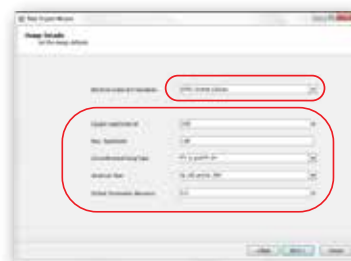
Step 5:
Input design defaults. Set electrical codes and standards with other project defaults that stay with each project.

New project has been created

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Getting Started

Introducing a new interface to reflect a new and improved approach. The screen is divided into four logical areas: Circuit Manager, Segment Definition, Circuit, and Segment.

1. CompuTrace® Window Overview

Circuit Manager

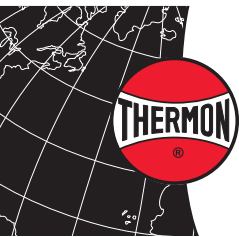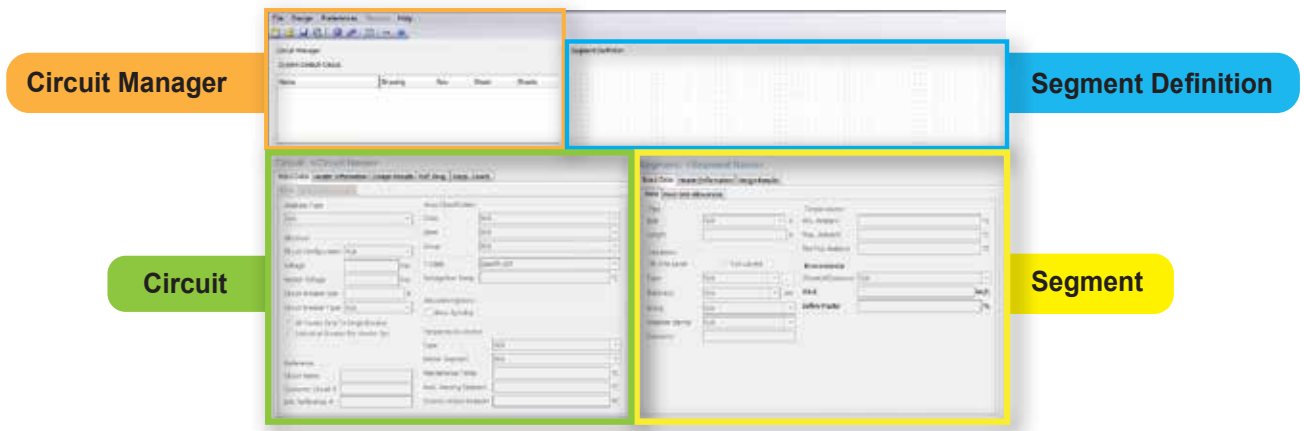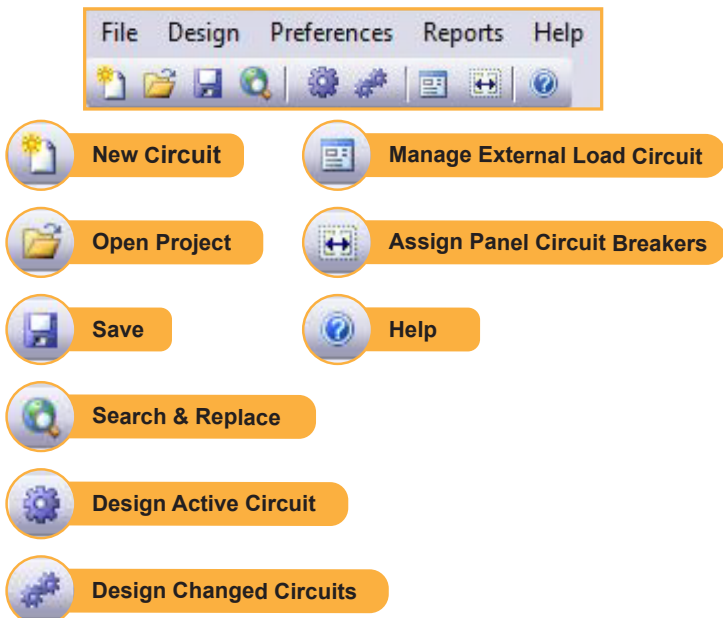**Segment Definition**

Circuit

Segment

2. Circuit Manager Window

Located at the top of the Circuit Manager Window, The Toolbar Menu controls much of the organization related to the project.

File   Design   Preferences   Reports   Help

New Circuit

Manage External Load Circuit

Open Project

Assign Panel Circuit Breakers

Save

Help

Search & Replace

Design Active Circuit

Design Changed Circuits

3. Starting A New Circuit

Starting A New Circuit

Select the "New Circuit" button at of the toolbar menu to begin any circuit.

Right clicking icon allows you to create a default circuit, delete a circuit, design circuit, add a connections, etc.

Name	Drawing	Rev	Sheet	Sheets
Circuit 1				

Design Circuit
Add Connection
Make Default Circuit
Copy Circuit
Delete Circuit
Generate Bill of Materials
Class I Div 1 Checklist
failed: Single Segment Report and BoM
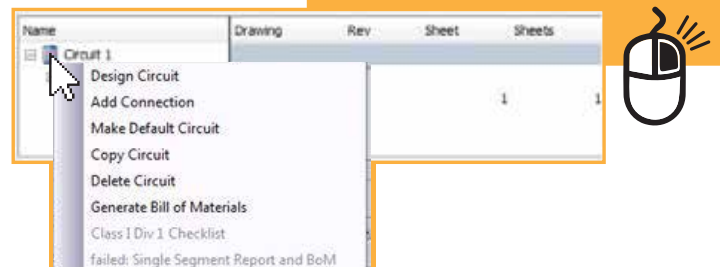
4. Segment Definition Window

Used to define the segments that make up the circuit. Right clicking on the nodes (interactive boxes) can add new segments or re-define existing ones. This window is where you will see a graphic representation of the circuit and see the components associated to it.
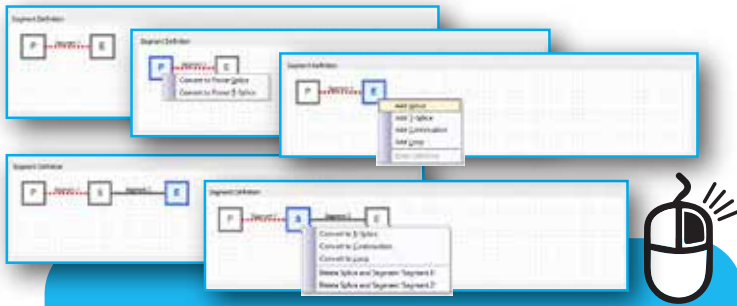
To interact with elements in the Segment Definition Window, Right Click and add to your circuit.
To auto-arrange the content, right click in the open space and select "auto-arrange.

Use your mouse to drag and select elements inside the Segment Definition Window. This allows you to copy, delete, and move the segment to a new circuit.

5. Circuit Window

All inputs that effect the entire circuit or connection are on this corner of the screen. Analysis type, voltage, breaker size/type, control methods are examples of inputs that cannot vary by segment

The Heater Information tab contains the variables that define a connection. Pipe type, exposure or max product temperatures, and heater types are examples of connection level variables.

6. Segment Window

Input values associated with each segment. The values can change between the multiple segments. Pipe size/length, Insulation specifications, ambient conditions are examples of segment level variables.
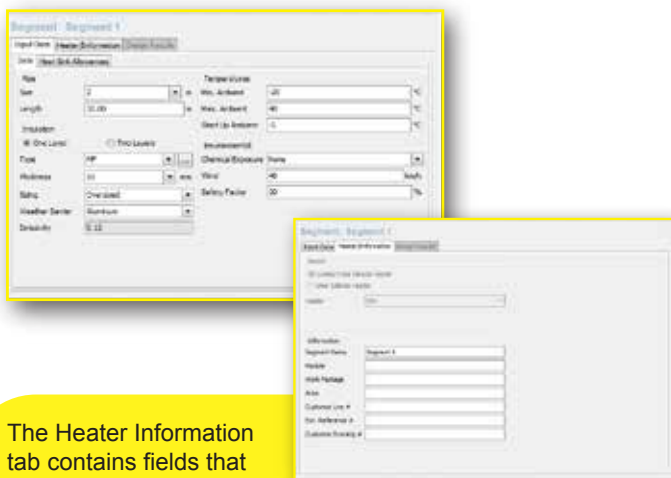
The Heater Information tab contains fields that can be used to sort BOM at the segment level (Module/Work Package/Area). It also allows the user to select a specific heater.
Since inputs such as pipe size, insulation specifications, ambient conditions, and heater selection can change from segment to segment, the performance characteristics are determined for each segment.

7. Circuit Design & Results

After completing the data entry, click the "design active circuit" button to view your results. When you have multiple undesigned circuits, you can select the "design changed circuits" button to design more than one circuit at a time.

Design Active Circuit

Design Changed Circuit

There are four visual icons that lead the user through the design process. Design results are explained in both the circuit and segment result tab.

Calculator
Undesigned Circuit

Green Check w/ Caution
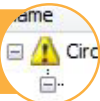Successful design, but requires further attention

Green Check
Successful Design

Yellow Caution
Unsuccessful design

Once you have a successful design, you can generate a bill of materials and multiple reports with the options in the reports tab.