Ultra Slim





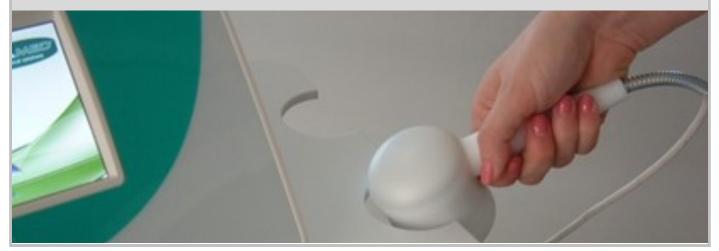
ULTRA SLIM

Ultra Slim is an ultrasound waves generator that, trough controlled emission at low frequency, is able to reshape the skin reducing the adipose layer, toning and reducing skin blemishes.



How It works

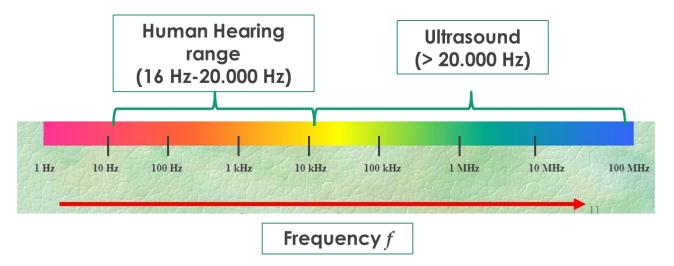
Ultra Slim grounds its operating principle on a scientific phenomenon called CAVITATION.



Ultrasound waves

Ultrasound is an oscillating sound pressure wave that can not be heard by the human ear. In fact it has a frequency greater than the upper limit of the human hearing range. The term "ultra", in fact, indicates something that is "beyond" the sound, (identifying with the term "sound" the physical phenomenon of listening).

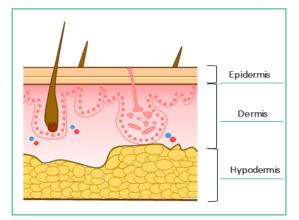
Ultrasound devices operate with frequencies from 20 kHz (20.000 Hz) up to several gigahertz.



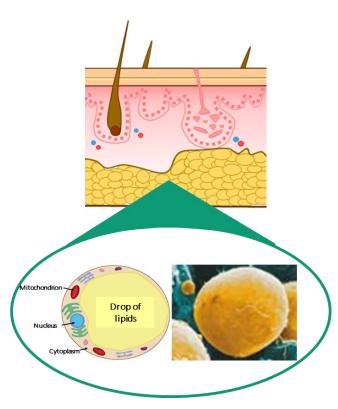
Skin

The skin covers and protects the entire human body and is composed of three layers:

- **Epidermis**: outermost layer, it is a barrier against the external environment;
- Dermis: tissue intermediate, it supports the epidermis. Being crossed by a dense network of blood vessels and nerves, it also innervates and nourishes epidermis.
- Hypodermis: it is the deepest layer, consisting predominantly of adipose tissue that has the task of protecting the body, from heat loss and trauma, and of acting as a reserve energy. The cells most common at this level are the adipocytes that synthesize, accumulate and dispose of lipids (fats).



Adipocytes



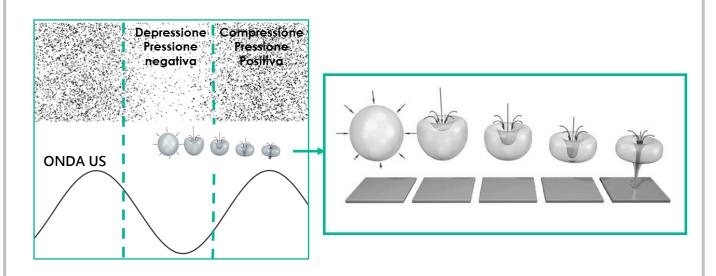
Adipocytes, also called fat cells, constitute the adipose tissue. This is an "active" tissue because its cells are directly involved in the synthesis of fats that they release in response to specific hormonal and nervous stimuli. Thus, it plays a vital role in ensuring a constant supply of energy to the body material.

The adipocytes are spherical; the nucleus is flattened and pushed to the periphery while the cytoplasm (the internal environment of the cell) is reduced to a thin ring which surrounds a single large drop of lipids.

Cavitation

Cavitation is a phenomenon that is obtained by investing a liquid with ultrasonic wave (frequency between 25,000 and 40,000 Hz). The passage of ultrasound through a liquid determines, in fact, expansion (negative pressure) and compression (positive pressure) waves . If these waves are strong enough, they can cause the formation of vapour bubbles that become smaller until to implode.

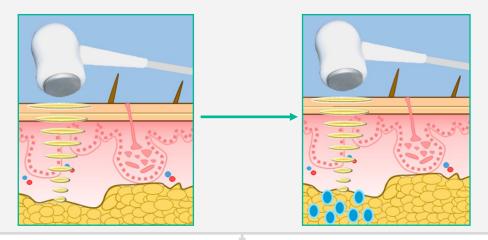
In aesthetic medicine the cavitation effect is used to cause fragmentation of the adipocytes in order to reduce the fat layer without recourse to surgery.



Operating Principle

Ultra Slim's hand pieces generate ultrasound waves which, for their high frequency, produce, within the tissue, areas at high and low pressure.

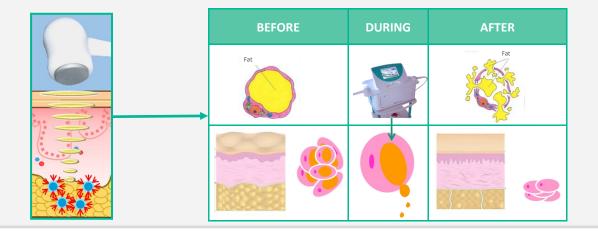
The interstitial liquid, an aqueous solution present between the cells, due to the lowering of pressure, changes its phase (passing from liquid to gas) producing numerous micro bubbles.



When the micro-bubbles pass from a low pressure to an high pressure zone, they are crushed becoming smaller until to implode. This implosion fragments the cell membrane of the fat cells

In this way, the drop of lipids, contained in the cells, comes out reducing the volume of subcutaneous fat.

The fat, turned into liquid, may be expelled physiologically, through the urine.



To sum up, to reduce the volume of localized fat, Ultra Slim, carry out two main actions:

- 1. **Breaking up of adipocytes**: the energy given off by the implosion of the cavitation bubble cause partial or total rupture of the cell membrane and the releasing of its fat contents.
- 2. **Inverse osmosis**: it is induced by the tangential force (shear force) that the pressure exerts on the cell membrane. This gradually increase the membrane permeability with leakage of the contents in the extracellular fluid.

Fields of Application

Clinical / Therapeutic Application

Ultra Slim reduces the fat thickness of peripheral fat deposits such as lipomas.

Lipomas, benign tumours of adipose tissue, manifest as lumps under the skin, slow-growing, largely localized at the level of the armpit, shoulders, buttocks, trunk and thighs. It 'important that they are diagnosed with an ultrasound examination.

Applicazioni estetiche

It reduces the imperfections caused by localized fat, such as:

- Primary fat type;
- Secondary fat type;
- Dysmorphia post liposuction;

This fat tissue is present in the male and female body in high quantities due of a reduction in lipolytic activity caused by sex hormones.

In the lower body district the areas most affected are the hips, buttocks, abdomen, interior and exterior of the inner part of the thigh and knee. In the upper district the area most affected is the arm. In all these locations the fat tends to consolidate and, while the liposynthesis action (generation of fat) takes regularly place, the lipolytic enzymes, deputies to the dissolution of fat, are inhibited due of the oestrogen.

Results

- Compact dermal texture;
- Evident reduction of adipose tissue;
- Toned up skin;
- Regression in skin imperfections such as cellulite and orange peel;
- Reshaped body;
- Tight, smooth and firm Skin.



Innovations and Features



The ultra-sound wave is produced by a PIEZOELECTRIC TRANSDUCER: a special crystal that, when is subjected to an electric current, changes its form.

Hand pieces: Smart flat e Smart Focus

The handles are available in two configurations: flat and concave. This configuration affects the ability of the ultrasonic wave to penetrate into the tissues because of the different mode in which the ultrasonic beam converges. The area of maximum efficiency therefore occurs at different depths:

- Smart Flat (flat) maximum efficiency from 2 cm to 3 cm in depth;
- Smart Focus (concave) maximum effectiveness from 3 cm to 4 cm in depth;

In a work session, the operator can use the two hand pieces in succession in order to make more effective the treatment.

Hand piece's area is 20 cm².

Disinfection Box

Ultra Slim is equipped with a unique and innovative drawer with an integrated UV system to sterilize the hand pieces. Sterilization is activated by pressing the button on the back of the case. A timer automatically switches off the lamp within 5 minutes. Each time that you open the drawer the lights is automatically turned off, even if the disinfection cycle is not yet complete and it restarts when you close the drawer.

The drawer can also be used to put away the hand pieces when the device is not in use.





Starting Pedal

EXTREME SAFETY. To avoid distraction and to avoid that the instrument is inadvertently activated, Ultra Slim has a Safety pedal: the treatment starts only pressing the pedal.



User-friendly Interface

- Intuitive interface with 7" colour Touch Screen Display;
- The system has an innovative and easy to use interface which is a new addition on the market.
- Using the USB pen drive the firmware upgrade is possible without the intervention of a specialist.

Software

- A sophisticated software automatically organizes the treatments reducing the time processing, improving and optimizing the organization of work and the use of resources, materials and money involved;
- Pre-set application protocols;
- System for the development of programs "ad hoc": Ultra Slim allows to create and store new protocols. Ultra Slim is in fact an "open" device, this means that an experienced user can create unlimited programs.
- Registration of body measurements and plicometry (measure of skinfold):

Neck circumference

Waist circumference

Abdomen circumference

Circumference of Hips

Thigh circumference

Arm Skinfold

Abdomen Skinfold

Gluteus Skinfold

Inside leg Skinfold

Knee Skinfold

Visualization of some anthropometric indices:

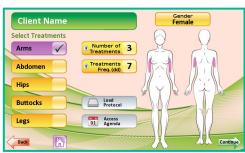
BMI (Body Mass Index); MG (Body Fat Index);

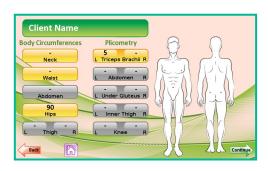
DIM (Recommended slimming);

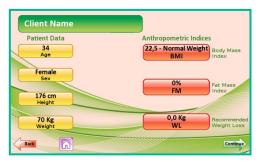
Kinds of treatments:

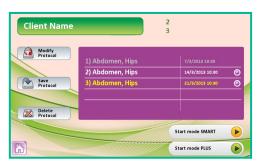
Smart Mode: Therapies are customized on the characteristics of the patient. The operating parameters and the frequency is determined by a powerful algorithm. The frequency can not be changed. The parameters can be changed by the operator within the range considered scientifically valid for ongoing treatment.













Plus mode: frequency and parameters are optimized manually by the operator.

 Table with the history of body measurements recorded during a cycle of treatments;

Parameters:

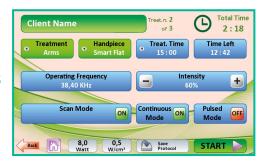
Intensity: it is expressed as a percentage and it acts directly on the power delivered by the generator.

Scan mode: it is the frequency modulation; it allows to vary the depth of penetration of the pressure waves.

Continuous Mode: continuous ultra sound wave.

Pulsed mode: the device works in pulsed mode allowing you to work in depth and at low energy.

Duration of treatment.





Design and Handiness

Ultra Slim has an elegant and highly functional design: the handles are fixed on the box so they are always available during therapy (when you need a rest period) or to keep them stored when the machine is turned off. In this way it gives to the environment around a sense of order and professionalism,





Training Course

A training course teaches you the skills and knowledge for a safe and correct use of the devices. At the end of the training course, Eurtronik will give you a certificate of participation.



Marking

CE Marking:

- Dir. LVD 2006/95/CE LV
- Dir. EMC 2004/108/CE
- MEDICAL MARKING: (2007/47/CE) CE (0476)

Optional

Ultra Slim is available with:

- \Rightarrow 1 Hand piece Smart Flat A=27 cm²;
- ⇒ 1 Hand piece Smart Plus A=27 cm²;
- ⇒ Plicometer;

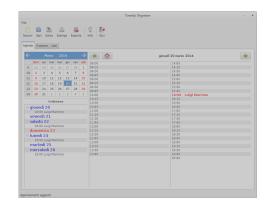




Organizer Software

Ultra Slim's software communicates with the Organizer software on your PC through a USB pen drive.

- Data and treatments, performed by each customer, are stored in the Pen Drive;
- It automatically creates a databasemanagement agenda (Planning Function): a modern and useful tool that allows to manage of all appointments;
- Software synchronization and updating on PC via USB;
- Programming therapies at a distance: the software for PC allows to manage the treatments for each customer. This information, stored in a file, can be transferred to the USB stick and loaded on the device that will be ready to start a treatment;
- Creating a follow up calendar for the customer:
 it contains dates of appointments, logos, information and an informative or promotional message.







Benefits and Innovations

CUSTOMER'S BENEFIT	BENEFIT FOR YOU	INNOVATIONS
Treatments scientifically determined	New addition on market	Treatments automatically determined
Customizable treatment	Guided treatment configuration	Interactive guide and intuitive interface
Treatment for numerous areas of the body	The customer is satisfied	Treatments based on scientific researches
No Waiting times	Easy to use	Pre-set protocols
Therapy is not painful	Safety	Hand pieces: Smart flat e Smart Focus to work in different ways
Sense of assurance and high hygiene	Free Advertising	Fast updates with USB key
Customizable treatment	Organization	Box with an integrated UV system to sterilize the handpieces
High technology	Customer database with management of treatments calendar	High frequency range [30-40 kHz]

ULTRA SLIM

reduces fat deposits from the first session and ensures hygiene!!!



Ultra Slim





Eurtronik S.r.l.—unipersonale

Via G. Di Vittorio 16/D - 40013 Castel Maggiore (BO)

Phone +39 051 703284

Fax +39 051 700904

E-mail info@eurtronik.it

www.eurtronik.com