

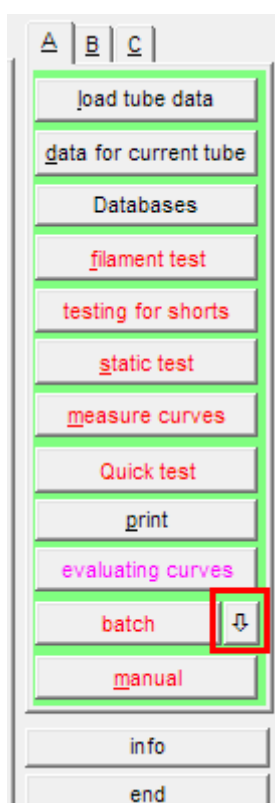
**Batch processing:**

25.03.2018

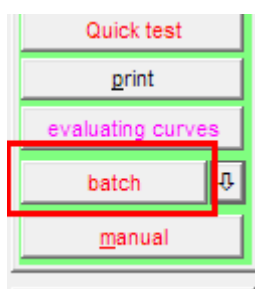
Often you have to do the same workings:

E.g. filament test, short test, static measurements, perhaps curves, printing, saving, evaluating curves and so on.

You can do one button batch processing. First please define, which steps are to do:



Then you can start the batch process:



## Explanations:

Most of the functions also you can start manually by buttons. This functions are not all explained detailed here.

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remark:  
Stapeljob 2: Prüft Röhre mit anderen Daten; kopiert Ergebnis in Tabelle; zeigt am Ende Fenster zum Röhrenwechsel; startet dann Stapeljob 1

Field for remarks: Explanation what this job does

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new (delete data) + increase ID

= erase all arrays, set next ID# (useful, if you want test several tubes of the same type). The next ID# depends if you work with the tubestock database.

add dataset to tubestock database

If you activate in batch processing (ID = synchronized with tubestock database) then always the ID# is the next free dataset in the tubestock database.

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load tube data + increase ID      empty field = tube menu, double click=tube data:      EF804S BTB Triode 200V

If the right edit field is empty then a window for selection tube data opens.

If the right edit field contains tube data, then this data will be loaded.

Select the tube data in this field by mouse double click.

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load measured data

opening a dialog for loading stored measured tube data.

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filament test

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testing for shorts

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<input type="checkbox"/> static measurements: (currents/transconductance)	<input checked="" type="checkbox"/> measuring D of plate	<input checked="" type="checkbox"/> internal resistance	<input checked="" type="checkbox"/> test cathode isolation
	<input checked="" type="checkbox"/> measuring D of screen	<input checked="" type="checkbox"/> test vakuum/Ig1	<input checked="" type="checkbox"/> reverse test diode

static measurements. Select which test to do (if possible for tube type)

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quick-test       search Ug1 for Iaconst       calculate transconductance at new Ug1

static short test.

Search Ug1 for Iaconst: Searches the grid voltage for a concrete plate current

calculate transconductance at new Ug1: Calculates the transconductance on the founded Ug1.

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abort, if not at least

%

If the tube measurement don't reach the % value, then abort the batch processing.

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writing curves

Ug1-curve

Ua/Ug2-curve

1

curve tracing. You can select which curves you want to trace. ,1' means: Only one curve of each chart.

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manual mode

start immediately

softstart

search G1

laKonst= [mA]

message (text):

sound [wav]:

Fenster in Vordergrund holen

Starts the manual mode.

Search G1: Searching a G1 voltage for laKonst. If laKonst = 0, then the typical value from the tubedata database is used.

Message: This text is messaged in the manual mode (what to do manually?)

Sound: (wav file, search with mouse doubleclick). Sound was played with starting manual mode.

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neon stabilizer / neon lamp

start measurement

nixie

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synchronize with tubestock database

add dataset to tubestock database

(ID = synchronized with tubestock database)

show maske tubestock

save measured data as attachment to the dataset in tubestock database

mark dataset

make a picture with webcam an add it as attachment to tubestock database

copy picture to folder 'Röhrenbilder' if not exists

This part is relevant for automatic adding the tube to the tubestock database (tubestock.dbf).

add dataset to tubestock database

(ID = synchronized with tubestock database)

Important: If set  add dataset to tubestock database (ID = synchronized with tubestock database) , then the ID#s are **synchronized with the tubestock database.**

The ID numbers are equal the dataset numbers. With this strategy the software enabled quick access to the tubestock database without searching. In this case, it is not possible to use free ID#s (this becomes useless).

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save measured data as attachment to the dataset in tubestock database

stores the measured data as attachment to the datasets of the tubestock database:

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mark dataset

marking the dataset in the tubestock database. Later you can select all marked datasets (you know all new datasets, e.g. for printing tube rolls)

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make a picture with webcam and add it as attachment to tubestock database

taking a photo with webcam. See separate Tipp.

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copy picture to folder 'Röhrenbilder' if not exists

copying the picture to the folder „Röhrenbilder“, in case the picture don't exist there. Therewith the picture also displayed in measurement software and tube data database.

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matching (transfer first curve in evaluation window to graphic - up to 10)

Ug1-curve

Ua/Ug2-curve

(without easy-match table)

Copying the first curve to the evaluation chart. You can select whether the use of Ug1 or the Ua/Ug2 curve. For matching it is only necessary tracing of 1 curve. In evaluation chart you can display up to 15 curves at same time.

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matching - transfer data in evaluation window to table (any count)

(matching with easy-match table)

Copies much you want curves to the 'easy-match table' in the evaluation window. Then in the evaluation window you can copy the curves with mouse click to the chart. This is a simple, comfortable function matching tubes from a bigger number of tubes. Also it is possible to use the windows clipboard for copying curve datas to other applications (e.g. Excel). See also separate tip to easy match.

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display evaluating-window

After curve trace you can display the evaluation window (usefull if no more tests in this batch process)

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save measured data

show dialog 'saveing'

Save measured data to the folder, set in options. The file name automatically generated as set in options. If wished, a save dialog is displayed.

print    printing protocol to printer (using settings of print dialog)

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print label    Etikettenanzahl:

printing a label with a label printer (ZPL-printer). Using settings of print dialog

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measured data->list    view list of measured tubes

Stores measured values to a table. You can export it to csv.

test

„test“: In options 2 you can define 2 extern applications (exe-files). If so, you can start this applications here.

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endless loop     beep     auto tube detection     Fenster in Vordergrund holen  
sound complete [wav]: C:\CBuilder5\Projects\RoeTest\Klingeln.WAV  
sound continue [wav]: C:\CBuilder5\Projects\RoeTest\XYLOPHON.WAV

If this part selected, then batch processing starts again, until you abort.

Auto tube detection: At end of the loop the software prompt you to insert another tube. The system is recognizing whether a tube is removed and inserted again. For security I only allow tubes without top connection (this function is limited to quantified sockets).

**Caution:** The measurement starts automatically after inserting the tube. In this case are high voltages at the tube sockets present. Only use this mode if no touch with the sockets is possible (only one socket is in an adapter).

You can define playing a beep or a WAV file at prompting and restart the batch processing.

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start batch job (doubleclick): C:\CBuilder5\Projects\RoeTest\Stapeljob1.job

Loads and starts another batch job. In this way also complex tasks are possible.

Example:

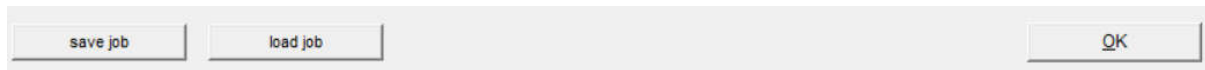
Somebody want to test tubes with two different settings. The results should be stored in the table measured tubes. Solve this task with two batch jobs:

Job 1: next ID, load tube data "first settings", quicktest, store result to table, start job 2

Job 2: load tube data "second settings", quicktest, store result to table, show window endless loop with tube change, start job 1

Begin the testing with job1 !

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Storing and reloading of batch jobs.

The at last used job is automatically loaded at starting software.

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