Welcome to the Engineering Data Book III Calculator

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Disclaimer

Although much work has been invested in preparing of this **Calculator**, minor errors may exist. Therefore, like a book, only the final user is responsible for any damage or loss caused by the results provided by this **Calculator**. Neither the **authors** nor Wolverine Tube Inc. can be held responsible for any damage or loss caused by the results provided by this **Calculator**.

This **Calculator** is provided free for use and cannot be sold or modified by the user. Any contents used by the user from this **Calculator** must quote **Wolverine Engineering Data Book III** as a reference source.

By click the button "**Agree**" below, you hereby **read** and **agree** to this disclaimer. The calculator application will open once you click on the "**Agree**" button below.

Introduction

This **Calculator** is based on thermal design methods described in the **Wolverine Engineering Data Book III**, which is available for free at www.wlv.com/products/index.html under Design Tools section.

It was primarily designed for **educational purposes**. Because it reflects many methods presented in the Data Book III, it can also be used by heat transfer engineers or research engineers to try out and compare different methods, generate two-phase flow pattern maps, etc.

The use of this file will allow you to quickly understand the application of many methods available in **Data Book III**.

Important Recommendations

We strongly recommend you to download **Data Book III** (it's free!) and to read it before using this **Calculator**. This **Calculator** is a complement to the **Data Book III**. Reading the **Data Book III** will allow you to correctly choose the method of calculation you need in relation to the problems you are solving.

Because **Data Book III** includes recently published research work, it is updated constantly. If you want to be up to date with the current evolutions in single and two-phase flows, heat transfer and pressure drops, we recommend you to regularly check for new updates of the **Data Book III** and this **Calculator**.

In this **Calculator**, the various methods are referred to by the name of the author of the method. Refer to the appropriate chapter in **Data Book III** to see details of the method.

How to Use

The use of this **Calculator** is very easy and should not present any difficulties. First, "**Enter the Menu**". In the Menu, choose the calculation that you with to perform. In the green boxes, enter the values that correspond to your problem and the results will be displayed automatically. Thanks to the "spin buttons" (that is the up and down buttons to click on), you can interact with the graphic output and see how the output values are modified.

Note that anywhere there is a "**spin button**", negative values and values smaller than 1.0 must be entered manually (for instance, for saturation 'temperatures below 0°C)

Results can be printed out or tabular data exported by the user. **NO TECHNICAL ASSISTANCE IS PROVIDED**.

Fluid Properties

The **Calculator** has automatic fluid properties for a few selected fluids. These can be accessed by the "**drop down menu**" of fluids and their saturation temperature by the "spin buttons" within the range of the lookup file. The user can also specify his/her own fluid properties by choosing "**Your-Own**". The properties for "**Your-Own**" fluid are filled in manually for the saturation temperatures of your interest and they are accessed from the main "**Menu**" by clicking "**Enter Your-Own Fluid Properties**".

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