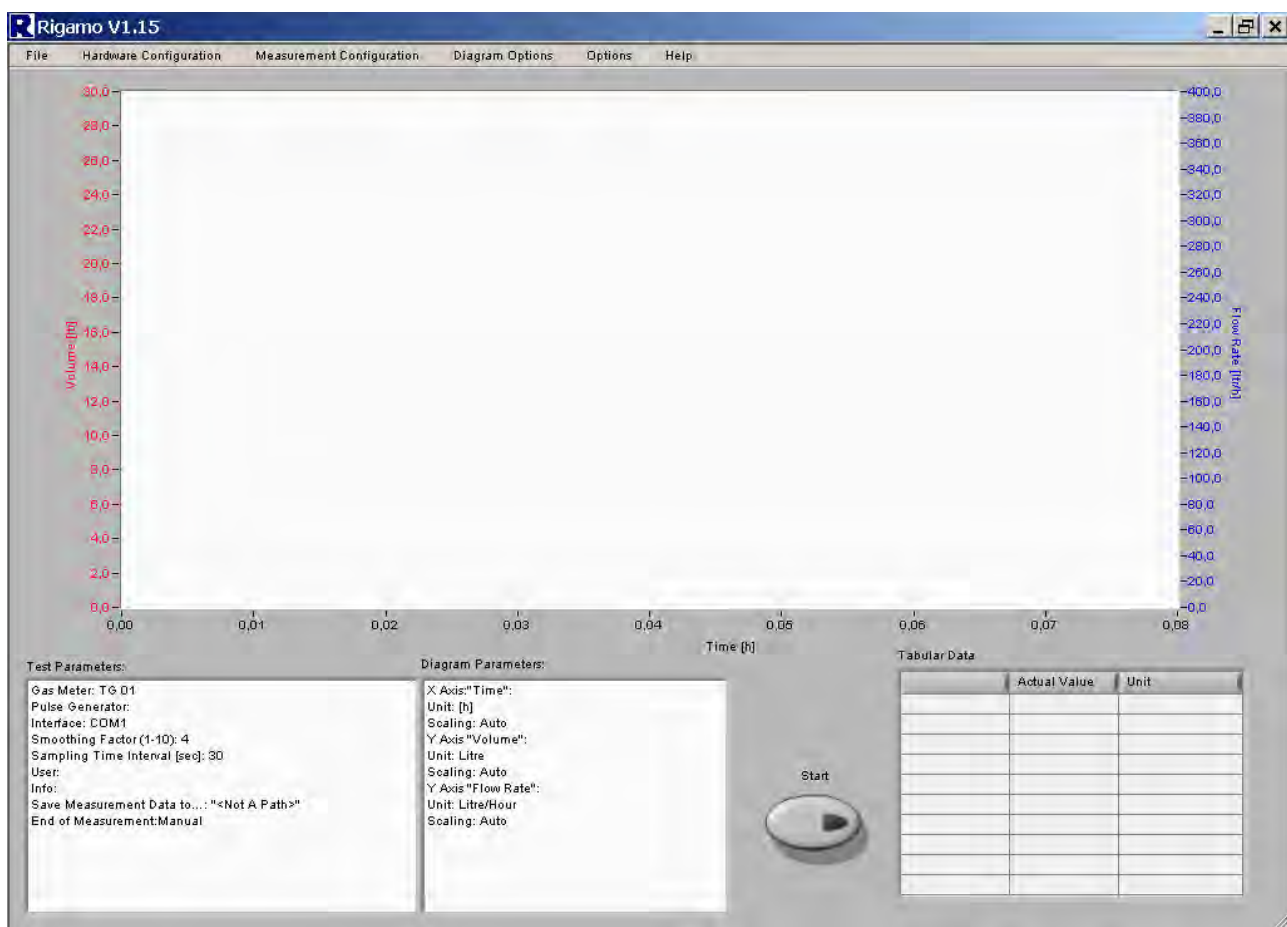


Software Features (overview):

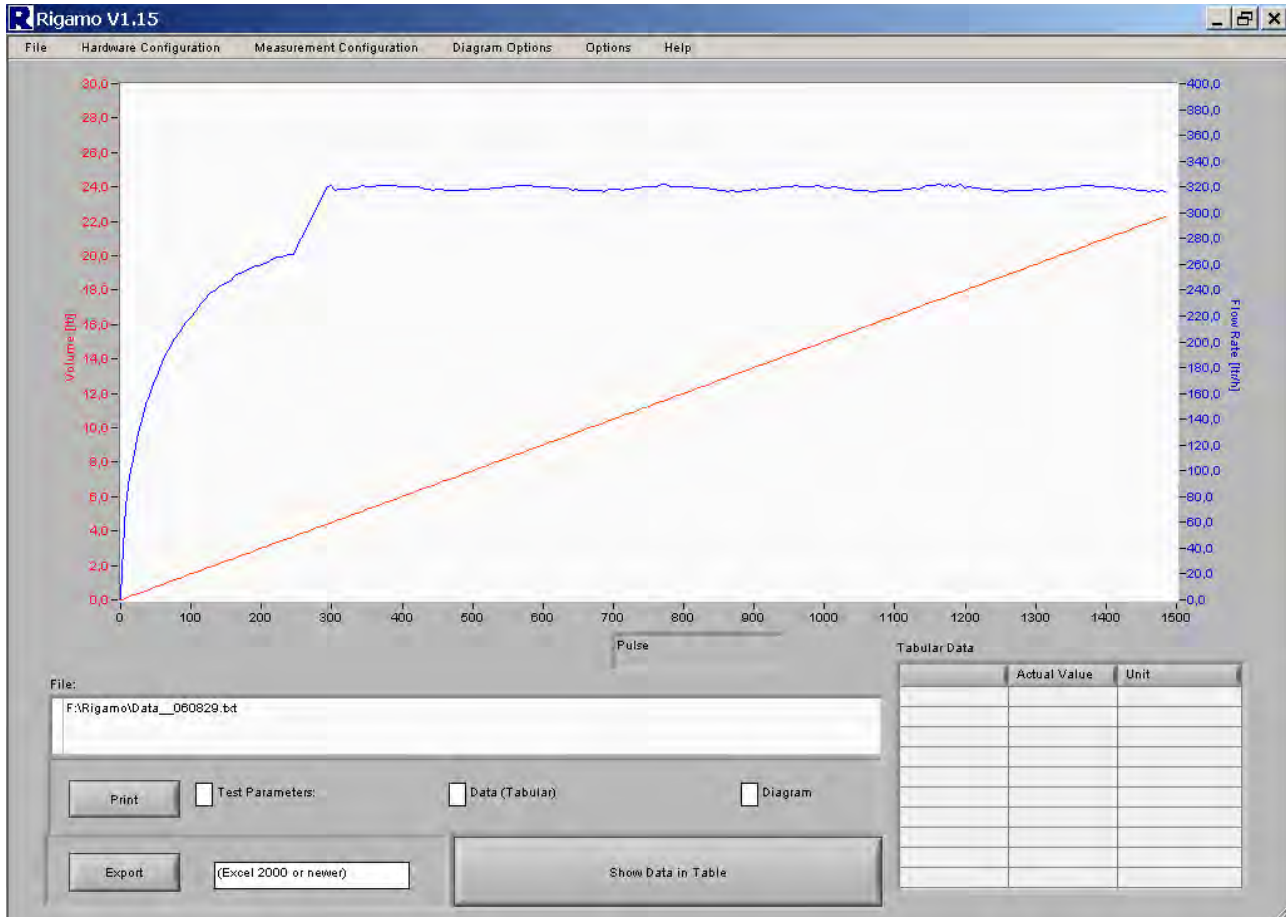
- **Data Transmission** of gas volume and flow rate measured by a Ritter gas meter to the serial interface of a PC (Windows operating system)
- **Display** of the values on the PC-screen.
- **Storage** of the values
- **Print out** (separately or in any combination) of
 - Diagram
 - Test parameters
 - 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)

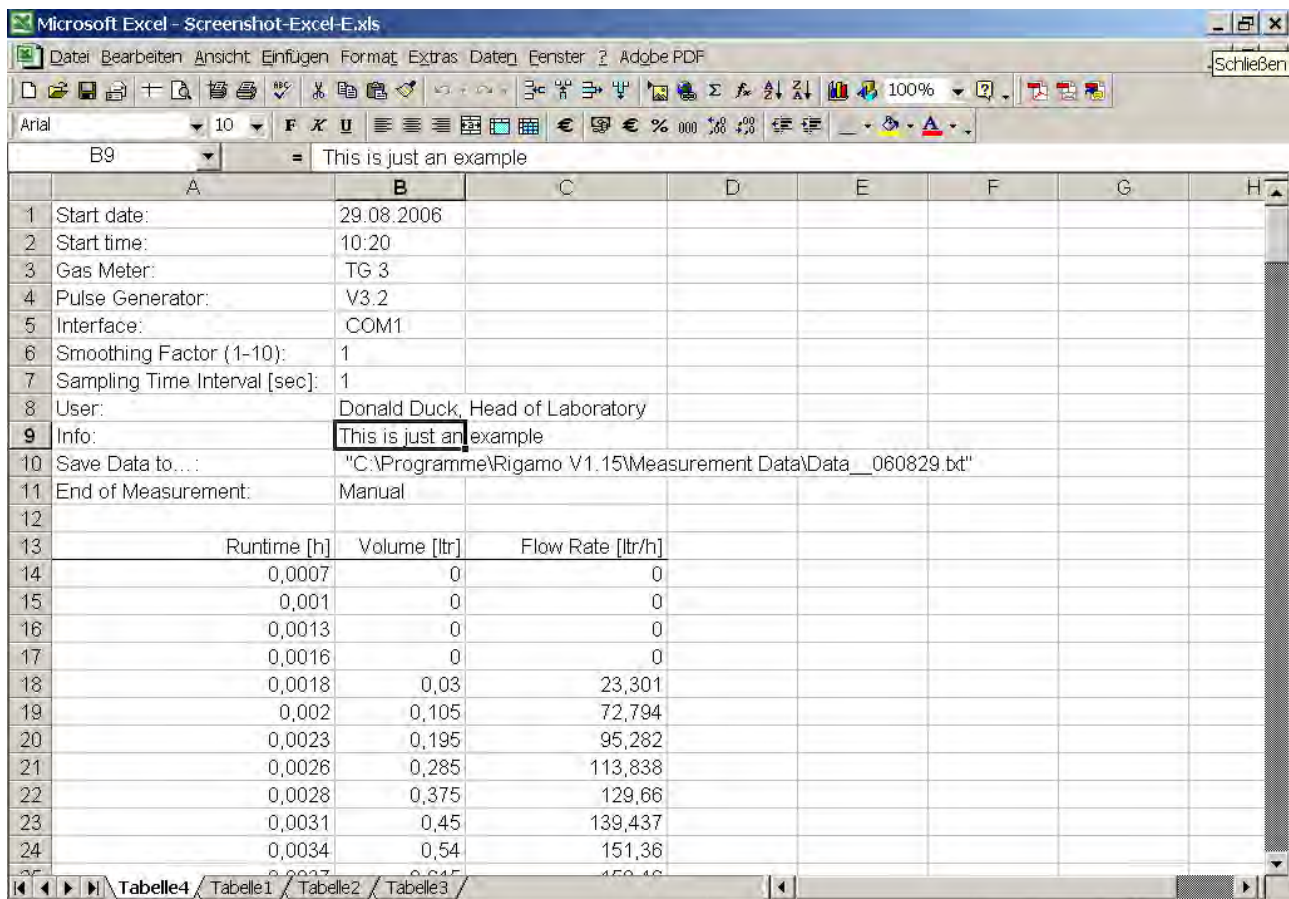


Features:

- 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 [m³]
 - cubic feet [ft³]

- 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 selectable
- 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
1	Start date:	29.08.2006						
2	Start time:	10:20						
3	Gas Meter:	TG 3						
4	Pulse Generator:	V3.2						
5	Interface:	COM1						
6	Smoothing Factor (1-10):	1						
7	Sampling Time Interval [sec]:	1						
8	User:	Donald Duck, Head of Laboratory						
9	Info:	This is just an example						
10	Save Data to...:	"C:\Programme\Rigamo V1.15\Measurement Data\Data_060829.txt"						
11	End of Measurement:	Manual						
12								
13		Runtime [h]	Volume [ltr]	Flow Rate [ltr/h]				
14		0,0007	0	0				
15		0,001	0	0				
16		0,0013	0	0				
17		0,0016	0	0				
18		0,0018	0,03	23,301				
19		0,002	0,105	72,794				
20		0,0023	0,195	95,282				
21		0,0026	0,285	113,838				
22		0,0028	0,375	129,66				
23		0,0031	0,45	139,437				
24		0,0034	0,54	151,36				
25		0,0037	0,645	174,46				