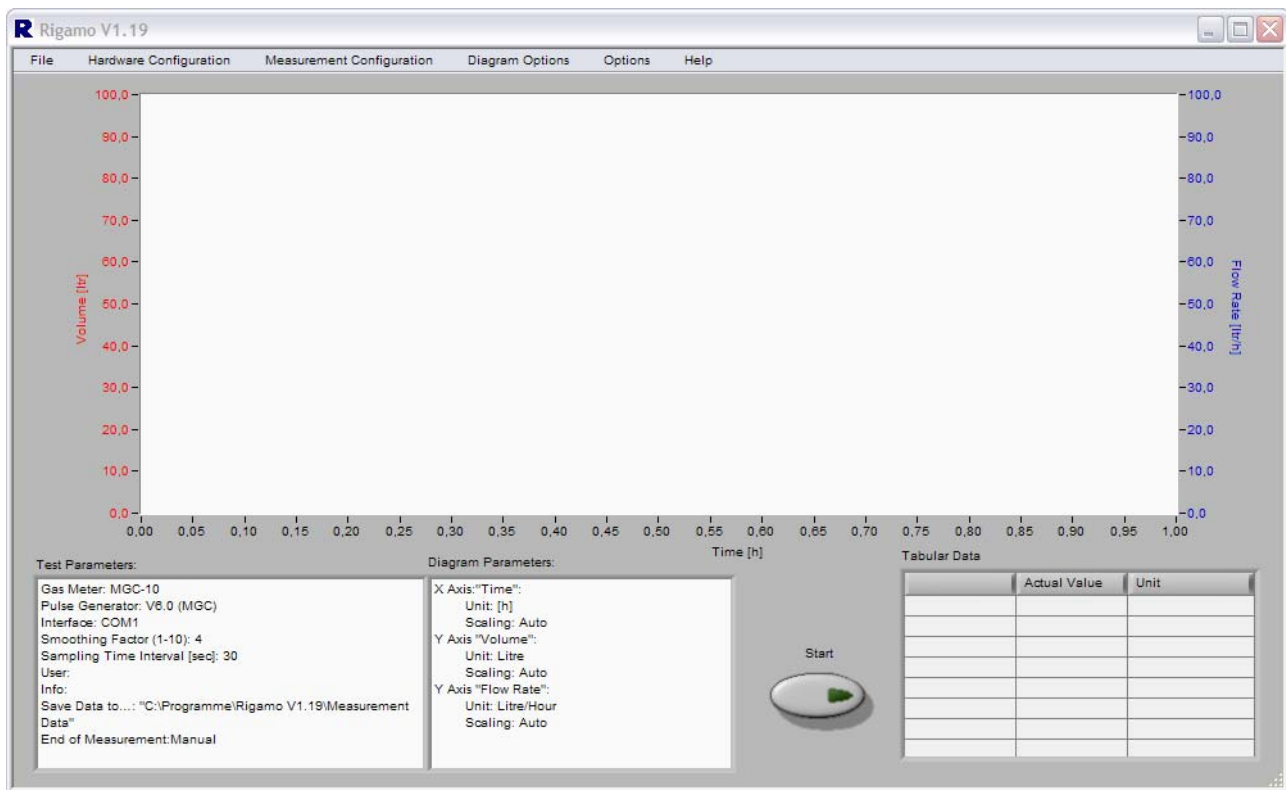


Software Features (overview):

9

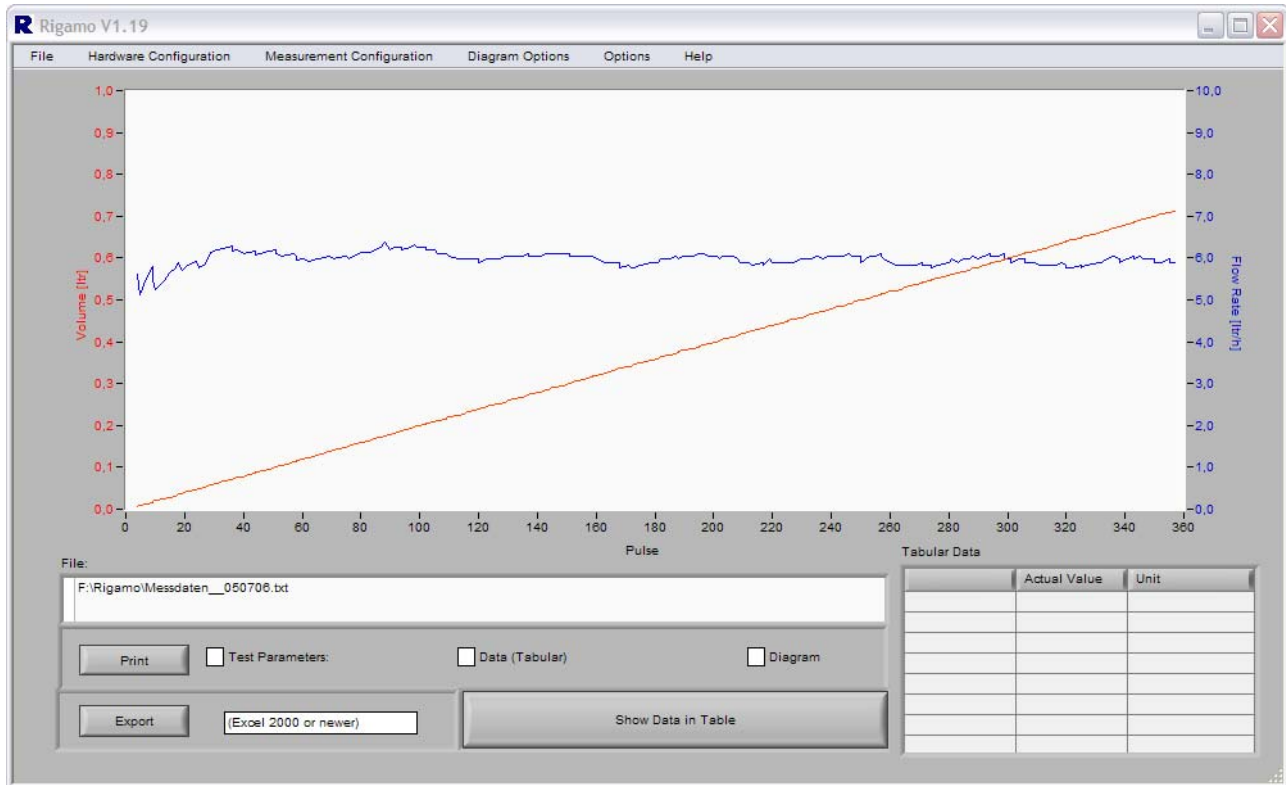
- **Data Acquisition** of gas volume and flow rate measured by a Ritter gas meter
- **Number of meters** to be connected:
  - Rigamo-1CH: 1 meter
  - Rigamo24: up to 24 meters
- **Data Transmission** to the serial interface of a PC (Windows operating system) (Rigamo-1CH ) or via the „Digital Input Box“ (Rigamo24) to USB-Port
- **Display** of the values on the PC-screen.
- **Storage** of the values
- **Print out** (separately or in any combination) of
  - Diagram
  - Test parameters
  - Measured values in tabular form
- **Conversion** to Microsoft-Excel format and **Export** to Excel



System Specification:

- Ritter gas meter with built-in pulse generator
- Special data transmission cable with integrated copy protection (included in standard scope of supply)
- PC with Windows operation system (Windows 2000 or Windows XP)
- Free serial interface (COM-Port)

Monitor Display of Diagrams (Example):  
(Volume: red graph, flow rate: blue graph)



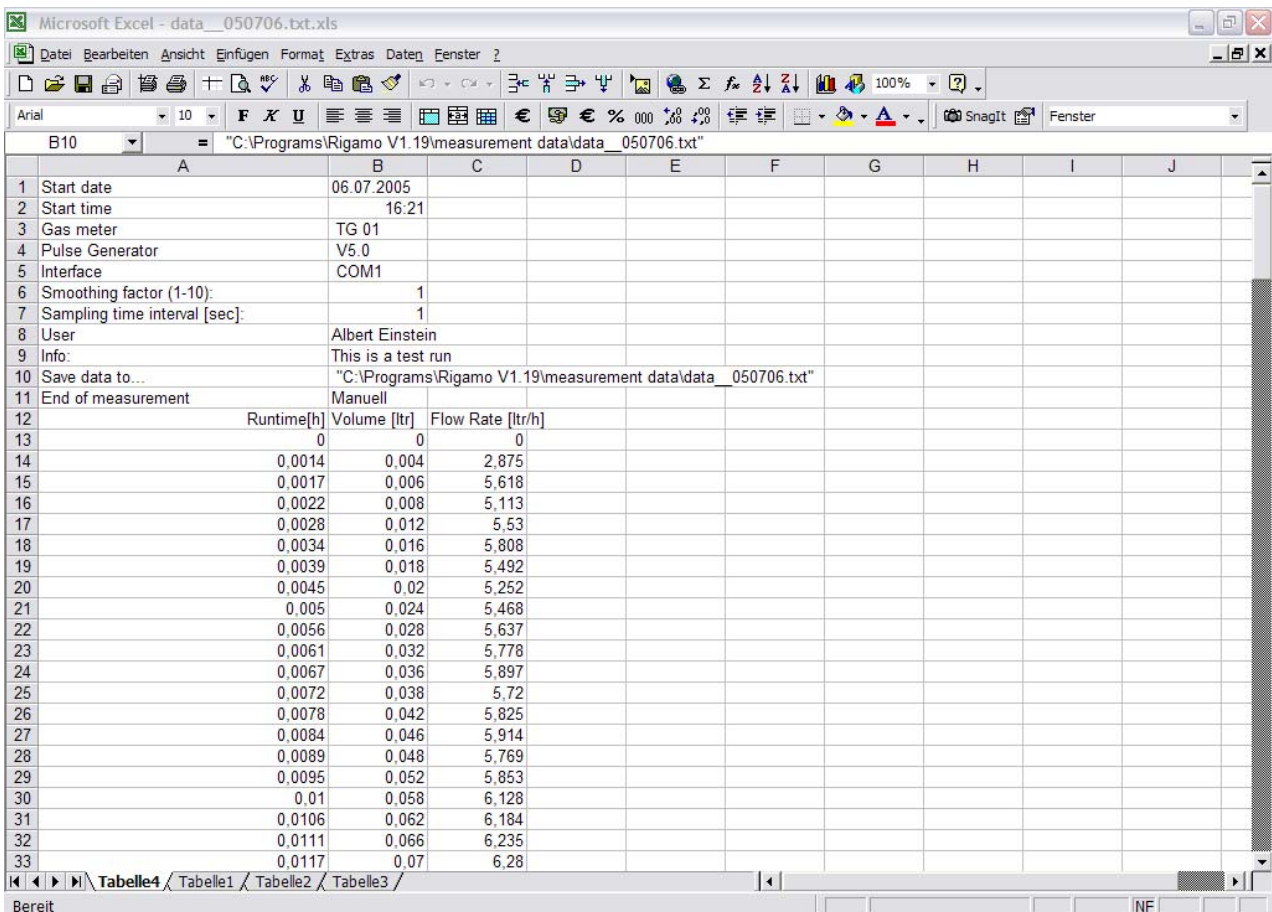
Features:

- Windows-Software
- Data acquisition without any additional hardware by a special data transmission cable from the pulse generator to the serial (COM-) interface of a PC
- Real time presentation of volume and flow rate in a diagram
- Averaging (smoothing) of the values for the flow rate when flow rates are fluctuating (averaging factor selectable)
- Scale of the axis automatically or manually selectable, different units selectable.
  - X-axis:
    - hours
    - minutes
    - pulses
  - Y-axis 1 (volume):
    - milliliter [ml]
    - litre [l]
    - cubic meter [m<sup>3</sup>]
    - cubic feet [ft<sup>3</sup>]
  - Y-axis 2 (flow rate):
    - Any combinations of units for flow rates with time units
    - hour [h]
    - minute [min]
- Sampling time interval between two measuring points for data display and storage se-

lectable

- Termination of data acquisition selectable by pre-setting of:
  - Manual ⇒ measurement will be terminated by pressing the button “Stop“
  - Time (min) ⇒ measurement will be terminated after a pre-selected time
  - Number of pulses ⇒ measurement will be terminated after a pre-selected number of pulses
  - Number of drum revolutions ⇒ measurement will be terminated after a pre-selected number of drum revolutions
  
- Export of the stored data to Excel is possible.

Data export to Excel:



	A	B	C	D	E	F	G	H	I	J
1	Start date	06.07.2005								
2	Start time	16:21								
3	Gas meter	TG 01								
4	Pulse Generator	V5.0								
5	Interface	COM1								
6	Smoothing factor (1-10):	1								
7	Sampling time interval [sec]:	1								
8	User	Albert Einstein								
9	Info:	This is a test run								
10	Save data to...	"C:\Programs\Rigamo V1.19\measurement data\data_050706.txt"								
11	End of measurement	Manuell								
12		Runtime[h]	Volume [ltr]	Flow Rate [ltr/h]						
13		0	0	0						
14		0,0014	0,004	2,875						
15		0,0017	0,006	5,618						
16		0,0022	0,008	5,113						
17		0,0028	0,012	5,53						
18		0,0034	0,016	5,808						
19		0,0039	0,018	5,492						
20		0,0045	0,02	5,252						
21		0,005	0,024	5,468						
22		0,0056	0,028	5,637						
23		0,0061	0,032	5,778						
24		0,0067	0,036	5,897						
25		0,0072	0,038	5,72						
26		0,0078	0,042	5,825						
27		0,0084	0,046	5,914						
28		0,0089	0,048	5,769						
29		0,0095	0,052	5,853						
30		0,01	0,058	6,128						
31		0,0106	0,062	6,184						
32		0,0111	0,066	6,235						
33		0,0117	0,07	6,28						