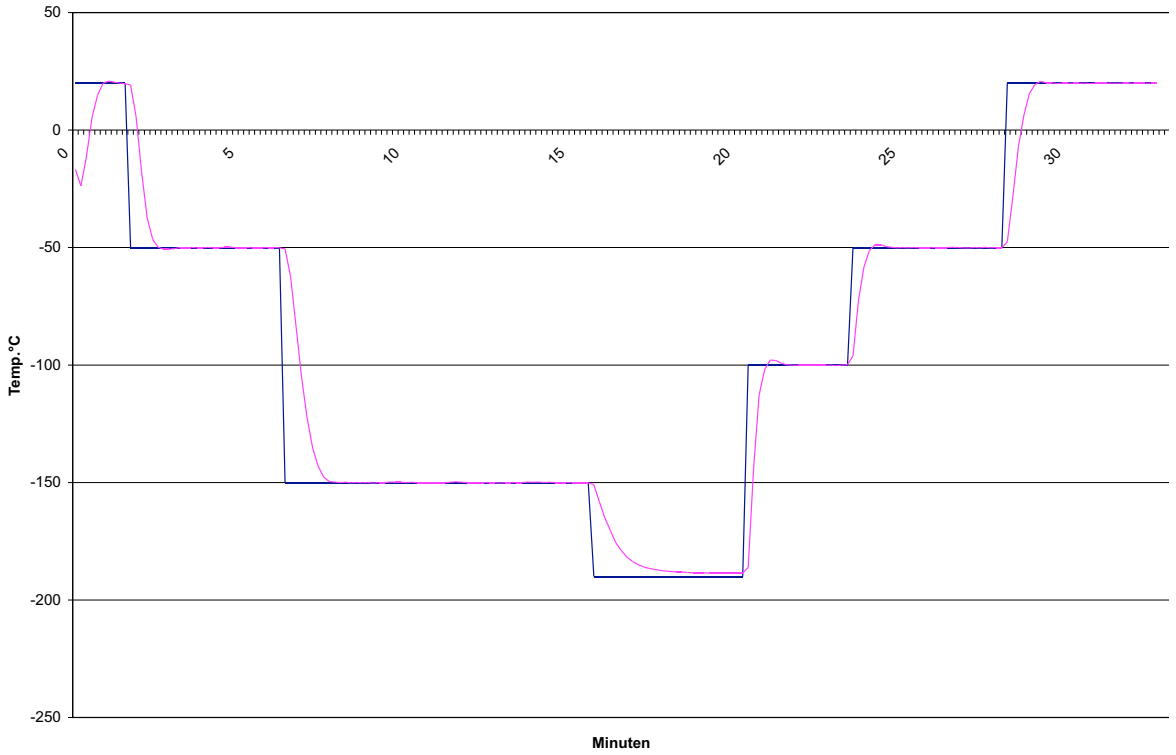
KALTGAS TOOL 2009

Software to control Kaltgas systems

Manual



Kaltgas Tool - MANUAL

Content

Operating Instructions for the Free Sample-Software Kaltgas Tool 2008

Warning Notice

This software is a free sample and may contain defaults. It is only made available to customers for testing purposes. KGW-ISOTHERM does not accept any liability for damages that might arise through malfunction of the software in connection with a Kaltgas System, or any other controller-supported system. Therefore, Kaltgas systems must never be operated together with this software without supervision.

In case that control errors arise when operating the software with the safety controller, both the safety controller and the software must be switched off and consequently re-started. Such a case may happen, if the operator interferes with a running temperature range and changes it.

1) Installation of Software

The user friendly software environment makes it possible to steer cold gas plants simply and comfortably with only few mouse click.

Requirements

Data for IBM PC:

Operating systems:	WinNT,2000,ME, XP, 95, 98
CPU:	90MHz or higher
RAM memory:	32 MB or more
Data communication:	RS 232 or USB
	(Standard RS 232 converter)

Installation

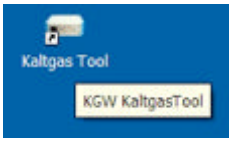
Insert the CD/disk into the appropriate drive assembly and run setup_1001.exe. Now this massage should follow:
"This will install KGW Kaltgas Tool. Do you wish to continue?".
Please confirm with "Yes".
Now a window InstallShild Wizard will open asking for continuing the installation. Please confirm with "next". If you do not want to continue, please click "cancel" then. The software requests now to indicate a directory in which the KGW Kaltgas tool should be installed
Preset is directory: "c:\Programme\KGW Kaltgas Tool".

If you wish to change the directory, please click "Browse". Please continue with "next" after entering your desired directory.
The software is now generating a shortcut in the start menu to simplify the start of this tool (please confirm with "next"). Now a short summary of all installation settings is shown (please confirm with "next").

The program is now installed. This can take a few seconds. You will possibly be requested to restart the computer, once the installation is finished (recommended).

2) Technical Prerequisites

The Kaltgas safety-controller must be connected with the jet and heater as well as with the temperature sensors and the converter. The safety-controller is switched on and the safety-control loop is re-set at Jet and Heater. The converter is connected to the computer. The computer is switched on and the “Kaltgas Tool” software is started.



3) Options and Settings

The pull-down menu file is opened. The menu item “Options” is opened.

The following functions must be set.

a) **Logging interval(s)**
= temperature request time and logging time in seconds

b) **Serial interface**
= activate the respective COM interface

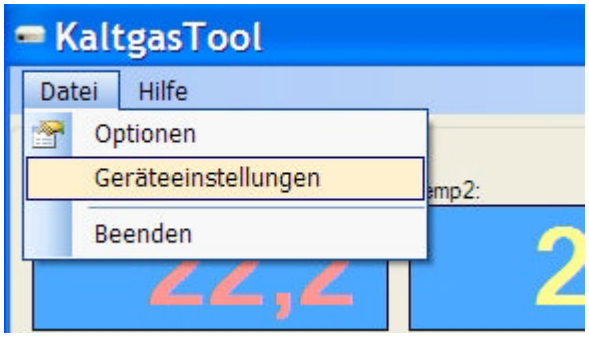
The following functions are set fix.

a) Unit of time
= setting the temperature request time and logging time to seconds or minutes.

c) **Unit of temperature**
= Celsius

4) Device Settings

The pull-down menu file is opened.
The menu item “Device Settings” is opened.



Analogue input 1 (KGW standard settings)

Linearisation

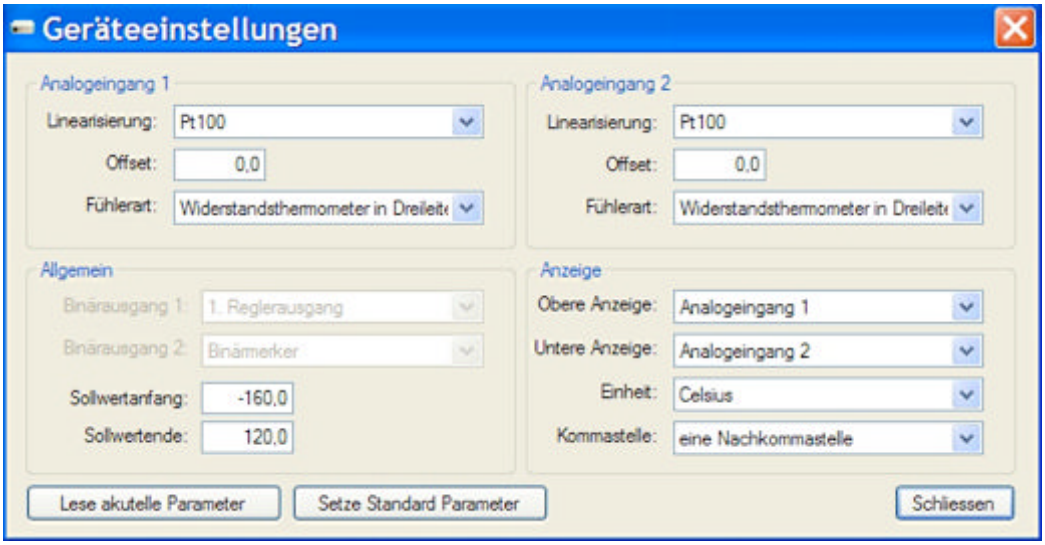
PT 100 (additional setting ranges linear or NiCr-Ni K)

Offset

0.0 (enter offset temperature of the sensor)

Sensor type

Resistance thermometer in three-conductor wiring (without function or thermocouple K)



General (KGW Standard settings)

Binary output 1

= first controller output **(KGW standard settings)**

Binary output 2

= binary flag **(KGW standard settings)**

Target value range – start,

e.g. -200°C (limitation for the lowest temperature that can be manually set at the controller)

Target value range – end

e.g. +120℃ (limitation for the highest temperature that can be manually set at the controller)

Analogue input 2 (factory standard settings)

Linearisation

= PT 100 (additional setting ranges linear or NiCr-Ni K)

Offset

= 0.0 (enter offset temperature of the sensor)

Sensor type

= Resistance thermometer in three-conductor wiring (without function or thermocouple K)

Display (KGW Standard settings)

Upper display

= Analogue input 1 (Kaltgas sensor)
(additional setting ranges without function and current target value)

Lower display

= Analogue input 2 (Temperature sensor)
(additional setting ranges without function and current target value)

Unit

= Celsius (**additional setting range**: Fahrenheit)

Decimal digit

= one digit behind the decimal point (additional setting ranges: no digit behind the decimal point or two digits behind the decimal point)

Read current parameters

= manually changed controller parameters are transmitted to the controller

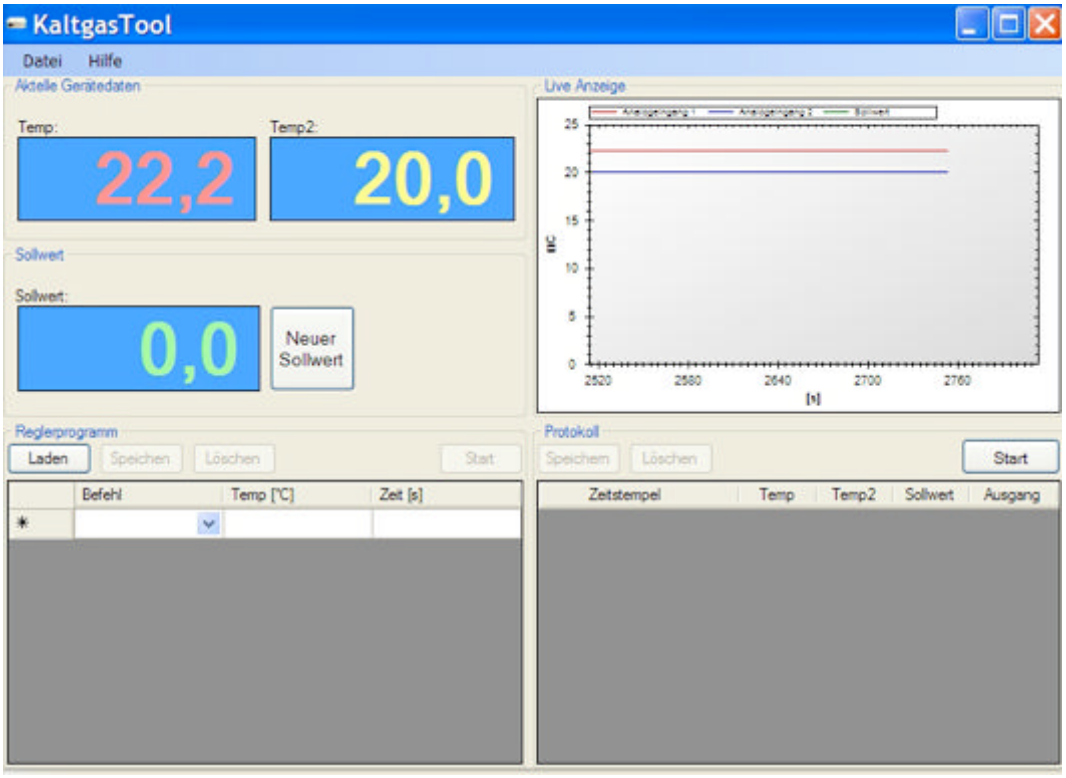
Set standard parameters

= factory-set standard parameters in order to reset the controller to the basic factory configuration.

Close

= exit the device settings

5) Kaltgas Tool (main page)



Temp 1
= current controller temperature (sensor: Kaltgas sensor)

Temp 2
= current display temperature (sensor: temperature sensor)

Target value
= current target value setting (target value from programme range or through entering "New target value".

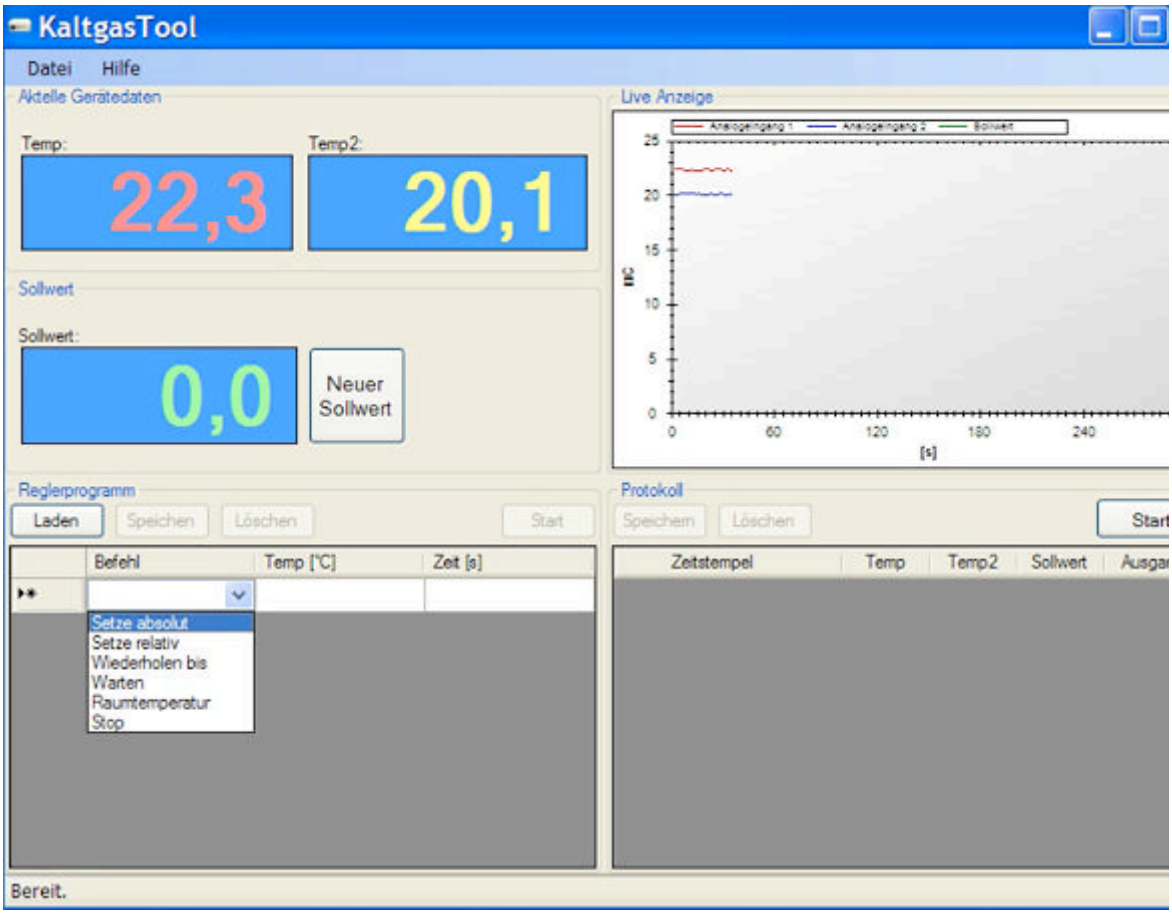
Controller Programme

Load
= loading of saved temperature ranges

Save
= saving of self-generated temperature ranges by means of “Name.ctl” file.

Delete
= deleting of generated temperature ranges.

Range Programme



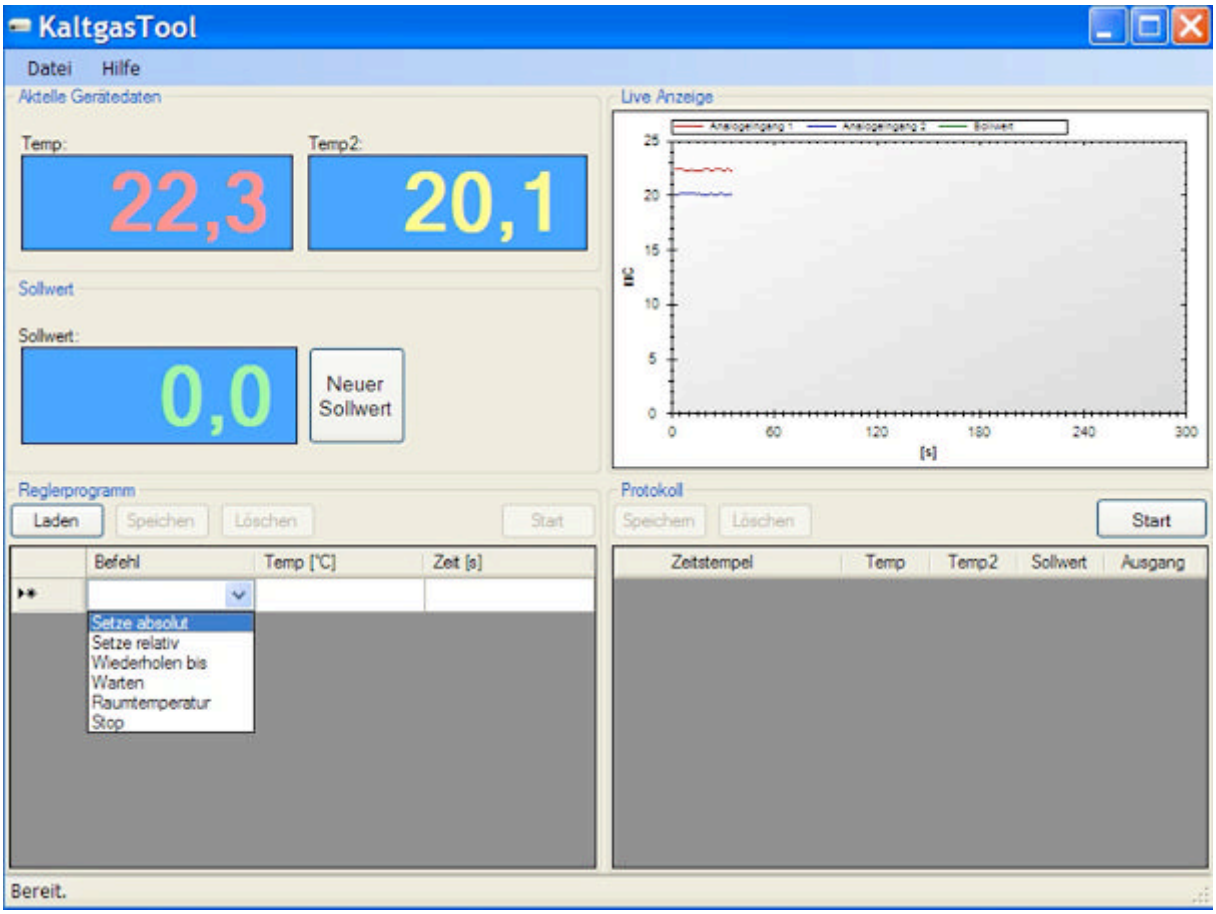
Command	Temp(°C)	Time(S)
Set absolute (fix temperature value)	**-50**	**300**
Set relative (temperature increase)	**-1**	**5**
Repeat until (is set after an increase in temperature)	**-100**	**(no entry)**
Wait (dwell time of the temperature)	**(no entry)**	**300**

Room temperature **(no entry)** **(no entry)**

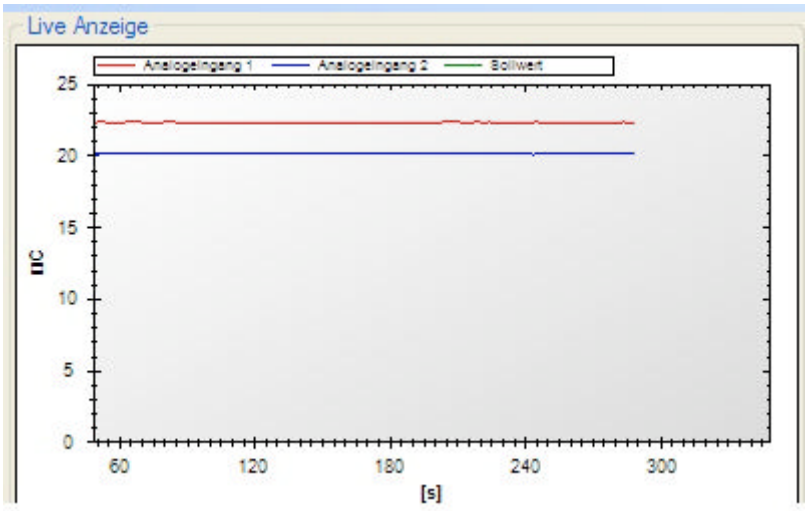
(automatically generates a temperature range up to +20°C, starting with the last temperature and using steps of 5°C per minute)

Stop **(no entry)** **(no entry)**

(switches off the system by simulating a cable rupture at the jet sensor. Reset by resetting the jet button.)



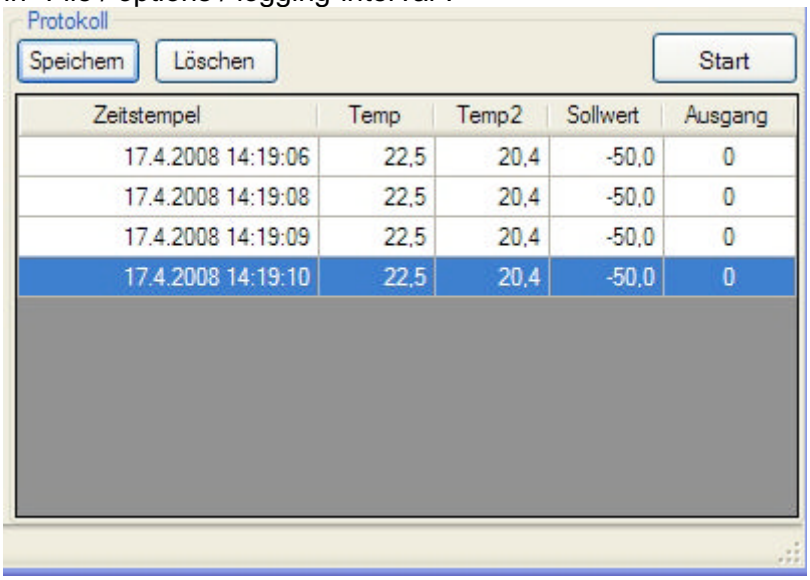
Live Display



The live display graphically indicates the current temperature values of temperature 1 (Kaltgas sensor), temperature 2 (temperature sensor) and the target value.

Log

This field indicates the temperature data. The time interval corresponds to the times set in "File / options / logging-interval".



Zeitstempel	Temp	Temp2	Sollwert	Ausgang
17.4.2008 14:19:06	22,5	20,4	-50,0	0
17.4.2008 14:19:08	22,5	20,4	-50,0	0
17.4.2008 14:19:09	22,5	20,4	-50,0	0
17.4.2008 14:19:10	22,5	20,4	-50,0	0

Save

Saves the data listed in the log into a file with the designation "Name.log".

Delete

Deletes the data in the log.

Start

Starts the manual input of temperature data without the Kaltgas control running. The time interval corresponds to the times set in "File / options / logging-interval”.

6) Connecting Safety Controller - Converter- PC

Converter to Safety Controller

Data wire from Safety Controller to Converter
Green connection wire to D1 +
Yellow connection wire D1 -

Converter to computer USB

USB wire converter to :

Anschlußkabel SI Conroller

Kabel grün auf D1 +
Kabel gelb auf D1 -

geändert Datum	Name	Maße und Toleranzen, wenn nicht näher spezifiziert, unterliegen den Eigenarten und Besonderheiten der Glasverarbeitung und werden dem Stand der Technik entsprechend realisiert.	
		Tag: 10.04.2000	Name: W.Schieder
		Maße: mm	unmaßstäblich
		Werkstoff:	Z.Nr:Controller/ Converter USB

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Tel.0721/958970 Fax.0721/9589777

Converter 7561