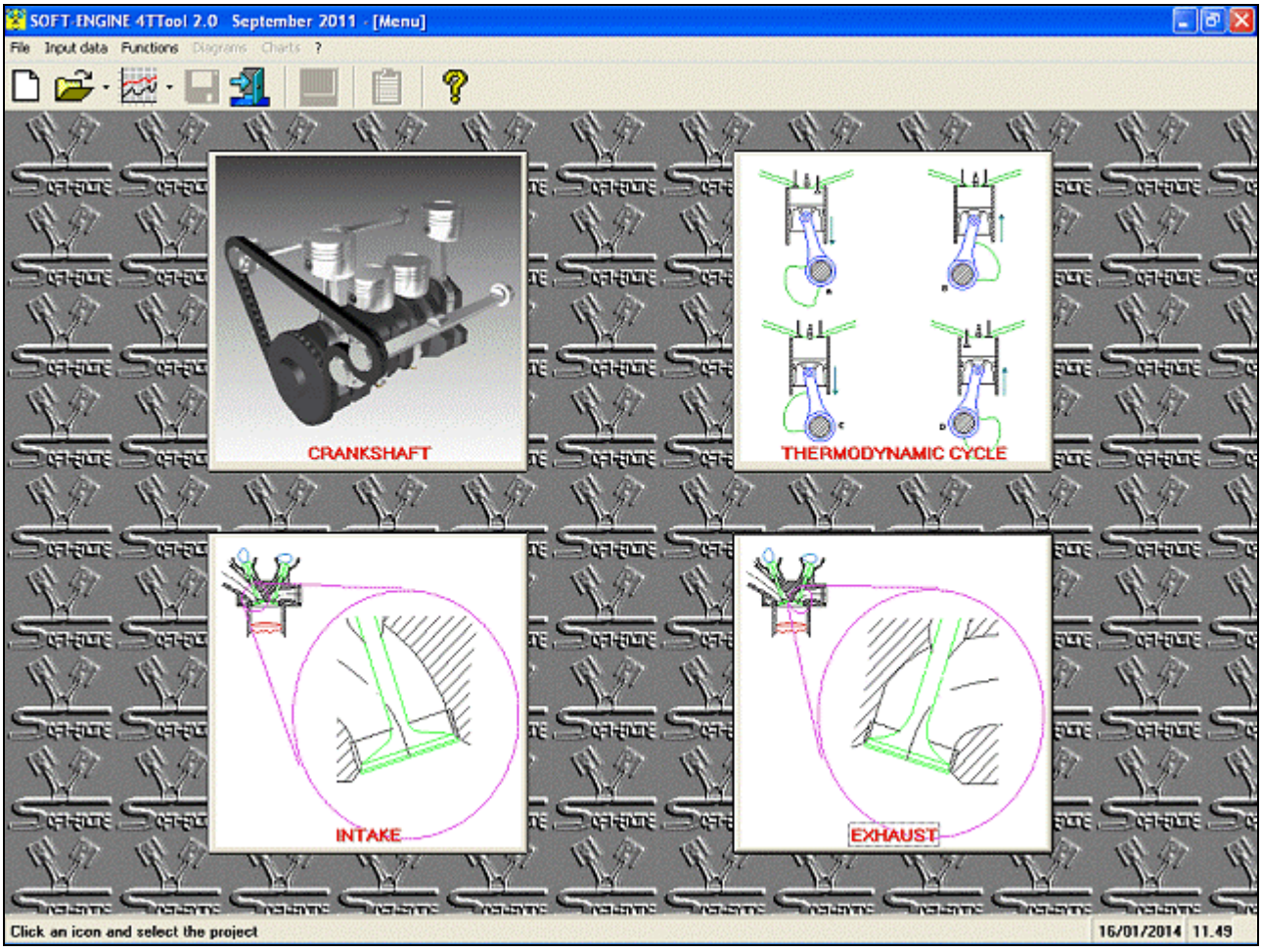
Soft-Engine - Software 4TTool 2.0

Main features

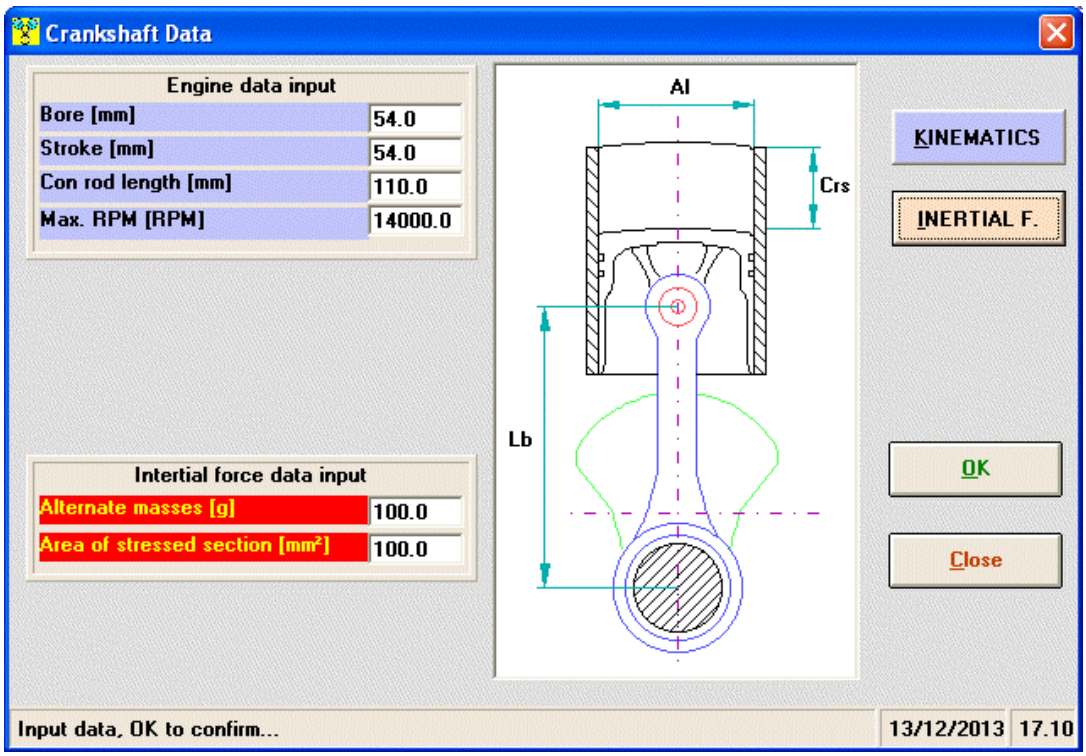
4TTOOL is a software by **Soft-Engine** for a wide range of applications including everything you may need to develop a 4-stroke engine with a special focus on practical issues. It runs on Windows. Data can be entered by means of drawings.



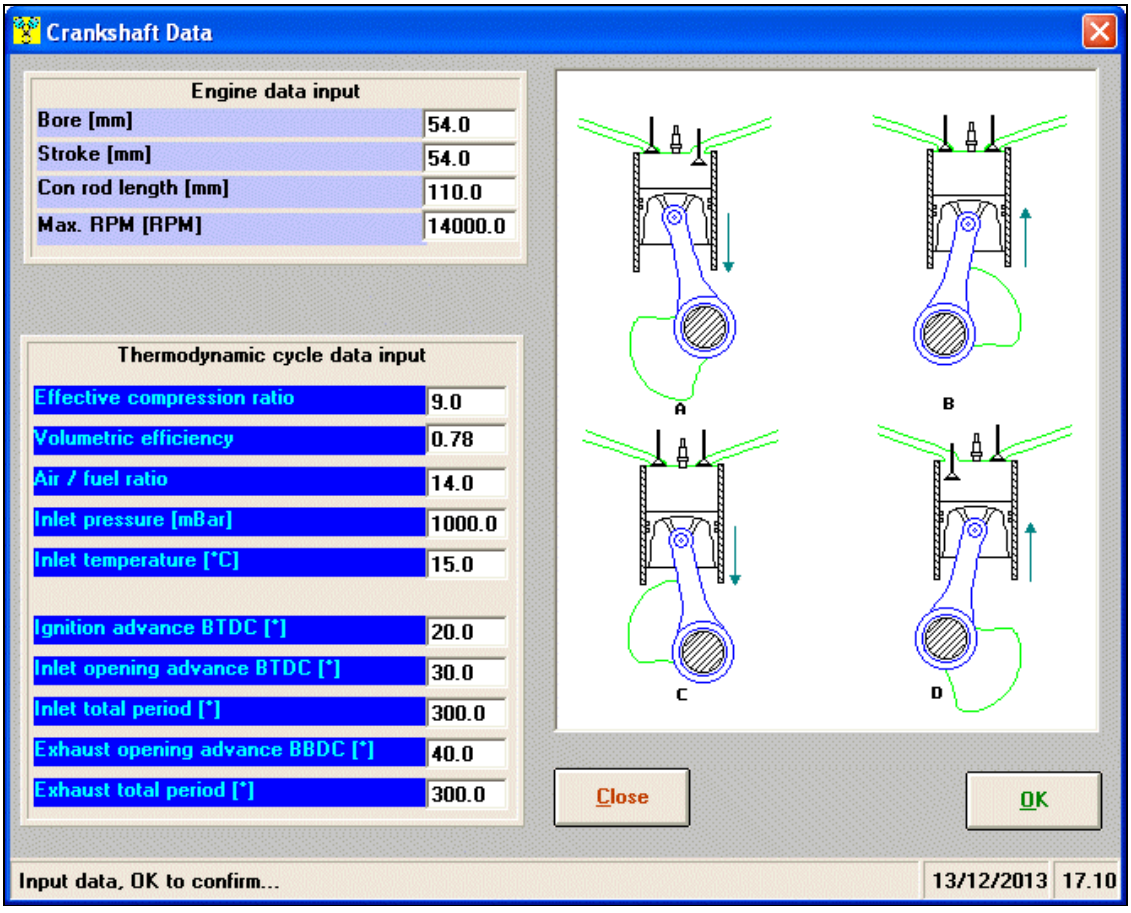
The main window

Data input

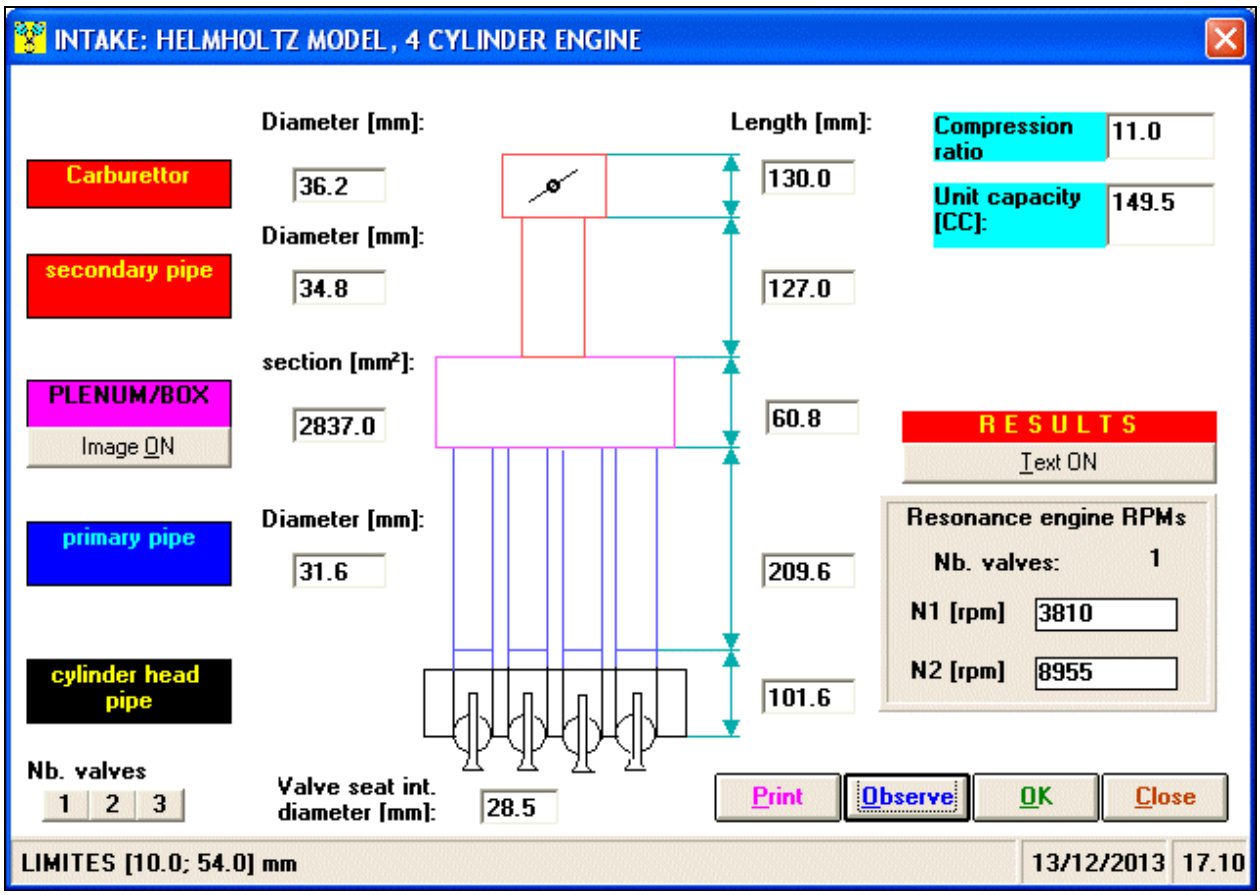
By the main window the right computing model can be selected.



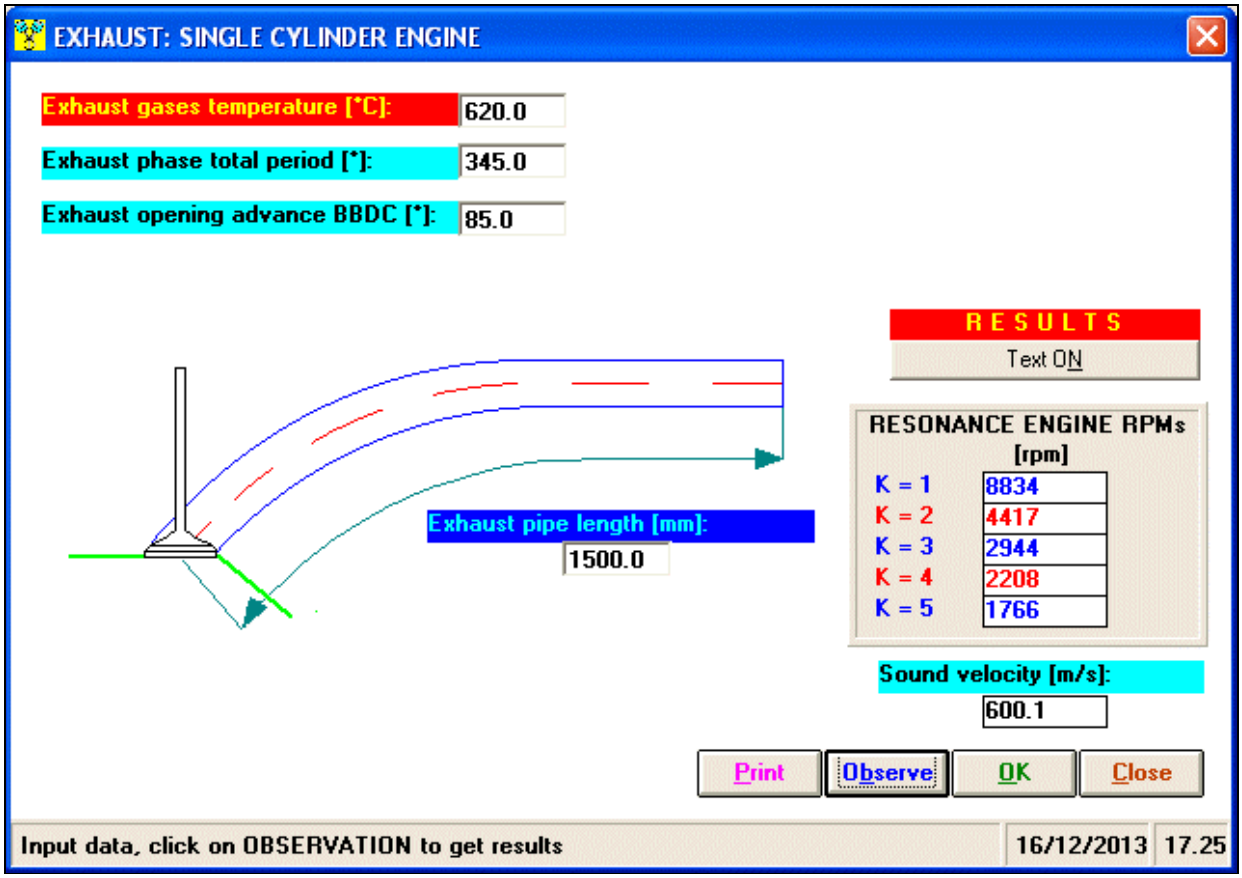
Crankshaft data input



Thermo-dynamics data input



Intake computing model (Helmholtz) to calculate resonance regimes for single or four cylinders engine. Data input



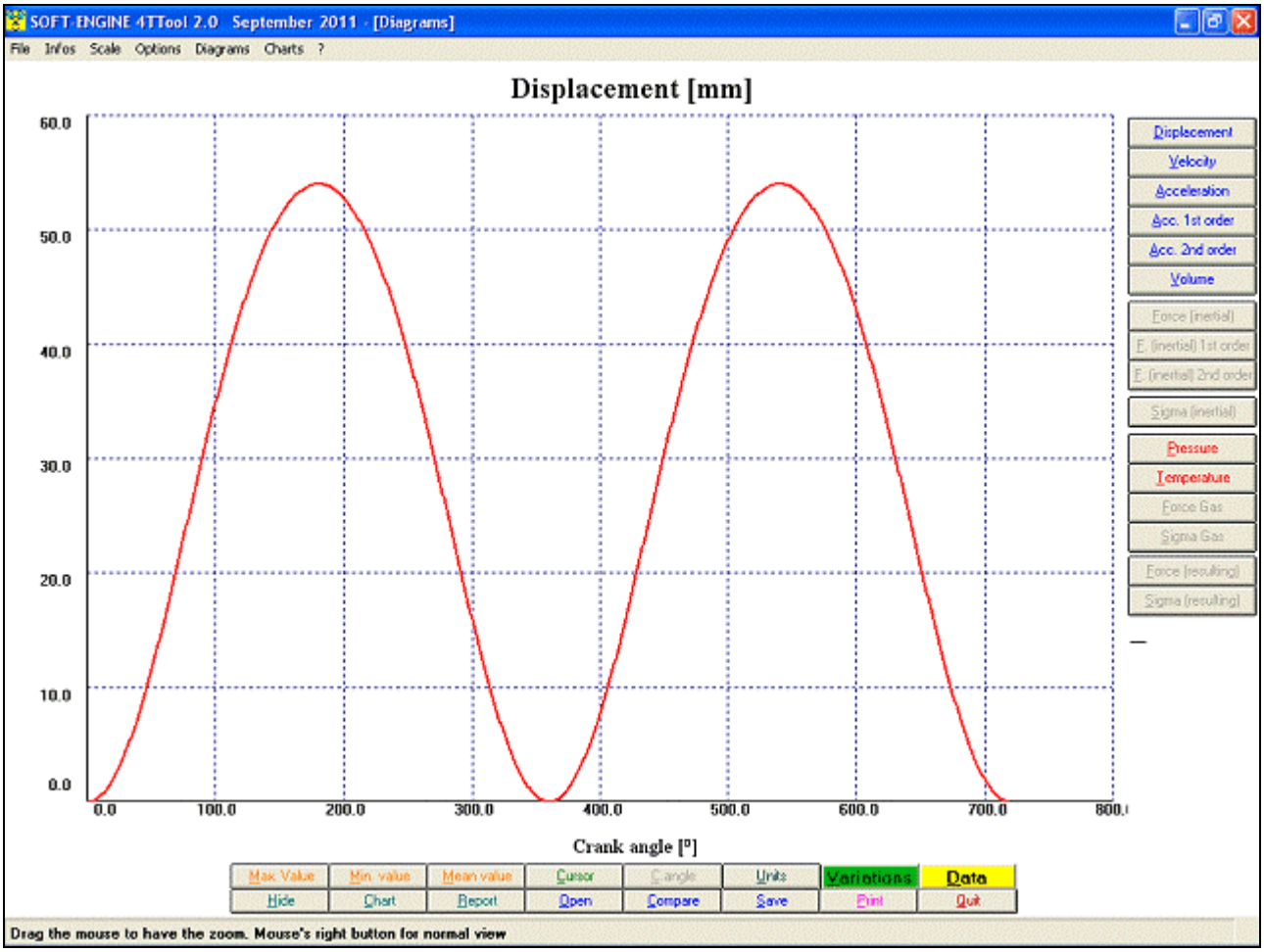
Exhaust computing model for single cylinder optimal lenght and resonance regimes. Data input

Results

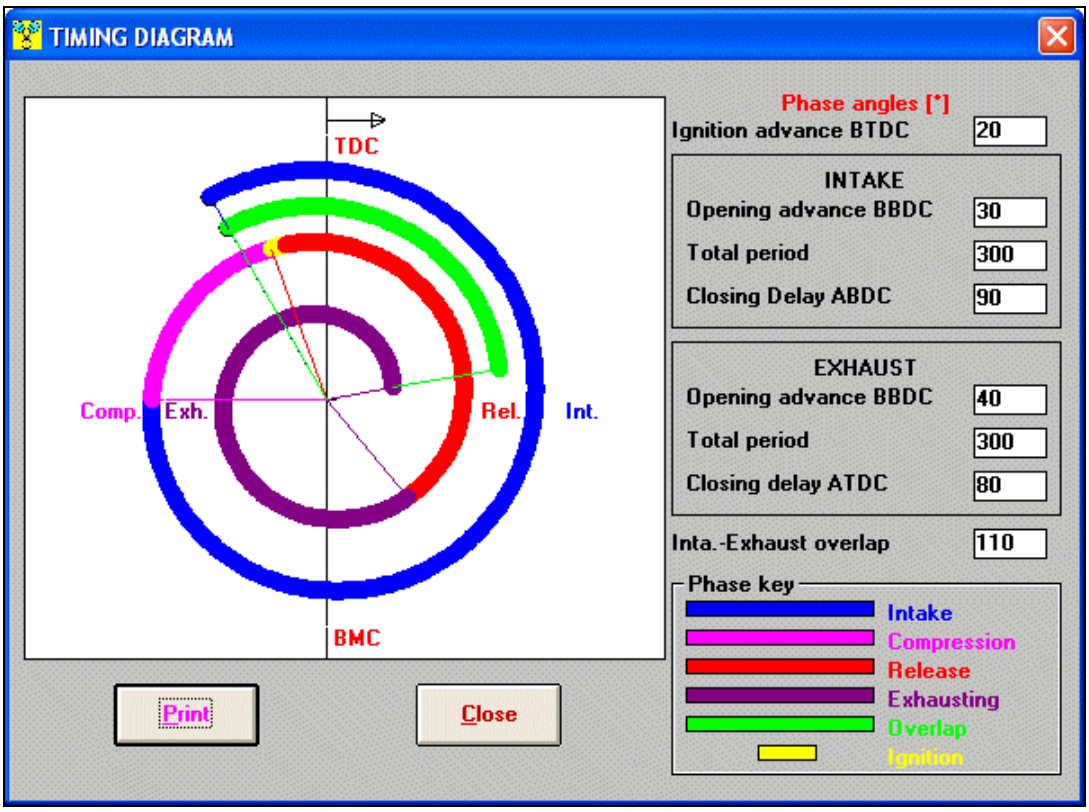
This software calculates the following values:

- **crank shaft system** with:
  - animation
  - **inertial forces**
  - **sigma** (**stress**)
- **thermodynamic cycle**
- **exhaust** with:
  - R.P.M. when engine resonance for single cylinder or individual ducts occurs
- **inlet** according to the Helmholtz model for :
  - **single cylinder** or individual ducts
  - **4 cylinders engines**

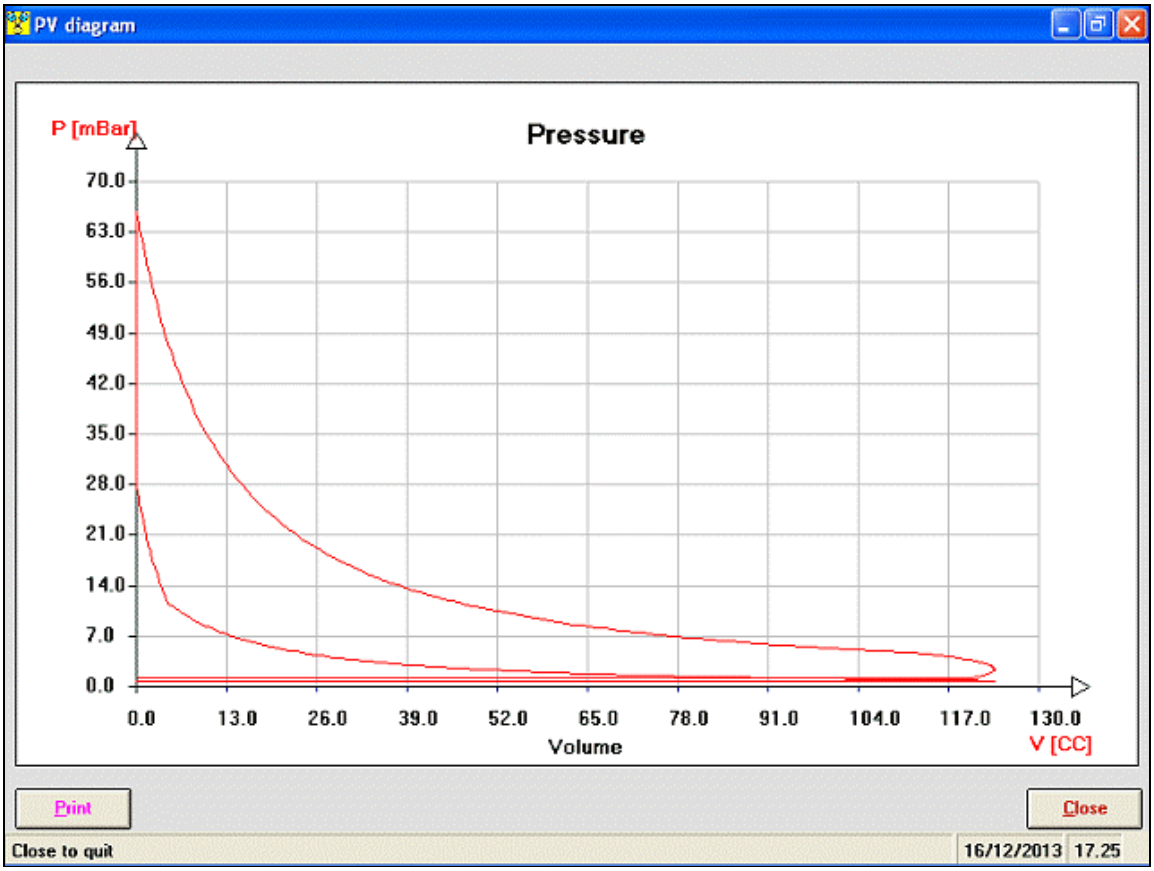
Graphics, charts, file printing, and on-line help utilities.



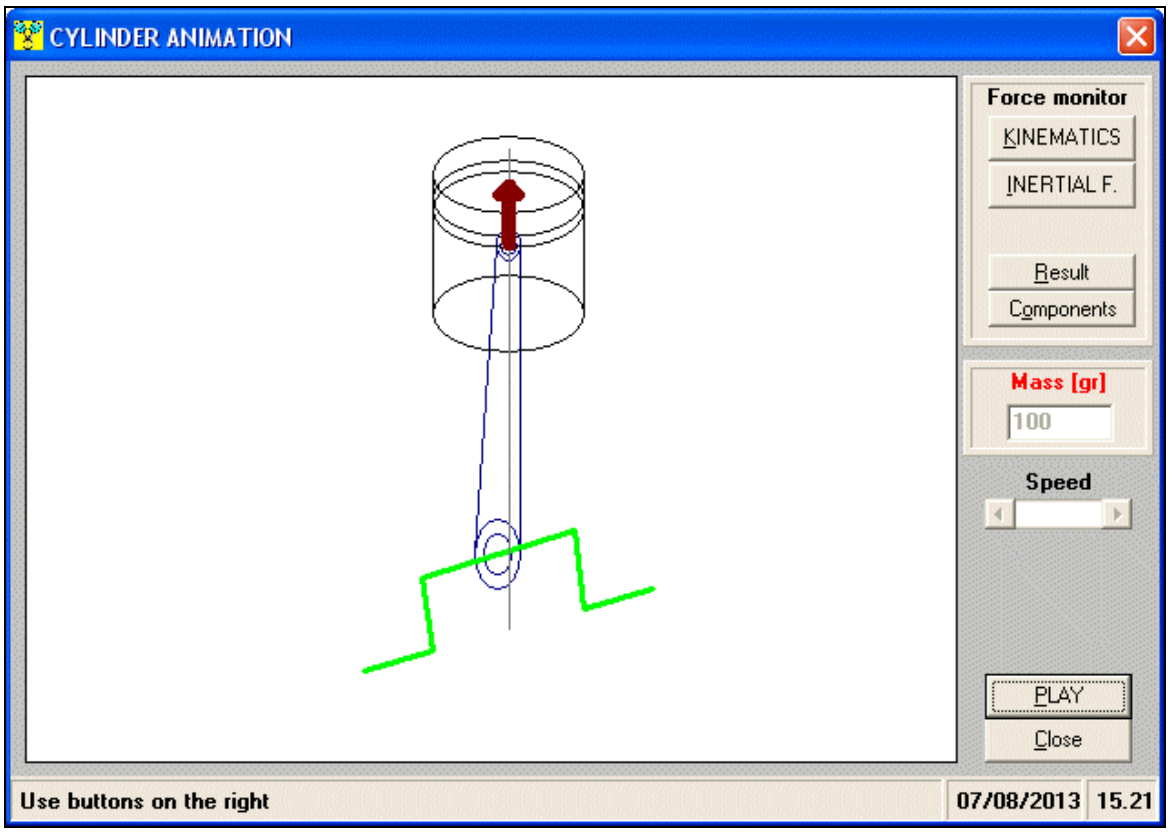
Crankshaft (dynamics) - piston Displacement diagram



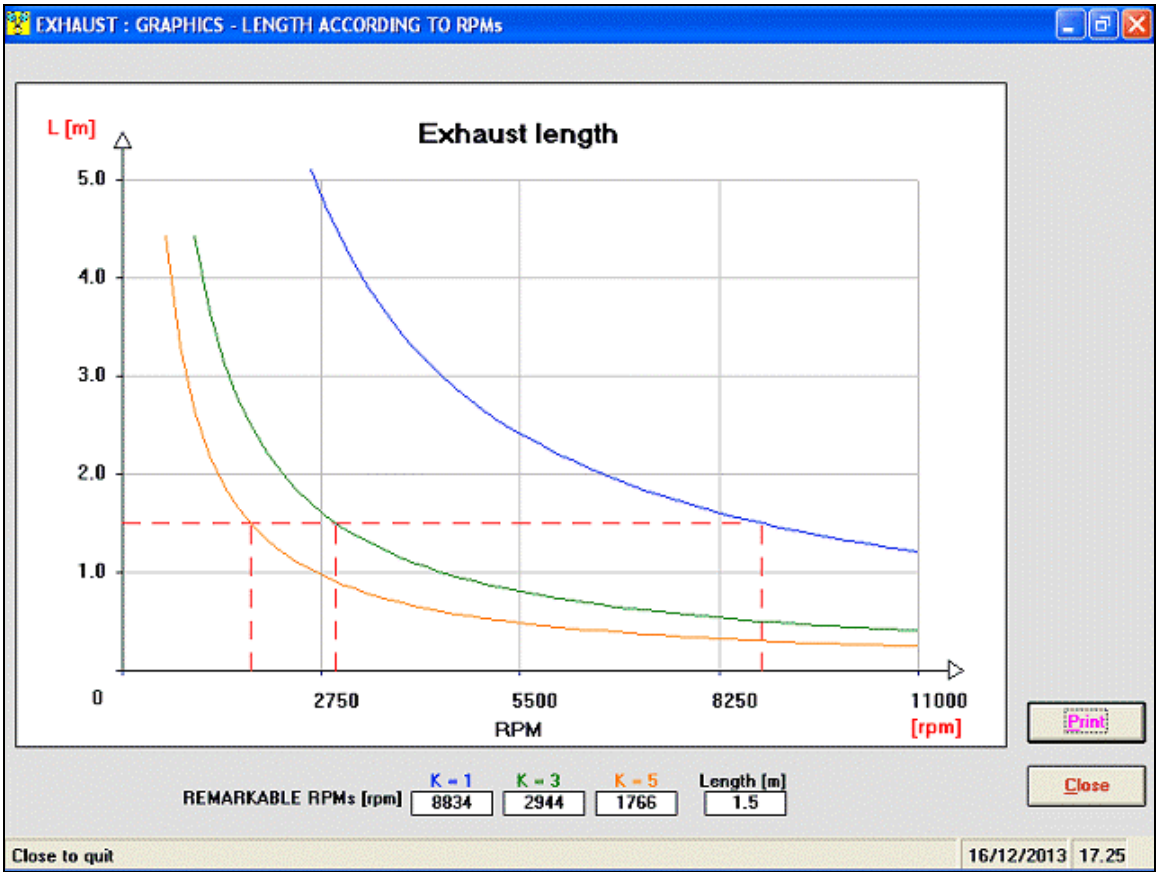
Timing



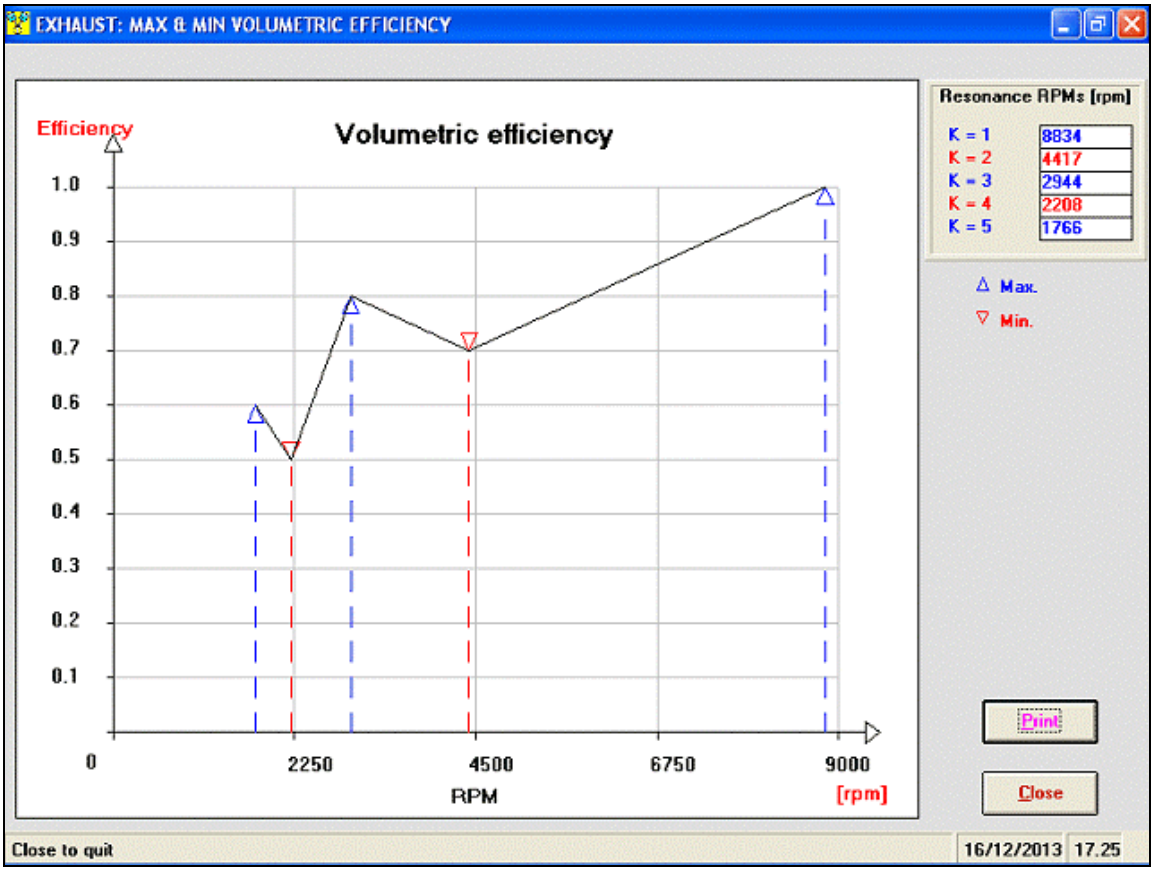
P/V diagram



Animation showing the inertial forces in the piston



Exhaust: optimal lenght exhaust systems diagram, varying the maximum resonance RPMs



Exhaust: volumetric efficiency diagram

Versions and costs

Version	Cost
4TTool 2.0	€ 60.00

PC minumum configuration

Feature	Description
Processor:	Any personal computer IBM compatible.
System:	Windows ME, NT, Xp, Vista, Seven, Eight, Ten - 32 or 64 bit systems.
Memory RAM and Hard Disk:	At least 512 MB RAM and 2 GB free in the hard disk (for best Windows performances).
CDrom or Dvdrom device:	Speed at least 52X.
Graphic card:	VGA, SVGA and compatible cards, set at least 32 bit, Min. resolution: 1024x768.
Miscellaneous:	Keyboard, mouse, at least 1 USB port free (to connect the printer).
Printer:	Any ink-jet printer. Total compatibility with laser printers.
Total compatibility with notebooks and cases minitower PC.	