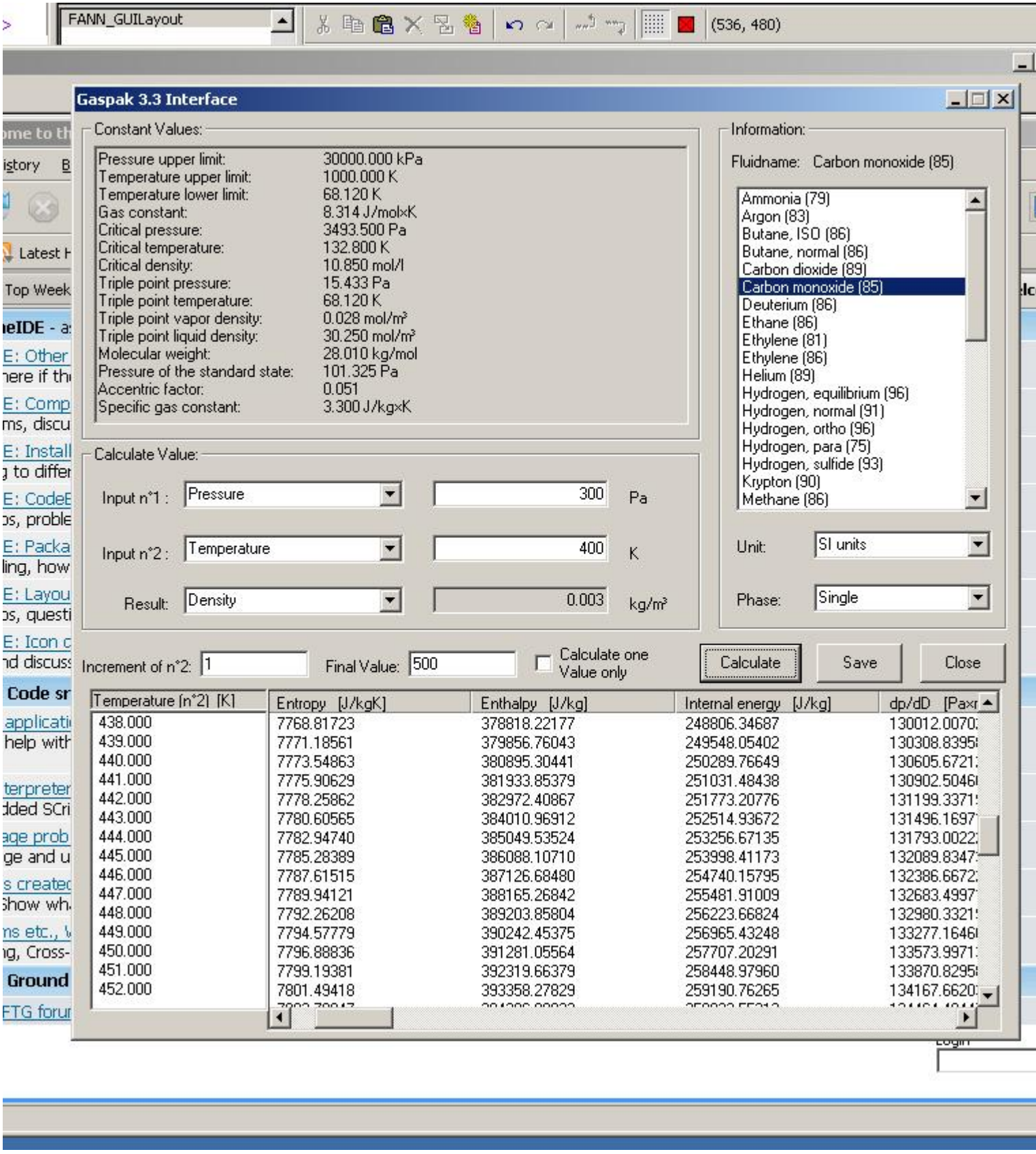
Subject: EADS company intern fluid-data application
Posted by yeus on Tue, 28 Nov 2006 17:17:14 GMT
View Forum Message <> Reply to Message

well her is a little screenshot...

I used upp to write a little company intern application which looks up and calculates fluid data from a database (company is EADS). It is used mainly for research in the field of space engineering. Not really a GUI which will win a price for its beauty but well.. its only used for looking up & exporting data.

File Attachments

1) gaspakscreeny.JPG, downloaded 8812 times


FANN_GUILayout
(536, 480)
Gaspak 3.3 Interface
Constant Values:
Pressure upper limit: 30000.000 kPa
Temperature upper limit: 1000.000 K
Temperature lower limit: 68.120 K
Gas constant: 8.314 J/mol×K
Critical pressure: 3493.500 Pa
Critical temperature: 132.800 K
Critical density: 10.850 mol/l
Triple point pressure: 15.433 Pa
Triple point temperature: 68.120 K
Triple point vapor density: 0.028 mol/m³
Triple point liquid density: 30.250 mol/m³
Molecular weight: 28.010 kg/mol
Pressure of the standard state: 101.325 Pa
Accentric factor: 0.051
Specific gas constant: 3.300 J/kg×K
Information:
Fluidname: Carbon monoxide (85)
Ammonia (79)
Argon (83)
Butane, ISO (86)
Butane, normal (86)
Carbon dioxide (89)
Carbon monoxide (85)
Deuterium (86)
Ethane (86)
Ethylene (81)
Ethylene (86)
Helium (89)
Hydrogen, equilibrium (96)
Hydrogen, normal (91)
Hydrogen, ortho (96)
Hydrogen, para (75)
Hydrogen, sulfide (93)
Krypton (90)
Methane (86)
Calculate Value:
Input n°1 : Pressure 300 Pa
Input n°2 : Temperature 400 K
Result: Density 0.003 kg/m³
Unit: SI units
Phase: Single
Increment of n°2: 1
Final Value: 500
Calculate one Value only
Calculate
Save
Close
Temperature (n°2) [K]
Entropy [J/kgK]
Enthalpy [J/kg]
Internal energy [J/kg]
dp/dD [Pa×r
438.000 7768.81723 378818.22177 248806.34687 130012.0070
439.000 7771.18561 379856.76043 249548.05402 130308.8395
440.000 7773.54863 380895.30441 250289.76649 130605.6721
441.000 7775.90629 381933.85379 251031.48438 130902.5046
442.000 7778.25862 382972.40867 251773.20776 131199.3371
443.000 7780.60565 384010.96912 252514.93672 131496.1697
444.000 7782.94740 385049.53524 253256.67135 131793.0022
445.000 7785.28389 386088.10710 253998.41173 132089.8347
446.000 7787.61515 387126.68480 254740.15795 132386.6672
447.000 7789.94121 388165.26842 255481.91009 132683.4997
448.000 7792.26208 389203.85804 256223.66824 132980.3321
449.000 7794.57779 390242.45375 256965.43248 133277.1646
450.000 7796.88836 391281.05564 257707.20291 133573.9971
451.000 7799.19381 392319.66379 258448.97960 133870.8295
452.000 7801.49418 393358.27829 259190.76265 134167.6620