Ostar High Voltage Tubes

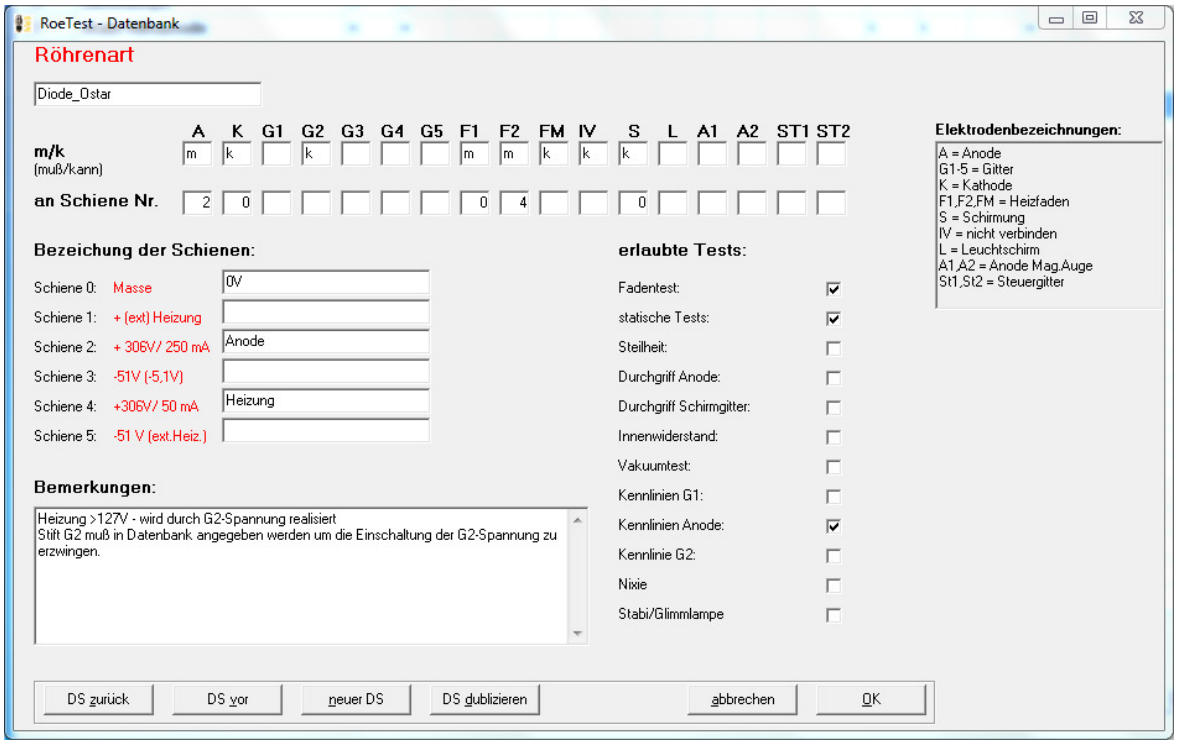
At the beginning of the 1930ies the company Ostar (Gustav Ganz, Vienna) produced so called high voltage tubes. The voltage of the filament was designed so that the filament could be directly supplied from the mains voltage.
The heating transformer or a series connection and series resistors were unnecessary for that tubes.

There were tubes with 110V, 150V and 220V filaments. The RoeTest can measure tubes with heater voltages up to 127 V just normal.

For higher voltages a small workaround is required. There are plenty of voltage sources present in the RoeTest. As an example an EG50 (rectifier tube)

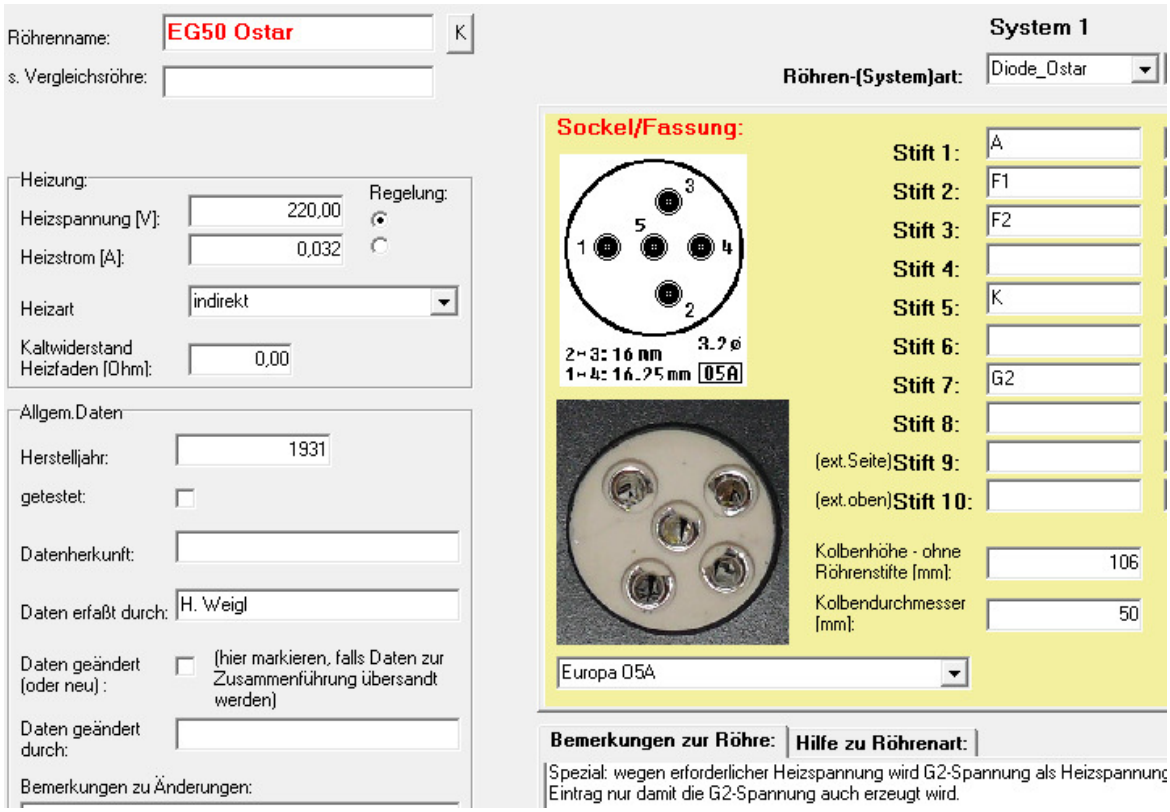
is used. This tube has a heater voltage of 220 V at 32 mA heater current (Attention, there are also 110 V types of this tube). The heater voltage of the RoeTest is limited to 127 V. So just use another voltage source: we use the G2-voltage that has an upper bound of 300V and 55mA. This special case is normally not provided by the software. **But you can dupe the software**.

First a new tube type is defined:

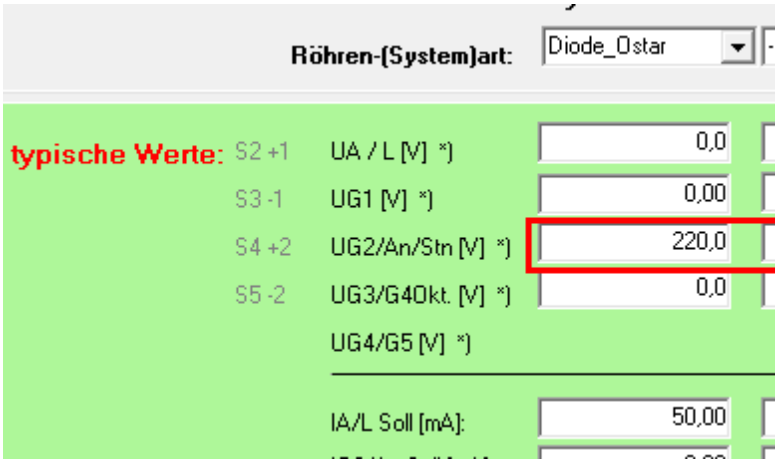


The filament (F2) is switched to rail 4 (G2-voltage source). This rail will be named heater voltage. Further on a grid 'G2' is allowed. Anyway there is no G2 in a diode. But this is required so that the G2 voltage will be generated.

Now the tube can be defined in the tube database:



Used is the new tube type 'Diode_Ostar'. A not present pin (here 7) is assigned to 'G2' that in reality does not exist. The software needs 'G2' to generate the G2 voltage. Actually the voltage source will be used as heater voltage and then correctly switched to 'F2'.



At UG2 the heater voltage has to be entered.

Tube measuring is now done in the normal way. When loading the tube data a note is shown telling that the heater voltage is not possible. This can be ignored. Filament test, short circuit test, static measurement and characteristic curve recording is done automatically as usual.