

# Bench-Top PEF R&D Sterilization System SBS-PEF-SA-1



## Pulse parameters:

- Max. voltages **V**: **A**: 10 kV; **B**: 18 kV; **C**: 30 kV (classic spark-gap or SCR and ca. 5  $\mu$ s pulses).
- El fields from 5 kV/cm up to **25 (A, B); 40 (C)**;
- Rep. Rates, Hz: **A**: 5, 10, 20, B, C: (+50,100);
- Durations in  $\mu$ s: 2.5, 5, 10, 15, 20;
- Max pulse current to media, A: 10 A; B: 50A; (it is a function of **V**, and sample resistance **R**);
- Max pulsed output: A: 250w; B, C: 1-2 kw
- Selectable time for pulsing: **1s-1h**;
- Shape: positive rectangular, fronts of ca.1  $\mu$ s.
- Flatness: 2% at 5 $\mu$ s: 10% at 20 $\mu$ s.

**Size (LxHxB)/Weight:** 100x46x46 cm /42 kg.  
**El. connection:** 220-230 VAC, 10 A, 50-60 Hz.

## Control panel:

- Analogue diallers for pulse parameters,
  - HV probe with BNC connector,
  - Current probe with BNC connector,
  - BNC output for pulse duration command,
  - PC scope with cables (included).
- OPTION:** LCD Siemens display for controls.



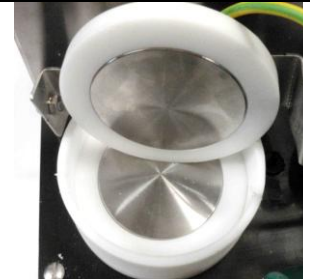
2 PEF cell, 1.5l batch,  
reg. pump, flow meter:



coaxial PEF cell:



PEF cell with  
parallel electrodes:



## Advantages of our semi-automatic bench-top PEF systems:

### TWO fast interchangeable PEF vessels:

- **a coaxial chamber** 180 mm long, gap 6 mm, for disinfection of juices, milk, etc. with regulated 1-5 l/min direct flow or through the 1.5 l batch volume, Flow meter, T° control.
- **A cooler (heat exchanger)** before or after PEF chamber- optional.
- **a round cell with parallel electrodes for**
  - sanitation of jells, jams, D80mm, gap 5-15 mm
  - Extraction of nutrients/colors from vegetative cells.

### Broad PEF parameters and R&D conveniences:

- #1: allow R&D from PEF extraction to PEF sanitation,
- #2: assure to locate optimal electrical parameters as per 3 PEF types of A, B, C, each with own advantages,
- #3: include a pump rate from 1 to 5 l/min,
- + #4: **changing** from one chamber to another in **30sec.**
- + #5: PEF chambers can be customized for your goals.

## Practical inexpensive & versatile PEF R&D system.

