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Property Libraries Software

for Excel, MATLAB, Mathcad, Dymola, SimulationX, LabVIEW, EES, Smart Phones, Tablets, Pocket Calculators, and Online Use

FluidEXL Graphics for Excel®

Menu bar of FluidEXL

Menu for choosing the library and function

Choosing diagrams for water and steam and for humid air for displaying the calculated property values

Function call of FluidEXL

FluidLAB for MATLAB®

Function call of FluidLAB

FluidVIEW for LabVIEW®

FluidMAT for Mathcad®

Function call of FluidMAT

FluidDYM for DYMOLA®, SimulationX®

FluidEES for Engineering Equation Solver®

Function call of FluidEES

Online Property Calculator

Property library

Function

www.thermodynamics-zittau.de

App International Steam Tables for iPhone, iPad, iPod touch, and Android Phones and Tablets



The following thermodynamic and transport properties can be calculated^a:

Thermodynamic Properties

- Vapor pressure p_s
- Saturation temperature T_s
- Density ρ
- Specific volume v
- Enthalpy h
- Internal energy u
- Entropy s
- Exergy e
- Isobaric heat capacity c_p
- Isochoric heat capacity c_v

Transport Properties

- Isentropic exponent κ
- Speed of sound w
- Surface tension σ
- Dynamic viscosity η
- Kinematic viscosity ν
- Thermal conductivity λ
- Prandtl-number Pr

Backward Functions

- $T, v, s(p, h)$
- $T, v, h(p, s)$
- $p, T, v(h, s)$
- $p, T(v, h)$
- $p, T(v, u)$

Thermodynamic Derivatives

- All partial derivatives can be calculated.

^a Not all of these property functions are available in all property libraries listed before.