# RoeTest – Computer Tube Tester / Tube Measuring System (c) - Helmut Weigl <u>www.roehrentest.de</u>

## Matching – and easy-match

Already with the earlier software versions it was possible to match tubes perfectly (finding two ore more tubes of the same type with same data) by comparing their characteristic curves. The previous function is very flexible but also a little bit difficult to use (see: Measuring the characteristic curve and analyzing it).

Starting with software version 5.3.0.0. there is now a new, more comfortable function "easy-match".

The characteristic curves of the tubes are recorded and stored in a table. Then the characteristic curves can be shown in a graphic with a mouse click (left mouse button) and also be removed from the graphic (right mouse button).

## **Instructions – Step by Step:**

## 1. Restricting the recording of the characteristic curves:

For matching we only need a single characteristic curve. Recording more characteristic curves only takes time and is unnecessary. So we restrict the recording either to the input or output characteristic curve:

jen   Heizung   Kurzschlu	stest stat	ische Daten	Vakuum	Kennlinien	Ве	emerkungen
ı 1   System 2   System 3	<b>⊽</b> UG1	-Kennlinien	□ UA/I	UG2-Kennlini	en	<b>▽</b> 1

## 2. Configure Batch Processing:

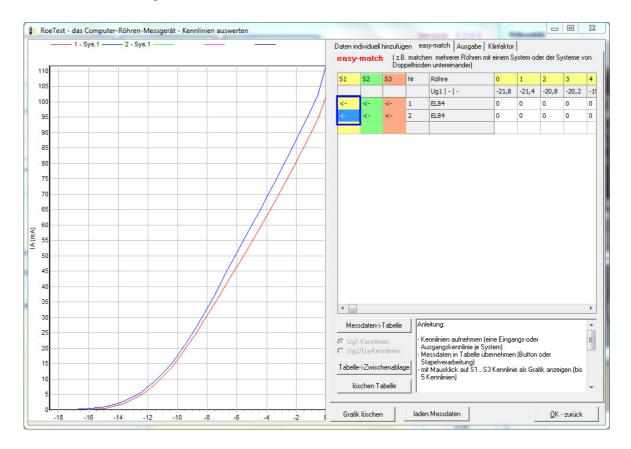
Kennlinien aufnehmen				
matchen (erste Kennlinie ins Auswertefenster (Grafik) übernehmen - max .5 )				
<ul><li>Ug1-Kennlinien</li></ul>	C Ug2/Ua-Kennlinien			
▼ matchen - in Auswertefester easy-match-Tabelle übernehmen				
☐ Auswertefenster anzeigen				

#### 3. Start the Batch Processing

Record the characteristic curves of as many tubes as you like.

### 3. Comparing the Characteristic Curves

Use the button "Kennlinien auswerten" to get to the analyzing window then select the tab "easy-match".



Use the left mouse button and click the column S1(=system1) of the tube to be displayed. Then the characteristic curve will be shown in the graphics. Up to 10 characteristic curves can be displayed at once in the graphics. On the eleventh mouse click the first characteristic curve will be overwritten. If one characteristic curve does not match well enough you can use the right mouse button to erase the respectively last characteristic curve. In this way the characteristic curves of the tubes can be compared very comfortably.

After all really easy, isn't it?

A tip from me: Many tube vendors sell supposedly matched tubes. In many cases the comparison is done using only one static measurement, thus only at one point of the characteristic curve. Such a comparison can be deceptive. The only way to be sure that tubes match exactly is by recording and comparing the characteristic curves.