## **UCOS-HIFU**

### High Intensity Focused Ultrasound Skin Care Beauty System

- ✓ Facial lifting
- ✓ Contour shaping
- ✓ Face rejuvenation
- ✓ Non-surgical
- ✓ Skin anti-aging
- ✓ Body skin tightening
- ✓ Non invasive
- ✓ No recovery time
- ✓ Immediate effects
- ✓ More precise and safe treatment





The most important goal of our company is the happiness of our customers.

- Customer Satisfaction
- Customer Impressions & Feelings
- Customer Happiness







## Management Based on Respect Value Creation for Customers **Management Based on Respect &**

#### **BE&BI Tech Pursues the Happiness of All Customers as Its Top Priority**

In the BE&BI Tech's new CI, the outer circles represent planet Earth where the five major oceans and the six continents are organically connected as one, and the face in the middle represents people living together in harmony in the world.

The new CI symbolizes our company's strong commitment and management philosophy to create values for customers and practice management based on respects for people.

BE&BI Tech is focused on convergence therapy systems and skin care treatment systems, and continues to innovate by developing stateof-the-art convergence source technologies. BE&BI Tech is committed to developing new technologies for human health, and we'll continue to strive hard to bring bigger satisfaction and happiness to our customers.



심(心) Heart / Filed with warmth and enthusiasm

기(氣) Energy / Filled with ambition and energy

정(情) Attachment / Growing together with customers

• Customer Satisfaction • Customer Impressions & Feelings • Customer Happiness

#### **UCOS-HIFU**

#### **High Intensity Focused Ultrasound Principles**

- Thermal effect: fast temperature rise above 60°C
- Mechancial effect : generation and collapse of gas bubbles, ruptures cell walls
- Create constant thermal coagulation and promote new skin tissue regeneration



#### **UCOS-HIFU Treatment**

The UCOS-HIFU has the advantage of removing wrinkles and lifting the skin without performing surgical procedures directly on the skin. The HIFU is an indirect treatment with little damage and no side effects to the upper skin area. With relatively small amount of treatment time of 10 to 30 minutes, it can improve skin elasticity and remove fine wrinkles. The users can also go back to their daily life right after the treatment procedure without any side effects.

The UCOS-HIFU system can be used for local areas to prevent damage to skin tissues. The system is used to remove wrinkles, drooping eyelids, wrinkles around the chin, around the eyes and around the mouth, and to restore skin elasticity and regeneration capability. As the skin is lifted through regeneration of elastin and collagen from the skin's inner layer SMAS(fiber membrane layer, Superfacial Muscular Aponeurotic System) tissues, repeated treatment using existing skincare devices becomes unnecessary. Also, the tissues newly formed in the skin's inner layer by the treatment last for a long period of time.

## The UCOS-HIFU System Was Developed to Satisfy Eight Requirements for Beautiful Skin

- Promote collagen regeneration
- Skin pigmentation improvement
- Natural V-line formation
- Removal of fine wrinkles
- Improvement to brighter skin tone
- Skin elasticity improvement
- Skin lifting effects
- Promote elastin regeneration





# UCOS-HIFU Lifting Treatment



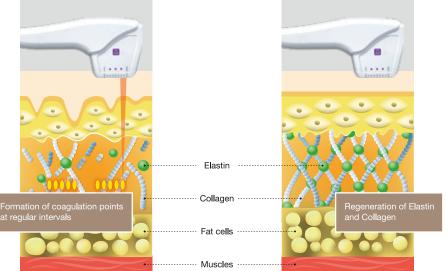
## HIFU Lifting How it works

#### **UCOS-HIFU Skincare System**

The high-intensity ultrasonic energy is delivered to the depth of 1.5mm to 13mm below the surface of the skin to create thermal coagulation points smaller than 1mm. The new thermal coagulation points generate heat of more than 60°C at the moment of their formation and create another set of thermal coagulation points in the target layer in constant intervals. This generation captures and lifts the skin issues up, thus resulting in the surface skin being lifted.

#### UCOS-HIFU Facial Area Treatment

Concentration of the ultrasonic energy in the wrinkled skin to form thermal coagulation points at regular intervals



Removes fine wrinkles and sagging by forming thermal coagulation points in aging skin layers. Skin aging is caused by decomposition, loss, and degradation of collagen

The UCOS-HIFU stimulates the creation of collagen and elastin, which increase skin elasticity and reduce skin sagging

2 Months After

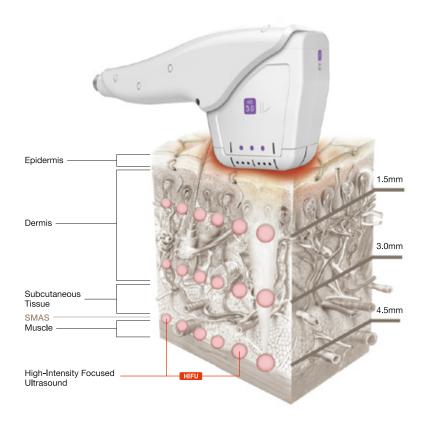
Regeneration of Elastin

the Ultrasound Treatment

and Collagen within skin tissues

The treatment forms thermal coagulation points in 4.5mm-deep fiber membrane (SMAS) layers, and elastin and collagen playback reaction takes place around the coagulation points, resulting in removal of wrinkles and increased skin elasticity as the tissues are pulled together tighter.

# UCOS-HIFU Ultrasonic Wave Delivery from the Dermis Layer to the SMAS Layer



#### Mechanism

HIFU(High Intensity Focused Ultrasound) delivered deep in to the skin layer without damaging the skin

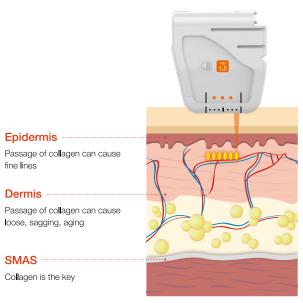


Cause thermal coagulation in the SMAS (Super facial Muscular Aponeurotic System) layer

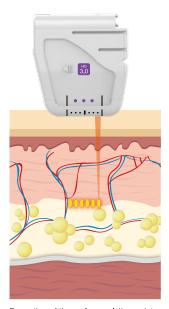


Regeneration of collagen and elastin over time gradually lifts skin and increases skin elasticity

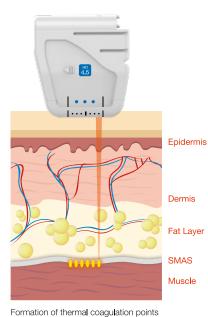
# UCOS-HIFU Delivery Depth Per Cartridge



Formation of thermal coagulation points in 1.5mm deep dermis layer



Formation of thermal coagulation points in 3.0mm deep dermis layer leading to increased skin elasticity



in 4.5mm deep SMAS layer leading to elastin and collagen regeneration

#### I UCOS-HIFU Treatment Information

#### Facial Area Removal of Wrinkles / Skin Aging Prevention / Increased Skin Elasticity



#### For Facial



#### HD-1.5

Remove wrinkles around the eyes, eye brows, nose HD-1.5mm



#### HD-3.0

Remove nasolabial lines and wrinkles in facial area, including forehead and cheeksHD-3.0mm



#### HD-4.5

Remove nasolabial lines And wrinkles in cheeks, double chins, neck, chest HD-4.5mm

#### Slim Type



#### HD-1.5

Remove wrinkles around the eyes, eye brows, nose HD-1.5mm



#### HD-3.0

Remove nasolabial lines and wrinkles in facial area, including forehead and cheeksHD-3.0mm



#### HD-4.5

Remove nasolabial lines And wrinkles in cheeks, double chins, neck, chest HD-4.5mm

#### **Treatable Parts of Body**

Fat reduction / Skin aging prevention / Increased Skin Elasticity Side / Thigh / Cellulite / Chest / Arm / Abdomen





#### HD-7

For skin elasticity improvement and fat reduction in the chest, shoulder and forearm areas HD-7mm



#### HD-10

For skin elasticity improvement and fat reduction in the side and leg areas HD-10mm



#### HD-13

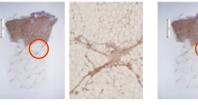
For skin elasticity improvement and fat reduction in the abdomen and thigh areas HD-13mm

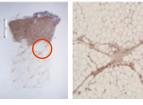
#### **Preclinical Experiment Research**

#### IHC(collagen) Evaluation

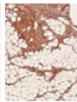
## 1J(Energy) 2J(Energy) 3J(Energy)

14th Day After Treatment







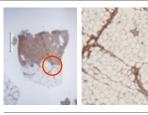


The collagen bundle that forms the septum is thickened to  $4\sim5$  layers. The energy increasefrom 1J to 3J produced more noticeable reaction, but at 3J, some of the inflammatory reactions in the skin were observed.

28th Day After Treatment











The collagen bundle, which has increased for 14 days, is well maintained.

Full-time testing using mini-pig showed an increase in the generation of collagen two weeks after appropriate coagulation points were generated at 4.5mm depth for all groups when the H&E dye, MT dye, and IHC dye were observed.

The UCOS-HIFU produced coagulation points within the appropriate biocompatible skin and it was observed that collagen was generated well. The recommended energy will also be used to perform the procedure more safely without the risk of skin burn or other side effects.

#### **Clinical Trial and Evaluation**

Yonsei Wonju Severance Christian Hospital, Department of Plastic Surgery / Clinical Center

#### Demonstration of Wrinkle Removaland Improvement of Chin Line with Stability(20 Clinical Cases)







1 week after treatment



4 weeks after treatment



Neck wrinkle before treatment



1 week after treatment



4 weeks after treatment

#### The result from 20 clinical cases of neck area treatment

- Neck wrinkles removed by 90% from objective observation / All patients felt satisfied
- After treatment, wrinkles stayed gone and the elastic skin was maintained from the continuous regeneration of collagen
- There were very few side effects, such as red spots, and it was evaluated as a safe and effective treatment

#### Demonstration of Skin Elasticity Improvement and Effectiveness of Treatment (47 clinical cases)



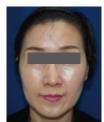
Forehead area before treatment



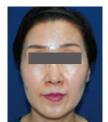
1 week after treatment



4 weeks after treatment



Forehead area before treatment



1 week after treatment



4 weeks after treatment

#### The result from 47 clinical cases of forehead area treatment

- Forehead wrinkles removed by 86% from objective observation after 30 days
- Skin was lifted by 2mm on the AEH and the skin elasticity was maintained after 90 days of treatment
- Patients' satisfaction level was very high after the treatment

Making our customer's skin beautiful is our greatest aim, and the UCOS-HIFU comes to you with exemplary customer satisfaction and customer service!

Category	Technical Specification
Product name	UCOS - HIFU
Power	AC 100~240V, 50/60Hz
Frequency	4MHz
Display	TFT 8 Inch Color LCD touch screen
Energy	0.2~2J(0.1 step)
Number of shots per cartridge	10,000 shots
Width	1.0~2.0mm(0.1mm/step), 2.0~5.0mm(0.5mm/step)
Length	5.0~28mm(1.0mm/step)
Weight	5.7kg(without cartridge)
System size	370 x 310 x 155mm(without cartridge)
Cartridge size	350 x 360 x 850mm(width x length x height)
Cartridge weight	 13kg
Total system weight	 18.7kg



Cartridge T	ype	Treatable Parts of Body
	HD-1.5mm	Remove wrinkles around the eyes, eye brows, nose
For Facial	HD-3.0mm	Remove nasolabial lines and wrinkles in facial area, including forehead and cheeks
	HD-4.5mm	Remove nasolabial lines and wrinkles in cheeks, double chins, neck, chest
For Body	HD-7mm	Remove wrinkles around the eyes, eye brows, nose
	HD-10mm	Sides, forearms, thighs, abdomen
	HD-13mm	Abdomen, forearms, thighs, sides, hip
	HD-1.5mm	Remove wrinkles around the eyes, eye brows, nose
S <b>l</b> im Type	HD-3.0mm	Remove nasolabial lines and wrinkles in facial area, including forehead and cheeks
	HD-4.5mm	Remove nasolabial lines and wrinkles in cheeks, double chins, neck, chest

#### **UCOS-HIFU Treatment Benefits**

- Remove wrinkles on the facial areas such as forehead, cheeks, under the eyes, sides of the eye, chin, and improve skin elasticity.
- Maintain and manage body shape and skin elasticity by skin lifting in various parts of body such as abdomen, forearms, sides, thighs, calves, and waist.
- After 10 to 30 minute non-surgical treatment, users can go back to their daily lives.
- Selective ultrasonic thermal energy is delivered deeper into the skin layers than laser and high frequency waves.
- The UCOS-HIFU treatment produces no pain or side effects.
- Immediately after treatment, fine wrinkles are removed and elastic skin can be maintained for a long time for body shape management.



























