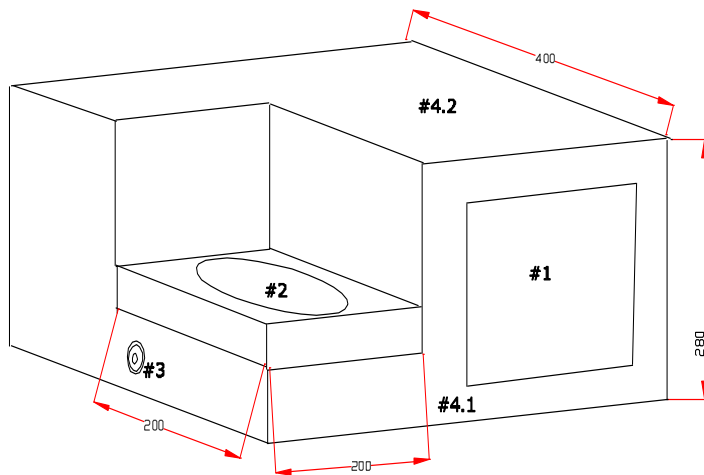


# 10kV-400W PEF **Lab System** of dual application



## A standard flat PEF chamber data plus the output for an outside load:

- 1: control panel with analogue LED supported manual dials,
- 2: PEF flat cell with the gap of D140x5-20mm, white Polyamide & Stainless steel.
- 3: 10kV coaxial plug for an outside load,
- 4: stainless steel enclosure in two parts: the base -4.1 and the cover-4.2.

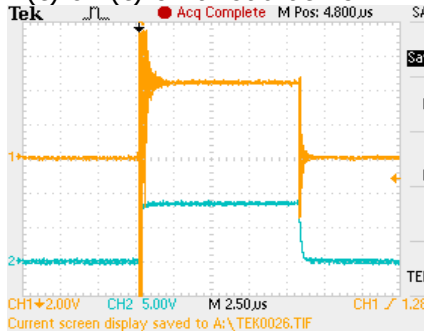
- the flat PEF chamber #2 for PEF assisted extraction of juices from hard to break vegetative cells. It can be used also for jell/creams sanitation and for softening meats and hard organics. Fully interlocked and magnetically locked during HV pulsing.
- coaxial plug #3 to external PEF co-axial or co-linear chambers, or other loads. It is interlocked for safe usage.

## Control panel:

- 2 knobs with LED's rows for 3 fixed pulse parameters  $\mu\text{s}$  & Hz,
- 2 knobs for gradual change of pulse parameters  $\mu\text{s}$  & Hz,
- Timer in the panel centre, 3s-1h pulsing,
- 2xBNC for pulsing inputs & 2xBNC to measure pulsed HV & current on the load with the included 100MHz digital scope.

## This new product evolved from a custom order on a basic 10kV pulser

V(t) & I(t) on a load at 10kV



One of custom PEF control panels



Leaves in the PEF chamber



## Advantages of our new bench-top PEF system:

### Broad pulse parameters:

- **10 kV** power supply provides electrical fields from **5 to 25 kV/cm**,
- Rep. Rates, Hz: gradual by a rotary knob from **5Hz to 50Hz** plus 3 fixed on your request in the same  $\mu\text{s}$  range;
- Durations in  $\mu\text{s}$ : gradual by a rotary knob from **2  $\mu\text{s}$  to 30 $\mu\text{s}$**  plus 3 fixed on your request in the same Hz range;
- Max pulse current to media (Q/s), 0.1-10 A depending on applied **V** and media **R** which has to be min of ca.3-10kOhm);
- Shape: positive rectangular, fronts 1  $\mu\text{s}$ . • Flatness: 10% at 20 $\mu\text{s}$ .

**Size:** 50x40x30cm

**Material:** food grade, polished stainless steel & white Polyamide.

**Weight** 12 kg.

**El.:** 230VAC, 50-60 Hz, 500W, 1kW – on order.

## Practical low-budget PEF & IPL lab systems.

