

Proposal for Computer Presentation

Property Libraries Software for Excel, MATLAB, Mathcad, Dymola, SimulationX, LabVIEW, Engineering Equation Solver, Smart Phones, Tablets, Pocket Calculators, and Online Use

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The software developed for calculating the thermodynamic and transport properties for working fluids in energy engineering has been designed for very convenient use by engineers who routinely calculate heat cycles, steam or gas turbines, boilers, heat pumps, or other thermal or refrigeration processes.

The following software solutions will be presented:

Add-In *FluidEXLGraphics* for Excel[®],

Add-On *FluidLAB* for MATLAB[®],

Add-On *FluidMAT* for Mathcad[®],

Add-On *FluidDYM* for Dymola[®] and SimulationX[®] (Modelica),

Add-On *FluidVIEW* for LabVIEW[™], and

Add-On *FluidEES* for the Engineering Equation Solver[®].

Through the use of the developed program *FluidSplines* extremely fast spline-based property functions can be provided.

For calculating and plotting large-size and camera-ready thermodynamic charts the program *FluidDIA* was prepared.

The *International Steam Tables* App is available for iPhone, iPad and iPod touch, and for Android smart phones and tablets.

Software for calculating properties of water and steam, and other fluids is available for Texas Instruments[®], Hewlett Packard[®], and Casio[®] pocket calculators, and is particularly interesting for students.

The properties of several working fluids can be calculated online using *Zittau's Fluid Property Calculator* at the website www.fluid-property-calculator.com.