

REMOVE FAT

REMEAT

PIEZO Cell Type HFES - High Focused Extracorporeal Shock Wave Therapy





All OBESE TYPE AVAILABLE, DIRECT FAT REMOVING SYSTEM



635nm LLLT

2009 Erconia Laser ZERONA





World Body Sculpting Trend

2017 Erconia Laser Verju



Coolsculpting

2010 Allergan Zeltiq





High Frequency RF 27.12MHZ

2013 BTL Vanquish



1060 NM Diode Laser

2015 Cynosure Sculpsure



Electro-Magnetic effect

2018 EMSculpt





2019 K1MED Magculpt



COMPARISON OF THE MOST POPULAR BODY CONTOURING BRANDS IN KOREA









	REMFAT	ULFIT	Vanquish	Liposonic
Manufacturer	HFES Korea K1MED	HIFU Korea Classys	RF 27 MHZ U.S.A BTL	2MHZ HIFU U.S.A SOLTA Medical
End User Price	USD22,000 ~ USD23,000	USD20,000 ~ USD23,000	USD55,000	USD80,000
Depth	5, 10, 20, 30, 35mm	6mm, 12mm	Required the additional Applicator for thigh USD14,000	11, 13, 16, 18mm
Function	Destroy Lipocyte Increase Elasticity	Approved as Skin elasticity No effect for fat removing effect	Induce the apoptosis	Demolish Lipocyte
Technology	Destroy fat with High Focused Extracorporeal shock wave	Ultrasound massage effect	Induce the lipocyte apoptosis with RF Heat	Melt fat with HIFU
Pain	No pain		Patient can't move whole of operating to keep 2cm distance between the cover so patient feel so inconvenient	anesthesia cream
Session	Once a week	Once a month	Once a week	
Disposable part limit(around palm size)	Over 2,500 areas 1 shot – USD0.0012	150 areas 1 shot – USD0.0183	No disposable	10 persons
Shot for one area(around palm size)	2,000 ~ 3,000 shot	400shot Treatment charge: USD200		All abdomen – USD900
Disposable part limit	5 million shot - limit	60,000 shot – limit USD1,100		525 shot – limit 10 persons / 1 H/P
Abdomen	8,000 shot, 20 min. USD0.0012X8,000= USD9.6	800 shot ~ 1,000 shot 45 ~ 60 min. USD0.0183X1,000= USD18	30 ~ 45 min.	1 hour

Abdomen treatment with REMFAT



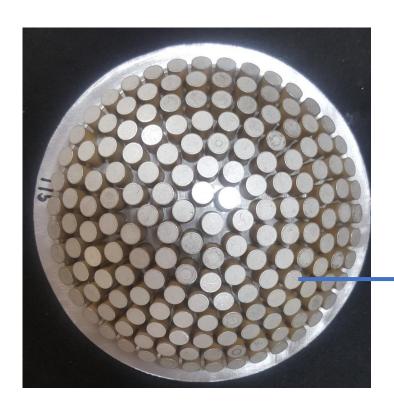


PIEZO CELL TYPE

Individual almost 200 pcs of Piezo electrons generate shockwaves and it is highly focused on the one point Effectively

REMFAT - Reverse Piezo Effect

When the piezo electrons are applied high voltage, the molecules inside are moved so it is temporarily expanded and returned to its original shape, at that time high concentrated extracorporeal shock wave is generated. It is reverse piezo effect. Piezo electron is the important part to decide the energy strength and its stability



Almost 200 pcs of PIEZO electrons are evenly **parallelly** installed

One shot, 8,000 high voltage is applied to the individual almost 200 pcs of PIEZO electrics at the same time, so strong extracorporeal energy is generated



Inverse Piezoelectric Effect - REMFAT

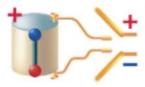
Piezo Electric : + and – molecules are well arranged inside of Piezo Electric

Apply 8,000V : Piezo Electric is expanded.

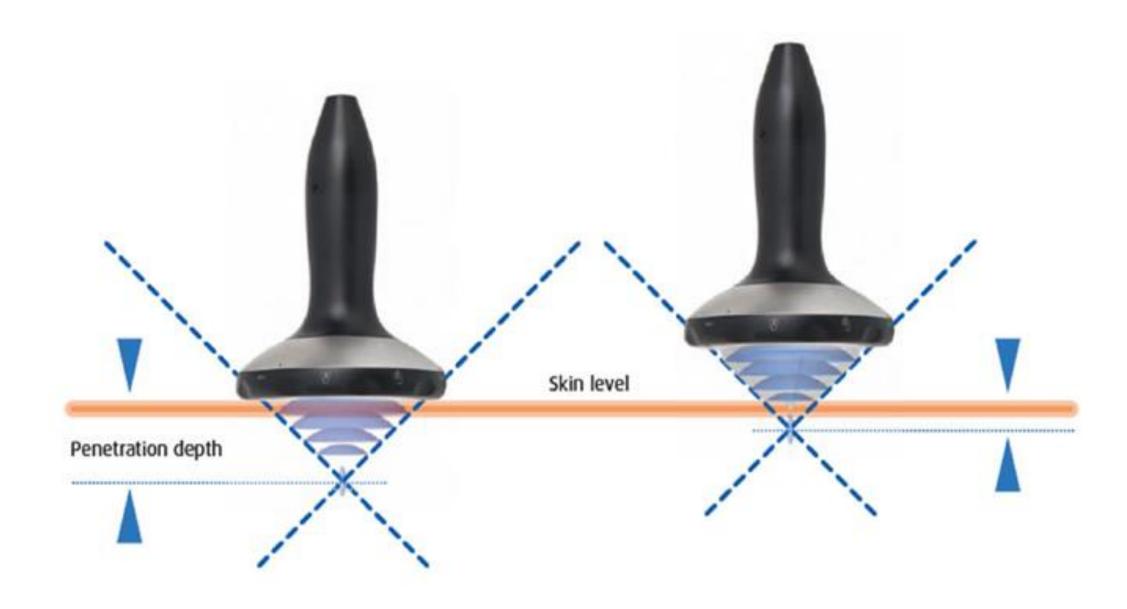
8,000V

Extracorporeal shock wave is GENERATED

Return to the original shape.



Gel pad to adjust focusing depth



Focusing depth is variable with gel pad

Install the gel pad to adjust focusing depth exactly at the target depth



Measure the fat with the manual fat measurer and install the pad around half of the measured thickness

To strengthen the elasticity by generating collagen in the dermis area with the adipocyte membrane broken effect, treat with the main pad 2,000 shot and 1,000 shot with the shallower depth

Precaution

Extracorporeal shock wave can't pass through the air (it disappears in the air)

Apply enough ultrasound gel and remove the bubble in the contact area with gel pad and hand piece by turning the gel pad by hand







Precaution

Apply ultrasound gel evenly on the skin and apply additional gel while operating prevent skin dryness



Press the trigger button or Footswitch after the pad is completely contacted with body



Treat one area around palm size first around 2,000 shots and then move to another area. It is recommended to leave the device for 10min. without operating but power on condition for the ventilation purpose.

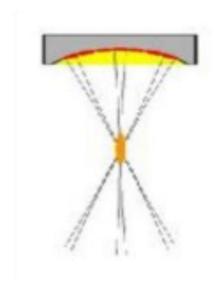
It takes around over 20 min. for abdomen area treatment so it is recommended to keep the client lying down on a bed.

Treat once a week



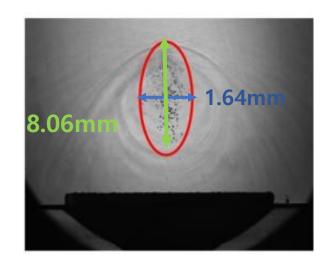
PIEZO Electric effect

Extracorporeal shock wave have straightness

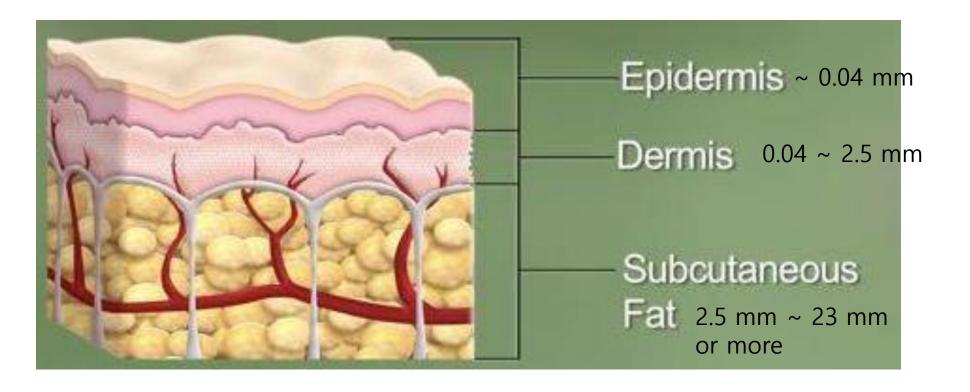


REMFAT Intensity "1" – 11MPA

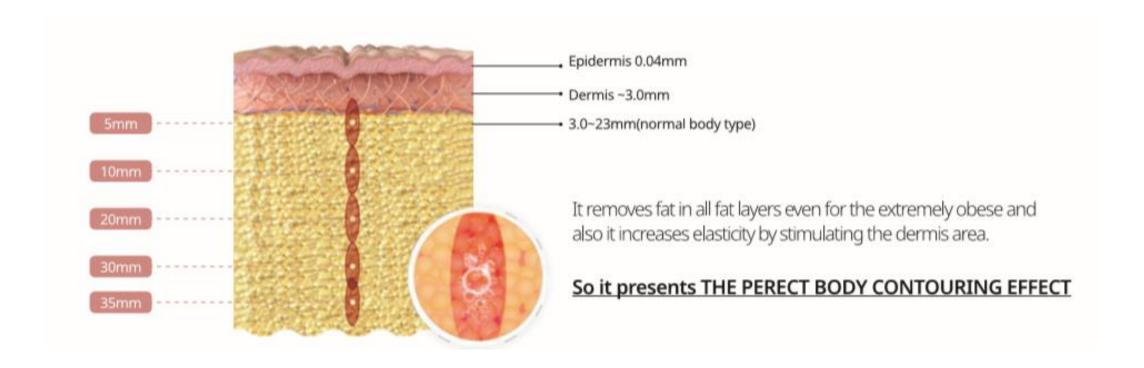
Bubbles are generated with the shock wave inside the body and then the shock wave hits them and collapses them. Due to the high power when they are. collapsed, the lipocyte membrane is damaged.



Layers of Skin for Normal person



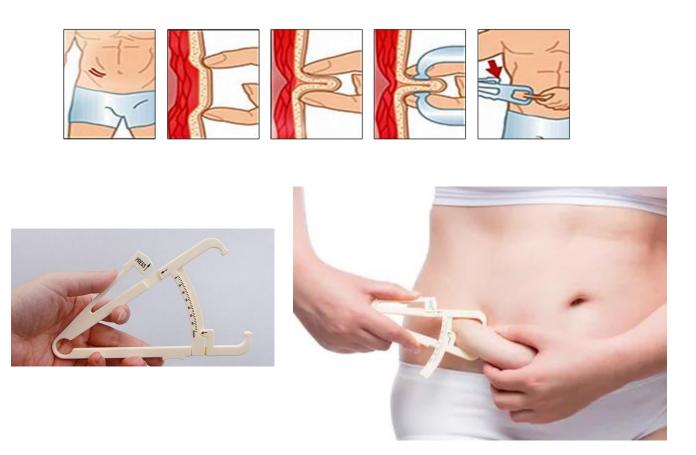
Lipocytes in the full fat layer are destroyed and the dermis layer has more elasticity



Bubbles are made from one power release and one shot



Measuring FAT and Apply the proper thickness pad



Body Fat Caliper

REMFAT for obesity care

FAT Destroying Effect covering the full fat layer

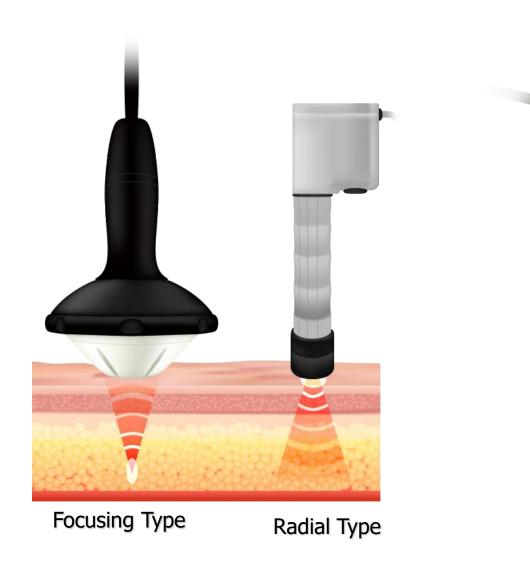
- REMFAT destroy Lipocytes in the entire Fat Layer

Elasticity effect

- REMFAT stimulates the dermis layer and generates new collagen

Extracorporeal shock wave





Energy Flux Density



Focusing type is around 4 times more powerful than the Radial type

Radial E.S.W.T Working Pressure (Bar)	Energy Flux Density (mJ/mm ²⁾	,	REMFAT LEVEL	Energy Flux Density (mJ/mm ²⁾	
			0.1 ~ 1	0.032 ~ 0.092	· Relaxing muscle
1.5	0.03		2	0.113	· Soft tissue
2.0	0.06		3	0.138	
2.0	0.06		4	0.153	· Trigger point pain
2.5	0.11		5	0.182	
	0.11	4	6	 0.220	
3.0	0.13		7	0.238	· Achilles tendonitis
2.5	0.16		8	0.270	· Actimes tendomicis
3.5	0.16		9	0.320	· Lateral epicondyliti
4.0	0.18		10	0.351	S
1.0	0.10		11 12	0.388 0.456	· Shoulder tendonitis
4.5	0.20		13	0.478	· Patellar tendonitis
7 0			14	0.478	· ratellal telluoliitis
5.0	0.22		15	0.581	 Plantar fasciitis
			16	0.601	
			17	0.646	
			18	0.648	
			19	0.770	
			20	0.822	
			21	0.828	
			22	0.832	
			23	0.839	
			24	0.844	
· ICMCT (intermedianal Con		Tueska	25	0.853	

Source: ISMST (international Society for Medical Shockwave Treatment)

Focusing Type

Strong points

- Strong power supply to the fat layer so it gives a powerful effect in a short time
- Accurate targeting on the focusing depth in the fat layer
- No vibration from the hand piece so the fatigue of operator is so low
- Comparatively low noise
- No required maintenance service
- NO damage on the epidermis, No bruise, No edema

Weak points

 Hand Piece is a consumable, it's guaranteed for 5 mil. shots and then Hand Piece should be purchased, its cost is relatively high

Others:

Wolf(Germany): 5 mil. Shot limit H/P: USD12,000

Ours:

REMFAT(Korea): 5 mil. Shot limit H/P: USD6,000

Radial Type

Weak points

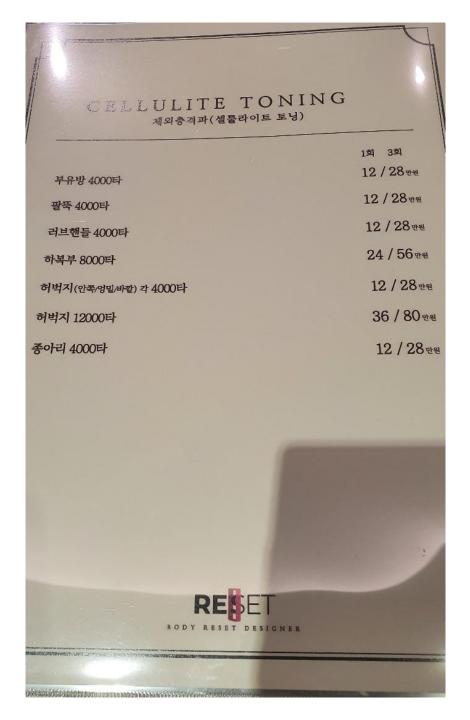
- Power is unfocused so the shock is mainly on the surface and gets weaker and weaker the deeper it goes
- Do not know the depth of fat breaking
- High vibration from the hand piece causes the operator's fatigue
- Noisy during operating so it is required a sound proofed room
- Required periodical maintenance related to pump
- Can be epidermal damage

Strong points

- Hand Piece price is relatively reasonable
 1mil. shot
- Pain: wide area muscle pain, knotted muscle

Radial Type Shock Wave Charge Per operating – one of clinic in Korea

	Shot q'ty	1 session	3 sessions
Polymastia	4,000	USD100	USD242
Arm	4,000	USD100	USD242
Love Handle	4,000	USD100	USD242
Lower Abdomen	8,000	USD207	USD480
Thigh (inner, under of buttocks, outer)	4,000 per area	USD100 Per area	USD242 Per area
All Thigh	12,000	USD300	USD660
Calf	4,000	USD100	USD242



THE Reasons you need to select REMFAT for obesity care



Strong Fat REMOVING Effect



No epidermis damage



Accurate Focusing at the depth you want fat removing and widely remove fat around the focusing point



Low pain



Workable with extremely obese with 35mm pad



Two or three different depth pads are applied what capable of removing fat in all fatty layer – for obese people



New concept in the obesity market



Low fatigue rate of operator



Simple to operate

Specialized technology for REMFAT comparing one PIEZO electron device

K1MED REMFAT PIEZO CELL TYPE

PIEZO CELL TYPE Almost 200 pcs of Piezo Electrons are installed in Hand Piece

One Piezo Electron Size:

Width 6mm, Thickness: 5mm





Other company ONE PIEZO Electron type

Theoretically it is **HIFU**

One Piezo Electron Size:

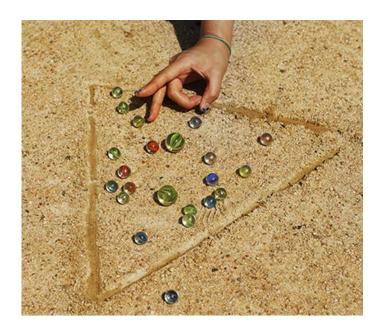
Width 90mm, Thickness: 5mm

It is 15 times bigger than our Piezo Electron



REMFAT Piezo cell type comparing one PIEZO device

REMFAT Piezo cell type



It is like almost 200 people shooting almost 200 marbles at the same time with the same power(same voltage 8,000 V) and they moves same distance.

One PIEZO TYPE



15 times bigger than Piezo electron PIEZO cell type

When one person shoot like the balling ball with the 1/3 power(2,500 V) with the shooting the marbles, it moves a little bit.

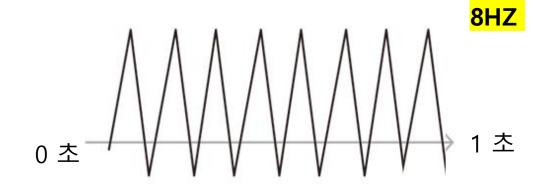
Comparison of shot type for REMFAT and One PIEZO type



Apply 8,000V 1 time / 1 SHOT

Apply 8,000V 8 time / 8 SHOTS





8,000 V high voltage



Around 200 pcs of Each of small piezo electron(width:6mm, thickness: 5mm)



Each of them are expanded

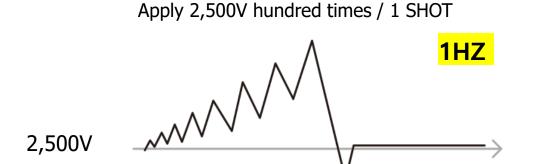


Comparison of shot type for REMFAT and One PIEZO type

One PIEZO type

0

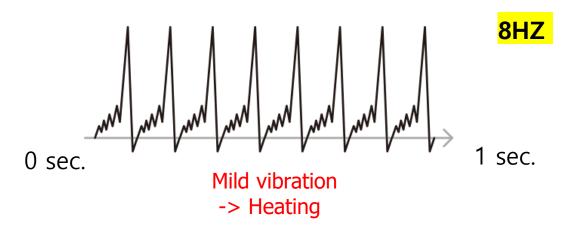
sec.



Mild vibration

-> Heating





2,500 V

1 sec.



Thick and Big Piezo electron(Width: 90mm, Thickness: 5mm)



After several times 2,500 V voltage applied and millions of mild vibration is accumulated

=> can't be expanded with one time 2,500 V apply



One PIEZO type Problem

Heat is generated due to the hundreds of small vibration

Problem to Device

- Generate energy loss
- Piezo Electron surface damage
- Piezo electron life span shortened

Problem to Clients & Operator

When you treat it by fixing it at the one area, it causes burning by the frictional heat on the skin surface so User should operate it in a rubbing way

- it makes the operator feel tired
- Can be the cause of burning and skin damage

	REMFAT	ONE PIEZO Electron type
Output power	80Mpa	Below 10Mpa, average 7 ~ 8Mpa 10 sessions of one Piezo electron treatment ≒ 1 session of REMFAT
Applied Voltage	MAX. 8,000 V	MAX. 2,500 V
Time for apply Voltage / Shot time	1 time / 1 shot	Continuous voltage apply / 1 shot
Durability	High Durability, Piezo electron isn't breakable easily	Weak durability: Piezo electron is easily broken due to the small vibration, before the shot is out, heat is generated on the surface : it is needed rubbing to prevent burning
Technical Skill	 Korea first Piezo cell type Hire the doctor's degree majoring ultrasound, he developed it and produced it. For the stable high output power and working stability, we have our own piezo electron assembly technology. Equip test facility to check out its power strength and guaranty the stable power level 	Around 5 Korean companies ITC, Waver etc.
Skin surface damage	Treat like keeping the H/P at the one point for 3 to 5 seconds and the color of treated area change to a bit red	If it stops at the one point, it makes burning. There can be abrasion and bruise.
Unit price	USD20,000 ~ USD24,000	USD20,000 ~ USD24,000

PIEZO CELL TYPE & ONE PIEZO Electron type in Korea market

PIEZO CELL TYPE



Wolf – PIEZO wave Germany



EMS – Swiss Piezo Clast Switzerland

<u>USD 36,000 – 40,000</u>



USD23,000-25,000

ONE PIEZO Electron type



Waver - ZeusWave Korea

<u>USD24,000</u>



ITC – Ulforce Korea

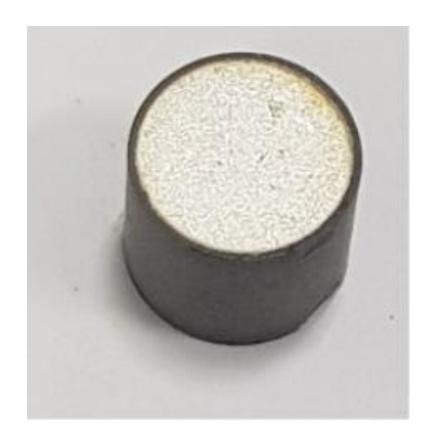
<u>USD20,000</u>

REMEAT

NO Energy Loss, No Skin damage, No heat

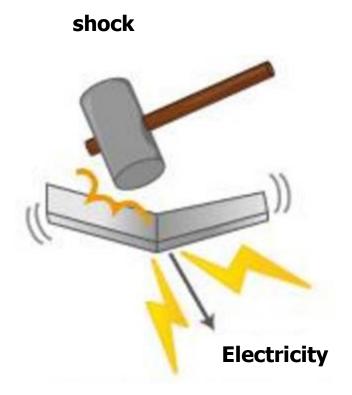
PIEZO Electric

The PIEZO electric has + and -



The same PIEZO Electric what is installed for Wolf and EMS is installed in the REMFAT and it guaranties the best performance and high durability

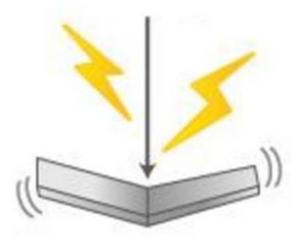
Piezoelectric Effect Vs. Inverse Piezoelectric Effect



Piezoelectric Effect

REMFAT





shock

Inverse Piezoelectric Effect

Device using Piezoelectric Effect in the life

Give Shock to the piezo electron when button is pressed by finger



Piezo Electron is CONDENSED



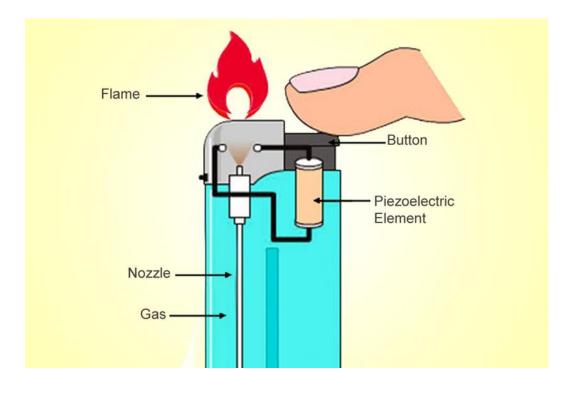
Due to the change of molecular arrangement, voltage is generated



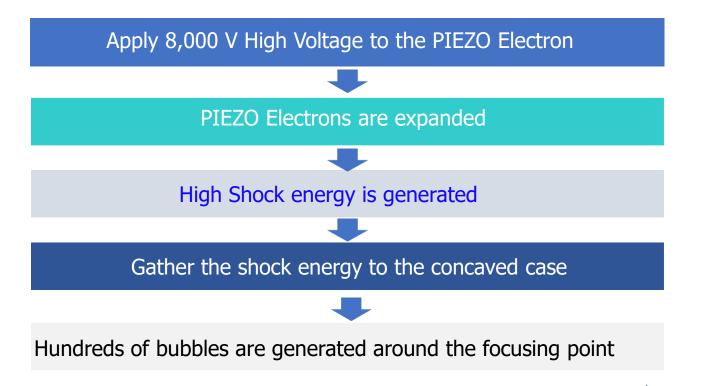
Gas is used as the catalyst for generating fire



FIRE



Reverse Piezo Effect - REMFAT



Damage the adipocyte membrane by the energy when the bubbles burst



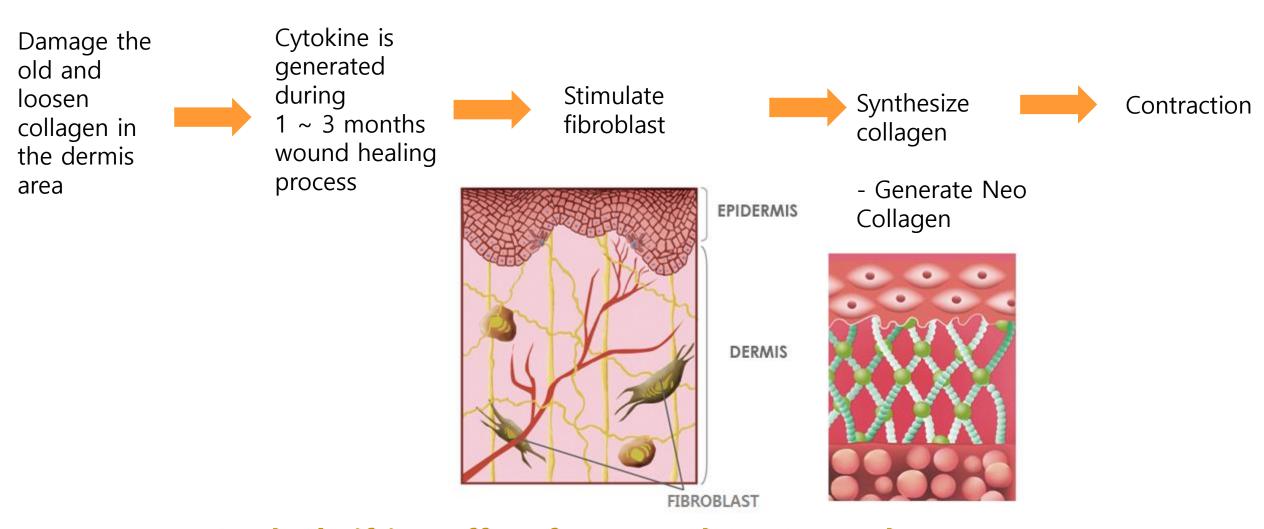
Stimulate in dermis and break the old and loosen collagen fiber



Soften the harden cellulite area and destroy the adipocyte membrane so resolve cellulite

Neo Collagen generation

Gradual Lifting effect by Generating neo collagen



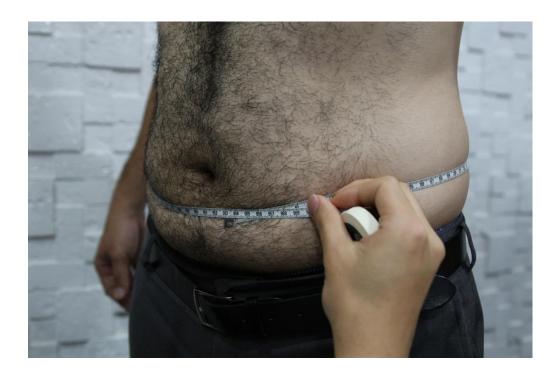
Gradual Lifting effect for around 3 ~6 months AFTER REMFAT TREATMENT

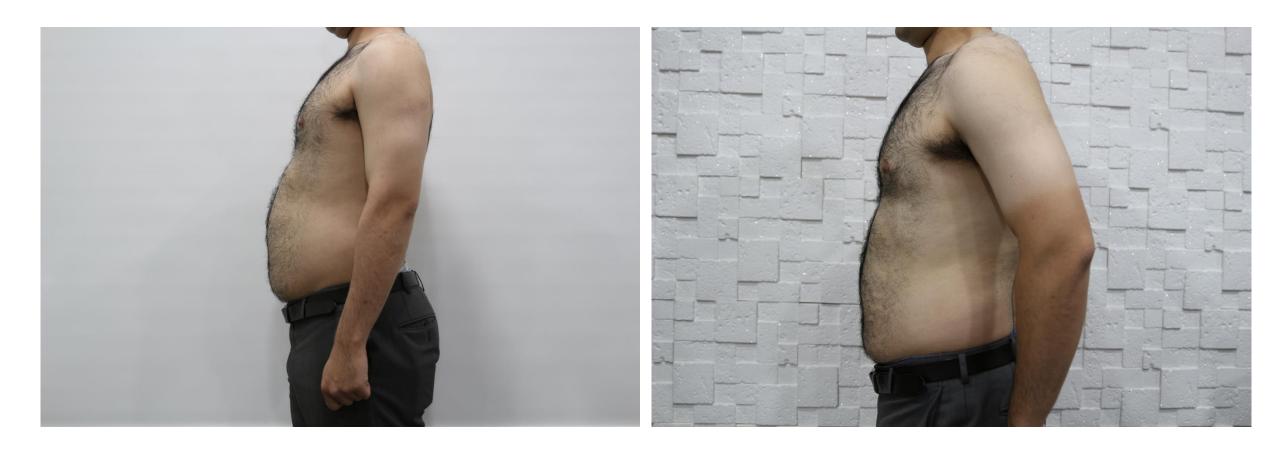
Clinical test

Term: May 3, 2019 ~ Jun 13, 2019

Treated area	Testee	Before	After	Ses sion s	Total Shot no. (1session)	Intensity	Freque ncy	Pad (mm)	REMAR K
Abdomen	Α	98cm 38.5 inch	93cm 36.6 inch	8	35,800 shot (3,000 ~ 5,000)	25	8HZ	20 – 7 sessions 30 -1 session	
	В	92cm 36.2 inch	87cm 34.2 inch	8	38,000 shot (4,000~5,000)	10~13 20 25 25 25 13->20			
								20-7sessions 5 - 1 session	
	С	85cm 33.4 inch	83.5cm 32.8 inch	4	20,000 shot (5,000)	25		10	
Arm	D	27.5cm 11 inch	26cm 10.2 inch	5	25,000 shot	15 19 18 18 18		5 – 3sessions	
	Е	26.5cm 10.4 inch	25.5cm 10 inch	5	25,000 shot	8 ~ 10		5	











92cm -> 87cm









85cm -> 83.5cm





26.5cm -> 25.5cm





Protocol

1'st SINESON

Pre heat the fat area with 300W high power Radio frequency device to maximize the fat destroying effect



Destroys fat cells

3'rd V-Max

Melting the fat with 4.5mm & 9mm HIFU

4'th SINESON

Massage the lymphatic area to accelerate the fat discharge

5th Exercise

Accelerate the fat discharge







The mechanism to generate HFES(High Focused Extracorporeal shock wave)

Adopting Inverse Piezoelectric, it generates a strong shock wave energy that is applied to the body through the pad(depth control pad) which is most proper for the treatment area and body type, we can expect a **powerful**

FAT Breaking down effect by focusing the extracorporeal shock wave at the accurate depth.

Boost the fat discharge by accelerating lymph circulation

Destroy Fat with REMFAT

Discharge the residue of lipocyte cytoderm and lipid through lymph and blood circulation

The destroyed fat is eaten by macrophage(its one of work is purify inside of body) and it is discharged through lymph circulating system



Macrophages eaten FAT Cell residues are found in the lymph biopsy after fat care. It is the proof that the residues from the broken lipocyte are hung on the lymph nodes to be discharged through the lymphatic vessel



Accelerate lymph circulation => conduct lymph circulation massage exercise and drinking 2 L water every day

The fat begin to discharge in earnest <u>after 4 weeks of REMFAT care</u>, depends on the person it can take <u>8 to 12 weeks</u> after REMFAT care

* It is same for high price range body contouring device like Liposonic, Vanquish

Lymph circulation care focusing on lymph nodes highly increase its effect and show the result in a shorten time



If fat discharge care isn't conducted?

Natural Body Circulation System

Some of destroyed lipocyte -> Discharge through lymph vessel

FAT RELOCATION

Some of destroyed lipocyte -> Resorption and accumulate in the body again

The PENTAPLEX Lipolysis program from one Korean Famous Clinic

Step 1 and 2 are for fat destroy Step 3 to 5 are for fat discharge

Step 1 Fat Pre-Heating

Step 5 Medical SPA

To increase the fat discharge



Step 2
Destroy and melt Lipocyte

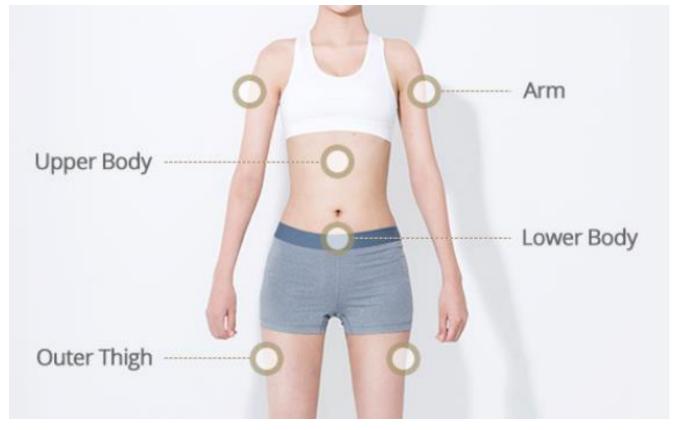
Step 3 FAT Massage

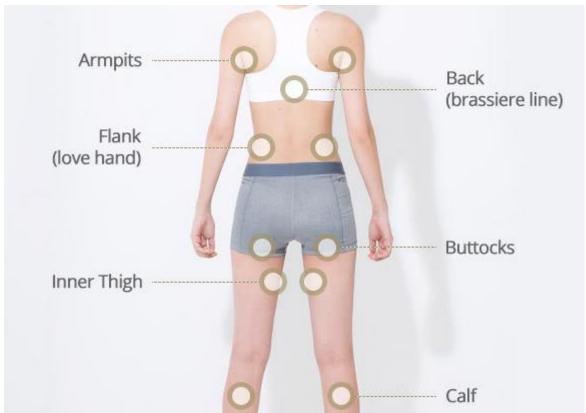
to discharge the melted fat, this step for activation of lymph and blood circulation

Step 4
Premium Exercise

Activate the remained fat discharge and for body balance

Treatment area with REMFAT





PHYSIOTHERAPY



MPS, Myofascial Pain Syndrome



Tennis Elbow



Rotator cuff syndrome



Golf Elbow



Dequervain



Trigger Finger



Knee joint tendinitis



Plantar fasciitis



Achilles Tendinitis

