MODUS ESWT®
DERMO

FOCUSED SHOCKWAVE THERAPY • SHOCKWAVE THERAPY •
FOCUSED SHOCKWAVE THERAPY

FOCUSED SHOCKWAVE THERAPY

NCler® medikal ltd.

Touch Screen Interface
Modus ESWT® DERMO
Focused Shock Waves

MODUS ESWT DERMO
FOCUSED SHOCK WAVES

Modus ESWT DERMO
Focused Handpiece

ESWT (Extracorporeal Shock Wave Therapy), is considered a highly effective treatment method in the field of dermatology. This approach works by applying focused shock waves to the skin to treat skin problems. One of the fundamental principles that ESWT focuses on is stimulating skin cells and tissue structures to activate the healing mechanisms.

The effectiveness of ESWT has been proven in the treatment of serious dermatological conditions such as chronic wounds, diabetic foot ulcers, venous ulcers, and other skin lesions. The shock waves' ability to increase blood circulation and promote the growth of new blood vessels contributes to the faster healing of these types of wounds.

ESWT uses high-intensity shock waves focused on the depths of the skin to increase collagen production and aid in the rejuvenation of skin tissues. This provides an effective option for aesthetic concerns such as skin tightening, wrinkle reduction, and treatment of blemishes.

> WHAT IS SHOCK WAVE THERAPY?

The method of applying therapy using shock waves from outside the body is a commonly preferred approach in various fields such as **orthopedics, physical therapy, veterinary medicine, neurology, urology, cardiology, sports medicine, and dermatology.** The advantages provided by this system include enhancing blood circulation, collagen synthesis, and oxygenation in the application area, leading to faster tissue healing. It also reduces adhesions and results in mechanically stronger tissue. Furthermore, the non-invasive nature of this system allows the desired treatment to be performed without requiring surgical procedures.

This therapy method contributes to the angiogenesis system, which involves the budding of new blood vessels in the tissue, by aiding the existing vessels, leading to the formation of new blood vessels. It also influences vasculogenesis, which is the formation of new blood vessels that accompanies the creation of new cells, through the mechanical trauma effect it creates in the tissue. By facilitating the formation of new blood vessels and initiating the repair of damage, it initiates the healing process.

Non-invasive method that provides **MUSCLE, NERVE, JOINT, BONE, TISSUE, CELL Regeneration.**

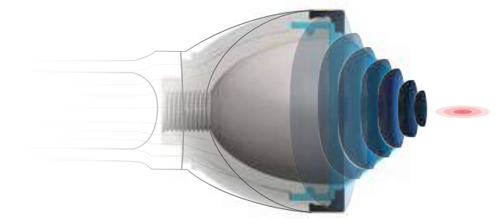
MODUS ESWT DERMO
FOCUSED SHOCK WAVES

MODUS FOCUSED HEAD FEATURES

F-50 Head

Penetration Depths

- 20 mm
- 30 mm
- 50 mm
- 70 mm

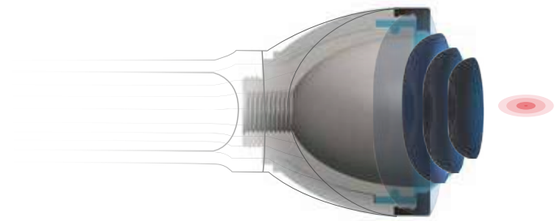


Area of Use: Chronic Skin Ulcers, Diabetic Foot Wounds, Venous Ulceration, Burn Disorders, Keloid Lymphoedema, Lipoedema...

F-60 Head

Penetration Depths

- 30 mm
- 40 mm
- 60 mm

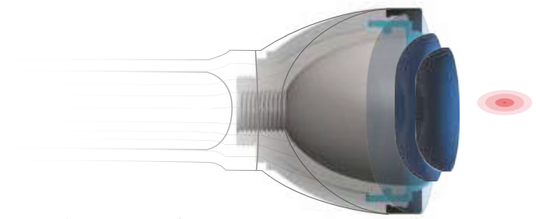


Area of Use: Chronic Skin Ulcers, Diabetic Foot Wounds, Venous Ulceration, Burn Disorders, Keloid Lymphoedema, Lipoedema...

F-80 Head

Penetration Depths

- 40 mm
- 50 mm
- 80 mm

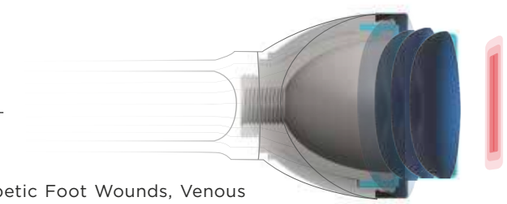


Area of Use: Chronic Skin Ulcers, Diabetic Foot Wounds, Venous Ulceration, Burn Disorders, Keloid Lymphoedema, Lipoedema...

F-L50 Head

Penetration Depths

- 50 mm



Area of Use: Chronic Skin Ulcers, Diabetic Foot Wounds, Venous Ulceration, Burn Disorders, Keloid Lymphoedema, Lipoedema...

MODUS ESWT FOCUSED HANDPIECE FEATURES

> Full energy transmission to the selected anatomical region
> Easy and fast use that does not tire the hand
> Easy mobility
> Maintenance-free handpiece
> Head options with easy replacement according to use

> GIVES MORE ENERGY FURTHER

Higher Energy Output

High Energy Depth

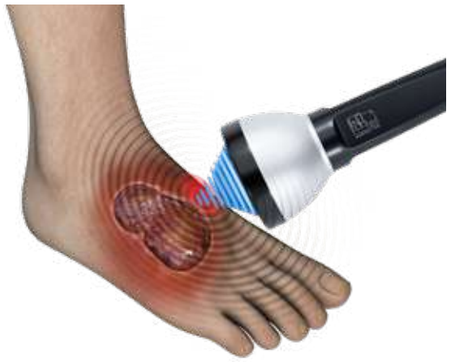
Fast and Effective Treatments

> THE MAIN INDICATIONSFOR THE SYSTEM

Diabetic Foot Ulcers

Diabetic foot ulcers are non-healing wounds frequently observed in diabetic patients, which can lead to serious complications if left untreated. Diabetes, due to high blood sugar levels, negatively affects nerves and blood vessels, leading to sensory loss and circulation disorders in the feet. This condition makes it easier for wounds to form on the feet and prolongs the healing process. Diabetic foot ulcers increase the risk of infection and can result in severe outcomes such as gangrene, infection, and amputation.
Extracorporeal Shock Wave Therapy (ESWT) has emerged in recent years as a promising option for the treatment of diabetic foot ulcers. This treatment method aims to promote the healing of damaged tissues by applying high-energy shock waves in a focused manner. The fundamental mechanism of ESWT is to stimulate tissue regeneration by increasing circulation through the application of shock waves, promoting cellular restructuring, and accelerating the healing process.

Chronic Skin Ulcer



Chronic skin ulcers are non-healing and recurring open wounds that persist for a long time. These ulcers commonly develop on the legs, feet, or areas exposed to pressure. They can arise due to various reasons such as diabetic foot ulcers, venous or arterial insufficiency, pressure ulcers, and traumatic injuries. Chronic skin ulcers can negatively impact patients' quality of life and lead to serious complications due to the risk of infection.
Extracorporeal Shock Wave Therapy (ESWT) is being considered as an alternative method for the treatment of chronic skin ulcers. ESWT stimulates tissue regeneration by focusing high-energy shock waves on the targeted area. This treatment can accelerate the healing process of wounds and enhance tissue regeneration, facilitating the reformation of healthy skin tissue.

Lymphedema

Lymphedema is a condition that occurs when there is a malfunction of the lymphatic system or blockage in the lymphatic channels, leading to the accumulation of fluid in the body. This accumulation can typically cause swelling and discomfort in limbs such as the arms and legs. Lymphedema can result from the surgical removal of lymph nodes, infections of the lymphatic system, or other factors that affect the lymphatic system.
Extracorporeal Shock Wave Therapy (ESWT) focuses high-energy shock waves on the targeted area, promoting tissue regeneration and enhancing circulation. In the treatment of lymphedema, the potential goal of ESWT is to stimulate lymphatic drainage, encourage the regeneration of damaged lymphatic channels, and facilitate more effective removal of accumulated fluid.

Lipedema

Lipedema is a chronic condition characterized by symmetric accumulation of fat, particularly in the lower extremities, primarily affecting women. In lipedema, fat cells in the body grow larger than normal, and fluid retention can occur. This condition typically leads to pronounced swelling and pain, especially in the hips, thighs, knees, and ankles. Lipedema is often associated with hormonal changes and may have a genetic predisposition.
Extracorporeal Shock Wave Therapy (ESWT) has been investigated as an alternative treatment method for lipedema. ESWT focuses high-energy shock waves on the targeted area, promoting tissue regeneration and enhancing circulation. In the treatment of lipedema, the potential goal of ESWT is to help reduce fluid accumulation in fat cells and regulate circulation.

Chronic Skin Ulceration

Chronic skin ulceration is characterized by the local loss of skin integrity and is often caused by underlying systemic or regional health issues such as vascular diseases, diabetes, and neurological disorders. Ulcers of this type do not heal with physical trauma, infection, and the progression of certain chronic diseases, and can lead to serious complications. ESWT, which enhances the release of endogenous angiogenic factors from cells such as endothelial cells and fibroblasts, may promote the healing process of chronic ulcers. Shock wave therapy is being considered as a potentially promising treatment method for chronic ulcers, enhancing wound healing through mechanotransduction and immunomodulatory mechanisms.

In conclusion, chronic skin ulceration is the local loss of skin integrity caused by underlying health issues and can lead to serious complications. ESWT, by increasing the release of endogenous angiogenic factors and supporting wound healing through mechanotransduction and immunomodulatory mechanisms, is being evaluated as a promising method for the treatment of chronic ulcers.

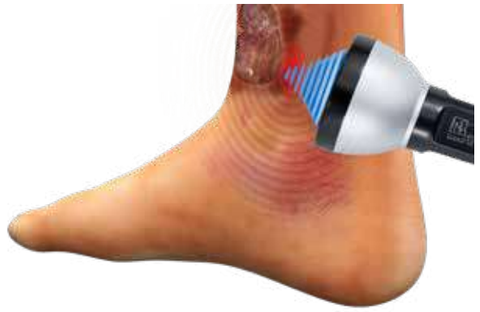
In Burn Conditions

Burns are painful injuries that occur due to thermal, electrical, chemical, or electromagnetic radiation. Smoking and exposure to open flames are common causes of burn injuries. Burns can lead to skin damage and complications, and they can be life-threatening. Burns that result in the death of skin cells can lead to serious health issues such as dehydration, electrolyte imbalance, infections, and organ failure. The prevention and treatment of burn injuries are of vital importance.

ESWT is being researched as a promising method for burn treatment. However, it is noted that the current scientific evidence is insufficient, and further research and high-quality trials are needed. More studies are required to determine the effectiveness of ESWT in the treatment of burn patients. Therefore, it is crucial to identify appropriate and effective treatment approaches for the management of burn injuries.

MODUS ESWT DERMO
FOCUSED SHOCK WAVES

Venous Ulcer



Venous ulcers are chronic lesions that occur due to problems with the veins in the legs, typically found on the lower legs, ankles, or feet. These ulcers can be painful and slow to heal. Chronic venous insufficiency is one of the common causes of venous ulcers, and it results from the inadequate functioning of the valves in the leg veins, leading to the accumulation of blood in the legs. Treatment options include compression therapy, wound care, and addressing the underlying cause. ESWT has been explored as an alternative treatment option for venous ulcers, and some studies have observed that ESWT has pain-reducing and supportive effects on healing.

The study by Taheri et al. (2021) demonstrated that the use of ESWT in conjunction with Compression Bandage (KB) in the treatment of venous ulcers resulted in less pain and greater satisfaction compared to patients who received only KB treatment. ESWT significantly improved the healing process of venous ulcers, suggesting that it could be considered as a safe and effective adjunct treatment for venous ulcer therapy.

Keloid Scars

Keloid is an excessive scar tissue formation that occurs after skin trauma, extending beyond the boundaries of the initial wound and not regressing on its own. This condition often exhibits a genetic tendency, especially in individuals with darker skin tones, and while some keloids lead to an unsightly appearance, others can cause serious discomfort such as pain and itching. Treating keloids can be challenging, but innovative methods like ESWT have emerged as effective options in recent years. ESWT triggers various biological reactions in cells through the mechanical effects of shock waves and mechanotransduction. This treatment supports wound healing and tissue regeneration by providing significant improvements in volume, height, and appearance of keloids.

MODUS ESWT DERMO
FOCUSED SHOCK WAVES

> MODUS ESWT ® DERMO FOCUSED SHOCK WAVE THERAPY SYSTEM

> Modus ESWT® DERMO Shock Wave System is a non-invasive treatment method based on focusing shock waves on the desired area of the body via a liquid-filled silicone cap. This method increases vascularization in the area affected and enables the body's healing mechanisms to come into play.

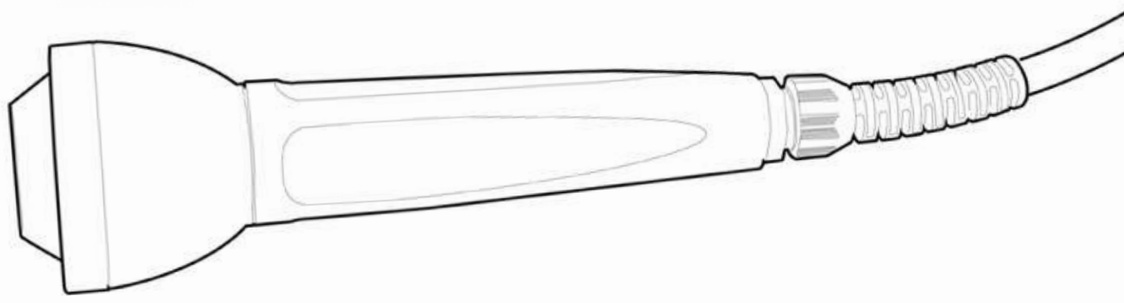
> Modus ESWT® DERMO provides impulses up to 4 Hz and 0.25mJ.

> The device provides ease of use with its colored touch screen technology. In addition, the parameters set during the treatment can be easily followed on the device screen and can be changed as desired during the treatment.

> Modus ESWT® DERMO device provides archive support to the user with its patient registration and follow-up menu.

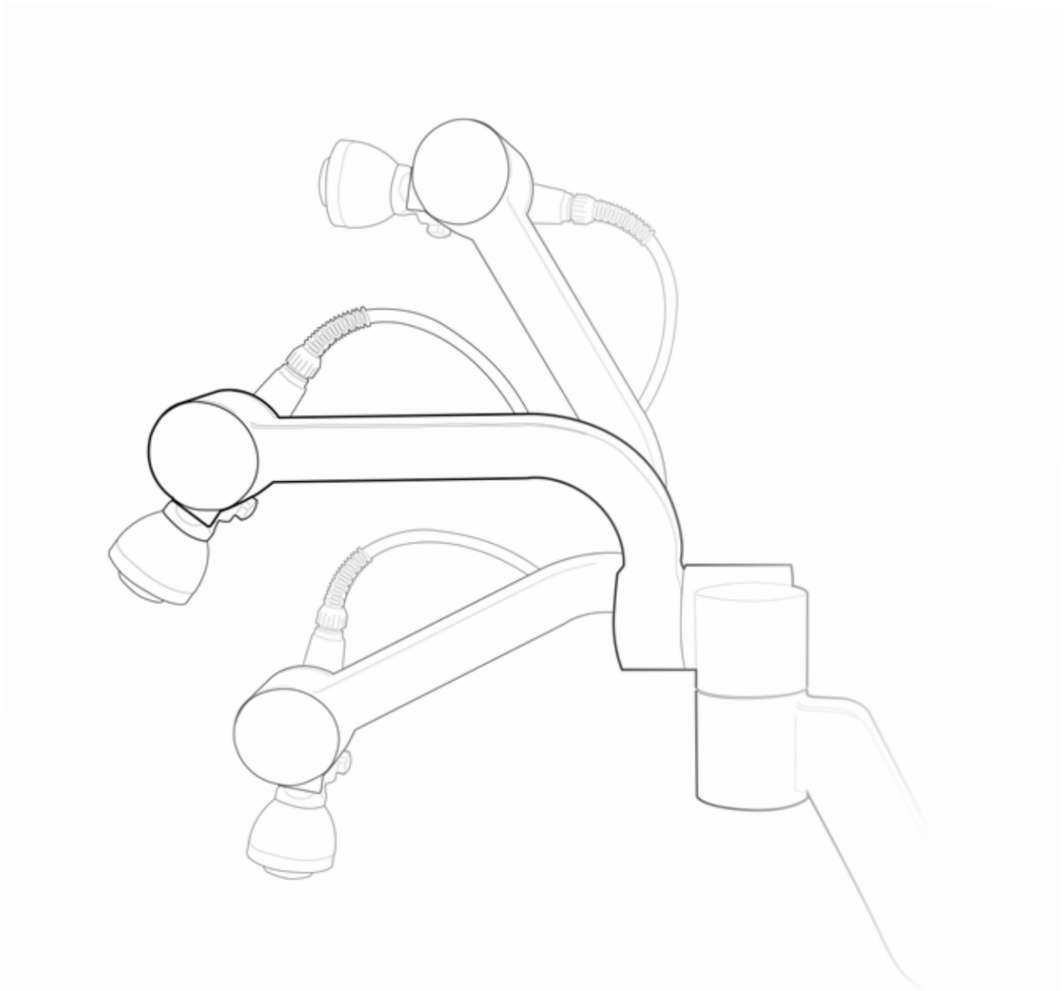
>The system provides video and written support to the user with the ready-made treatment programs in its content. Different caps are available for different treatments.

> When the number of beats set at the beginning of the treatment with Modus ESWT® DERMO are reached, the system automatically stops and the user can intervene as desired.



Modus ESWT®
Focused Arm System
Arms system is an optional feature.

MODUS ESWT DERMO
FOCUSED SHOCK WAVES



MODUS ARM SYSTEM

An optional arm that can be added to Modus ESWT provides ease of movement to the physician. This way the physician does not have to hold the handpiece for a long time during the treatment. In addition, it also minimizes the physician's contact with the patient. The arm can be moved in 3 axes. There are two buttons on the device for the arm. With help of these buttons, the device can move up and down. This way, positioning can be made according to the patient and their chair. The angle of the arm can also be adjusted manually.

> SHOCK WAVE THERAPY IN THE TREATMENT OF CHRONIC WOUNDS

Chronic skin lesions often arise as a result of underlying conditions such as diabetes. These types of lesions can significantly impact patients' quality of life and health. However, in recent years, Extracorporeal Shock Wave Therapy (ESWT) has emerged as a promising method in the treatment of these lesions, leading to significant results.
ESWT is an effective treatment approach that significantly improves and accelerates the healing processes using shock waves applied from outside the body. Research indicates that ESWT supports wound healing and provides better functionality in the restored tissue. Especially when examined in randomized controlled trials, ESWT, when used in addition to traditional wound treatment, results in approximately a 30% reduction in the wound area and an almost twofold faster healing rate. This means that the treatment process for patients can be shorter and more effective.

The effects of ESWT are not limited to just increasing blood circulation in the wound area. At the same time, the mechanical effects triggered during treatment also encourage the formation of new capillaries in the body, leading to better nourishment and healing of the tissue. This process is supported by metabolic effects, confirmed especially by the release of important proteins like eNOS and VEGF. Furthermore, it has been observed that ESWT possesses not only physical healing benefits but also antibacterial and anti-inflammatory effects. This implies that the treatment could reduce the risk of infection in the lesion area and help control inflammation.

In conclusion, the multifaceted benefits provided by ESWT in the treatment of chronic skin lesions are considered a significant advancement in the field of medicine. This treatment approach can enhance patients' quality of life and reduce the impact of issues related to skin lesions.

MODUS ESWT® DERMO

BEFORE

AFTER

MODUS ESWT DERMO
FOCUSED SHOCK WAVES

> SHOCK WAVE THERAPY IN THE TREATMENT OF LIPEDEMA

Lipedema is a condition characterized by abnormal fat accumulation in the body. It is often seen in areas such as the hips, thighs, knees, and ankles, predominantly affecting women. Lipedema is a type of fat accumulation that doesn't involve the lymphatic system and is more common in individuals with a family history. This condition can develop due to hormonal factors. Lipedema leads to disproportionate fat accumulation in the body contours and typically doesn't improve with diet or exercise.
Lipedema is a condition that predominantly affects wom
en, often demonstrating symmetrical fat accumulation in specific areas. The role of shock waves in the treatment of this condition has been investigated. Clinical studies indicate that shock waves may be effective in lipedema treatment. The applied shock waves can assist in breaking down fat cells, increasing circulation, and supporting lymphatic drainage. This can potentially lead to volume reduction in lipedema-affected areas and improvement in skin thickness.

Patients' experiences indicate that the areas where shock waves are applied feel softer, improvements in sensory functions are noted, and a noticeable reduction in the skin is perceived. Therefore, the use of shock waves in lipedema treatment is seen as a promising option for patients. However, as with any treatment method, it is important to evaluate based on individual conditions and treatment plans.

MODUS ESWT® DERMO

BEFORE

AFTER

MODUS ESWT DERMO
FOCUSED SHOCK WAVES

ITechnical Specifications

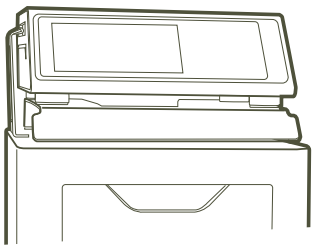
MANUFACTURER	**İNCELER MEDİKAL SAĞLIK HİZMETLERİ SAN. TİC. LTD. ŞTİ**
MODEL	**Modus ESWT® Focused**
QUALITY AND ELECTRICAL	**According to EN 60601-1 Class I Type B**
SAFETY CLASSIFICATION	**According to EN 93/42 MDD Class IIb**
	FDA Registered Manufacturer
	IEC 60601-1
	IEC 60601-1-2
WORKING PRINCIPLE	**Electrohydraulic**
USER MODES	**Continuous, Burst, Auto**
TREATMENT START/ STOP	**Main Unit Button,**
	Handpiece Button (Optional),
	Foot Pedal (Optional)
DIMENSIONS (H X W X G)	**116 mm x 387 mm x 316 mm (Main Unit)**
	917 mm x 512 mm x 410 mm (Trolley Including)
WEIGHT	**55 kg**
VOLTAGE & FREQUENCY	**110 – 240 ±% 10 VAC & 50/60 Hz**
FREQUENCY	**1 – 4 Hz**
MEMORY	**3 User Defined Treatment Protocol**
APPLIED POWER	**0,01 mJ/mm² – 0,25 mJ/mm²**
DISPLAY	**Touch Screen**
ELECTRODE LIFESPAN	**50K-70K Shock**
OPERATING ENVIRONMENT	**10° C ≤ Temperature ≤ 40° C**
	30% Rh ≤ Humidity ≤ 80% Rh
STORAGE ENVIRONMENT	**-10° C ≤ Temperature ≤ 50° C**
	20% Rh ≤ Humidity ≤ 90% Rh

MODUS ESWT DERMO
PAINLESS AND EFFECTIVE
SKIN REGENERATION!

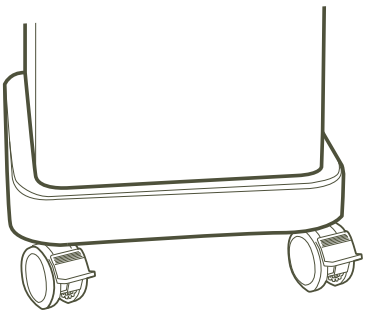
SHOCKWAVE THERAPY • SHOCKWAVE THERAPY •
FOCUSED SHOCKWAVE THERAPY

Dermatology

TECHNOLOGY FOR HEALTH



MODUS ESWT DERMO



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ESWT FOCUSED SHOCKWAVE THERAPY