

WELDING GENERATOR OPERATING IN A CONTINUOUS MODE

SETTING & SCANNING example for 20 kHz welding converter (2 kW)

-Install all necessary Lab View software (read the manual for welding generators).

-Activate our Lab View software: "**welding_scan.exe**" (or "**MPIwelding.exe**")

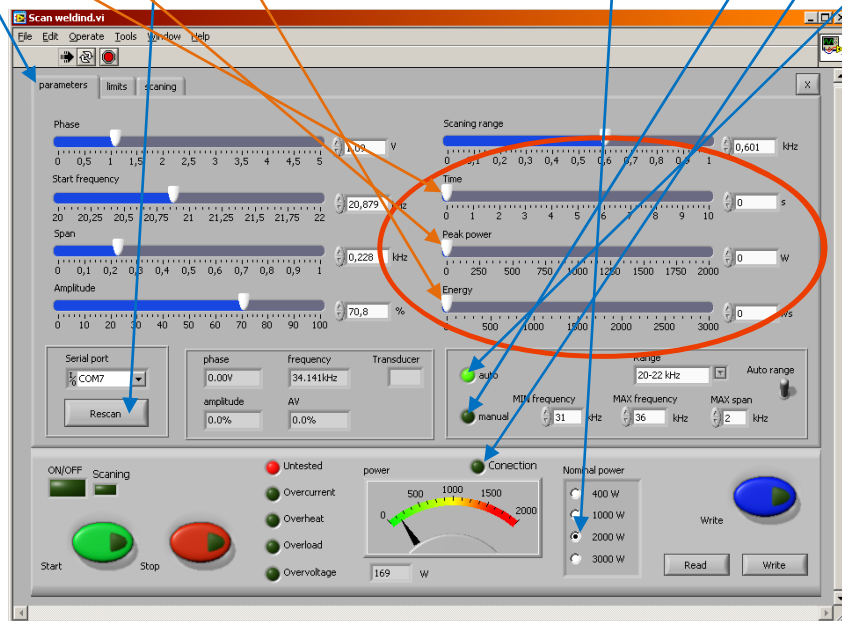
-**First Tab** (parameters):

-Select proper Serial port (Rescan). Verify that connection to your PC is activated (small green light "Connection" starts blinking).

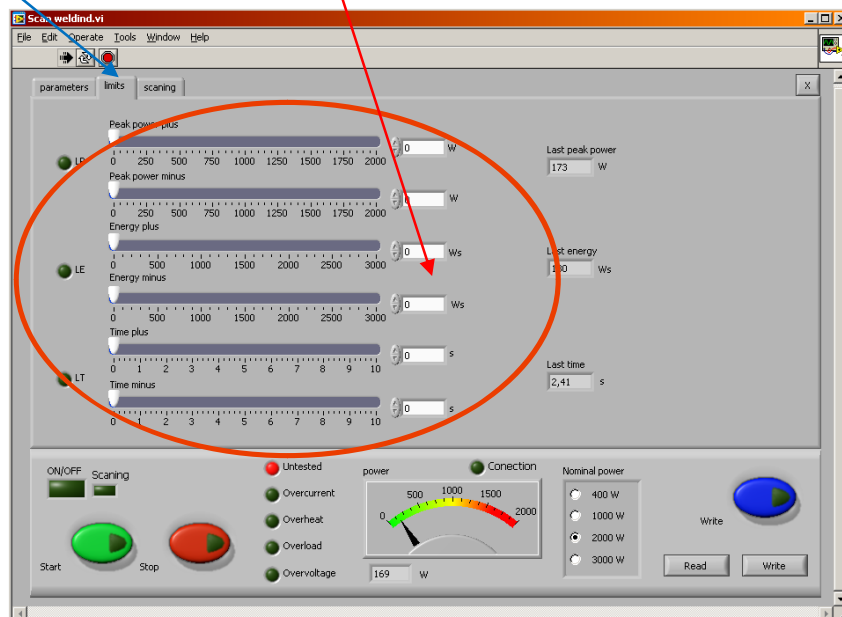
-Set **Time**, **Peak power** and **Energy** to "0"

-Select "**Frequency Range**", where is expected that transducer will operate (manual or automatic).

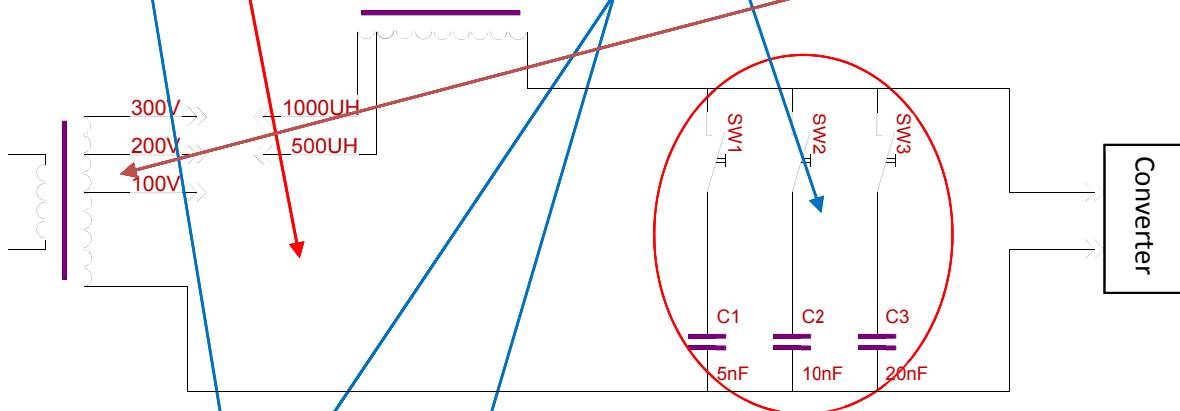
-Set "**Nominal power**" to what correspond to hardware – in this example 2000W



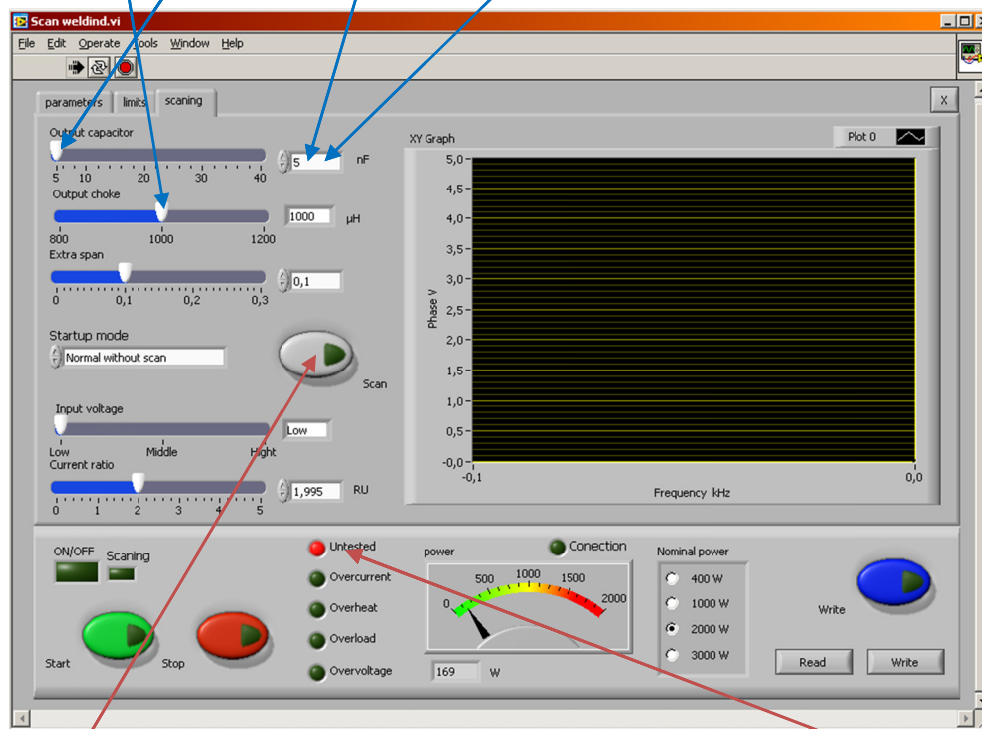
-**Second Tab** (limits): Set all limits also to "0". This is our software convention to initiate continuous mode.



-Always stop the generator before changing “Output capacitor” (third Tab)– see below the block diagram of the output stage of generator. Output capacitors are selected in all type of generators (400, 1000, 2000, 3000 W) from Lab View software with slider. The preferred value of Output voltage and Compensating inductance are selected from the software (2000 and 3000W generators only) or by jumpers inside the generator (older versions are using jumpers).



-Before Scanning set the output capacitor to minimum (5nF) with the slider in top left corner (third Tab).



-Set/or select with jumpers the output voltage to minimum - 100V (first time, for untested converter)
 -Set/or select with jumpers the Compensating inductance to 1000uH or 500uH relative to resonant frequency of ultrasonic converter (see complete user manual – chapter **Output capacitor selection**)
 -**Make scan** procedure (see the user manual chapter: **AMMM & Welding Ultrasonic Power Supplies - Examples of proper selection of operating frequency ranges (during Scanning)**).
 -Slowly change (increase) the “OUTPUT CAPACITOR”, “OUTPUT VOLTAGE” and “COMPENSATING INDUCTANCE”, to obtain the best operating conditions and automatic power and phase regulation (as explained in the user manual).

NOW YOUR GENERATOR IS READY FOR CONTINUOUS OPERATION.