

**INTENSE CAVITY SHAKING.
FOR 10 TO 500ML VOLUMES.**

OPERATION

The ultrasonic generator transforms the electric current from 220V 50Hz into ultrasonic energy of 20KHz, to feed the ultrasonic transducers. The transducer produces an elastic distortion by following the alternate voltage, which traduces in a longitudinal mechanical vibration that produces a cavitation effect in the titanium alloy probe submerged in the solution. This generates a multitude of micro bubbles which releases a considerable energy in the probe end that allow a sample intense shaking and vibration.

APPLICATIONS

Biology, chemistry, environment, general analysis laboratory.

It allows disintegration of cells and biological tissue, DNA protein extraction, ether hydrolysis RNA, reactions output acceleration and increase, earth and sediments treatment according to EPA SW methods which simplifies the Soxhlet method in time, quality control, R&D, sample gas remove, dissolution and homogenization, emulsion, dispersion, liposomes formation, proteins microencapsulation, etc.



FEATURES

The equipment consists of a control and power unit and an ultrasonic transducer (homogenizer).

Control unit: Epoxy coated external metallic case and ABS front panel. It consists of a LCD display, cycle time programming push buttons, impulse intervals, maximum power and temperature with 10 programs configurable by the user. Probe and connector for the sample temperature control.

Ultrasonic transducer consists of a piezoelectric converter with a 1/4 inches titanium alloy probe (5,6mmØ and 60mm height).

It is hold by means of a retort stand and an adjustable clamp, max. 44 cm height.

ACCESSORY

Anti-noise cabin

Made in double isolated layer that protects from high noises emitted by the ultrasound effects.

It comes with a transparent door.

Part No. **5059601**

Probe 1/8" for volumes of 0.5-400 ml.

Part No. **5059602**

Probe 3/8" for volumes of 20-600 ml.

Part No. **5059603**



CONTROL PANEL

On/off switch.

Parameters indicator LCD display.

Ultrasonic power adjustable control (1-99%).

Push button from 0 to 9 for parameters selection: Time (1" - 2hours).

Maximum impulses and temperature.

SET push button: select parameters.

CLEAR push button: cancel parameters.

ENTER push button: validate parameters.

START/STOP push button: cycle beginning and end.

PAUSE push button: pause function.

RECALL-SAVE push button: memory to save 10 programs.

MODEL

| Part No. | KHz Frequency | Height/Width/Depth (exterior) cm | Power W | Weight Kg |
|----------------|---------------|----------------------------------|---------|-----------|
| 5059600 | 20 | 22 19 33 | 500 | 6,7 |

It is supplied with a support-rod adjustable in height.

APPLICATIONS

For the use in pharmaceutical, chemistry and alimentary industry.
For powder, granulated and small concentrated batches that are sent to the production plant after being investigated in laboratory.

FEATURES

Made of stainless steel AISI 304.
It have two loading entrances in V and an unloading hole which is protected with isolated covers with silicon gaskets.
Engine group with shaking device at a constant speed of 18 rpm.

CONTROL PANEL

Start button.
Stop button.
Container positioner button.
Timer from 1 to 99,9h.

MODELS

| Model | Part no. | Volume Liters | Load capacity (50%) Liters | RPM | Height / Width / Depth (external cm) | Power W | Weight Kg |
|-------|----------|------------------|-------------------------------|-----|---|------------|--------------|
| VS-5 | 5810100 | 5 | 2,5 | 18 | 58 72 37 | 550 | 47 |
| VS-8 | 5810101 | 8 | 4 | 18 | 64 81 37 | 550 | 52 |
| VS-50 | 5810102 | 50 | 20 | 15 | 130 150 50 | 750 | 250 |



SPARE PART

Silicone gasket for VS-5, VS-8 and VS-50
Part No. 5810110 (Unit).

APPLICATIONS

For a wide range of products grinding, solid, fragile, soft and semi-hard ones. For the use in pharmaceutical, chemistry and alimentary industry in general.

FEATURES

Made of stainless steel AISI 304.
Device for different kind of easily changeable sieves. From 0,12 mm Ø to 0,80 mm Ø.
It is supplied with a sieve of 0,18 mm Ø.
Only suitable for grinding samples with relative humidity below 20%.

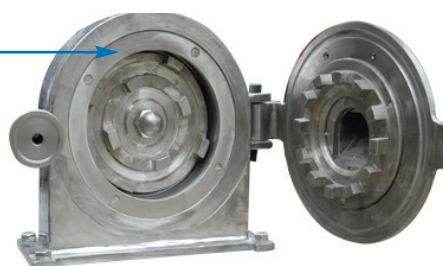
| Model | Part No. | Capacity Kg / h | Db | RPM | Voltage V | Measures (cm) Height./ Width. / Depth. | Power Kw | Weight Kg |
|-------|----------|--------------------|----|------|-----------------|---|-------------|--------------|
| TR-20 | 5810000 | 10 a 30 | 85 | 4200 | 380-50 Hz phase | 70 40 80 | 2,2 | 85 |



ACCESSORIES

Sieves

| Part no. | Sieve Ø mm. |
|----------|----------------|
| 5810007 | 1 mm |
| 5810001 | 0,80 mm |
| 5810002 | 0,38 mm |
| 5810003 | 0,25 mm |
| 5810004 | 0,18 mm |
| 5810005 | 0,12 mm |



SPARE PARTS Shear Part no. 5810006

Device for an easy sieve insertion.