

# MODUS COMBINED ESWT



**Dual Mode in Shockwave Therapy**  
*Focused & Radial Solution for  
Orthopedic Applications*



**MODUS COMBINED ESWT**  
RADIAL AND FOCUSED SHOCKWAVE THERAPY



**Modus Combined ESWT**  
The Shock Wave Device features a touchscreen and combines radial and focused shock waves in one system.

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RADIAL AND FOCUSED SHOCKWAVE THERAPY

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## **MODUS COMBINED ESWT** *Radial and Focused Shock Wave Therapy in One Device!*

**Modus Combined ESWT** offers an innovative solution for the treatment of musculoskeletal disorders by combining radial and focused shock wave therapies in a single device. Thanks to its non-invasive structure, it can be applied without the need for anesthesia or surgical intervention, ensuring a comfortable and effective treatment process for patients.

**Radial shock waves** act on superficial tissues, while **Focused shock waves** penetrate deeper tissues to promote cellular regeneration and accelerate the healing process. This supports increased blood flow and tissue renewal through stimulation of neovascularization.

With its touch screen and user-friendly interface, **Modus Combined ESWT** offers practical usability and is widely preferred in many fields such as orthopedics, rehabilitation, and sports medicine thanks to its broad range of indications.

# MODUS COMBINED ESWT SHOCK WAVE THERAPY DEVICE

**Modus Combined ESWT** Shock Wave Device combines radial and focused shock waves in a single device, offering a versatile and effective treatment solution. This non-invasive method increases blood flow in the area of discomfort, activating the body's natural healing mechanisms and supporting tissue regeneration.

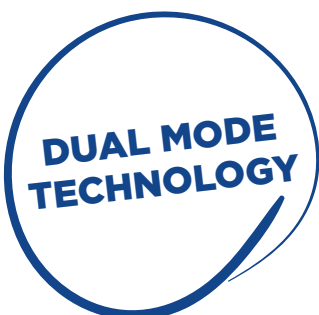
- **Dual Modality Therapy**  
Combining radial and focused shock waves, the device provides comprehensive treatment options targeting tissues at different depths.
- **High Power & Wide Adjustment Range**  
The radial shock wave mode offers frequencies up to 22 Hz and impulse pressure up to 5 bar, while the focused shock wave mode is adjustable from 1-4 Hz with 25 power levels, allowing customization according to patient needs.
- **Advanced Touchscreen Interface**  
The color touchscreen offers a user-friendly experience. Treatment parameters can be easily monitored and adjusted in real time during therapy sessions.
- **Patient Monitoring System**  
Built-in patient record and tracking menu helps manage treatment processes more efficiently.
- **Ready-to-Use Treatment Protocols**  
The system provides visual and written guidance for ease of use. Various applicator heads are available for different needs in radial therapies.
- **Automatic and Manual Control**  
The device stops automatically after the preset number of pulses is reached, but can also be manually controlled by the user if desired.

**Modus Combined ESWT** is an innovative device optimized to meet the needs of healthcare professionals, equipped with advanced technology to simplify modern treatment procedures.



**Modus Combined ESWT**  
Focused Handpiece

**Modus Combined ESWT**  
Radial Handpiece







**Provides More  
Energy to Deep  
Tissues**

**Modus Focused ESWT** offers highly effective treatment with penetration up to 84.50 mm. The powerful energy reaching deep tissues helps you achieve fast and effective results.

## MODUS COMBINED ESWT FOCUSED HANDPIECE FEATURES

More efficient treatments with high-level energy transfer and ergonomic design.

### Advantages for the User

- > Provides full energy transmission to anatomical regions.
- > Ergonomic design prevents hand fatigue, offering comfort during prolonged use.
- > Lightweight and balanced design enables easy maneuverability.
- > Durable structure ensures long lifespan and requires no maintenance.

### F-50 Head

Penetration Depths

- 68,50 mm
- 28,50 mm
- 12,00 mm
- 84,50 mm



### Higher Energy Output

Provides optimal results by delivering concentrated energy to the treatment area



### Deep Penetration

Speeds up the healing process by delivering effective energy to deep tissues.



### Fast and Effective Treatments

Shortens treatment time, saving both time and effort.

## MODUS COMBINED ESWT RADIAL HANDPIECE FEATURES

Enhance your treatment efficiency with the Modus Radial ESWT handpiece. While its powerful and ergonomic design ensures comfort during prolonged use, the advanced technology provides an effective treatment solution.

### Advantages for the User

- > One-button on/off functionality
- > Suspension system to reduce vibrations caused by projectile movement
- > Variety of applicator heads based on treatment area
- > Easy maintenance and revision kit replacement
- > Lightweight and ergonomic design that minimizes hand fatigue



### High Energy Output

Effective treatment with impulse power up to 5 bar and frequency up to 22 Hz



### Penetration Depth up to 40 mm

Yüzeysel ve orta derinlikteki dokulara ulaşarak etkin ve hızlı tedavi sağlar.



### Fast and Effective Treatments

Practical use with quick sessions even over wide areas

**Modus Radial ESWT** provides effective treatment for superficial and medium-depth tissues with penetration up to 40 mm. It delivers powerful energy over wide areas, accelerating healing in muscle and connective tissues and offering a comfortable and effective treatment experience.

**MODUS COMBINED ESWT**  
RADIAL AND FOCUSED SHOCKWAVE THERAPY



**3,000,000  
SHOCK PULSE  
CAPACITY  
RADIAL  
HANDPIECE  
DESIGN**

**3,000,000  
SHOCK PULSE  
GUARANTEE**

Applies effective rhythms to the selected anatomical area to accelerate the treatment process. With its powerful design that ensures easy and safe use, it provides long-lasting performance. With a **shock pulse capacity of 3,000,000**, the device offers long-term reliability and durability suitable for intensive use.



**RADIAL APPLICATOR  
OPTIONS OFFERING  
WIDE RANGE OF USE**

With a broad range of applicators suitable for various treatments, the system delivers pulses at frequencies up to 22 Hz. These pulses are transmitted into the body via the applicator, achieving **penetration depths of up to 30-40 mm** in the tissue it contacts.



## > WHAT IS SHOCK WAVE THERAPY?

Shock wave therapy is a treatment method that involves the application of shock waves externally to the body. It is a widely preferred technique, especially in fields such as orthopedics, physical therapy, veterinary medicine, urology, cardiology, sports medicine, and aesthetics. The advantages of this system include increasing vascularization in the treated tissue area, boosting collagen synthesis and oxygenation, and thereby promoting **faster tissue healing** and mechanically creating a stronger tissue.

Thanks to the system's **non-invasive** working principle, the desired treatment can be achieved without the need for surgical intervention.

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Relieve your pain and regain  
healthier mobility discover  
Modus Combined ESWT today!



## MAIN INDICATIONS FOR THE SYSTEM



### EPIN CALCANEI

A heel spur is a calcium deposit between the heel bone and the arch of the foot. It typically starts at the front of the heel and later affects other parts of the foot. It often results from prolonged tension in the muscle and connective tissues. Repetitive stress from walking, running, or jumping on hard surfaces is a common cause of heel spurs. Pain, swelling, and warmth at the front of the heel are typical symptoms. ESWT treatment helps reduce pain by eliminating inflammation and increasing shock absorption capacity, relieving discomfort in the foot.



### PLANTAR FASCIA INFLAMMATION / PLANTAR FASCIITIS

Plantar fasciitis is a painful foot condition in which the connective tissue of the sole and heel of the foot, called the plantar fascia, becomes inflamed due to overstretching or overuse. Repetitive stress on the plantar fascia can cause mild connective tissue tears, which can cause discomfort, swelling and make walking difficult. Plantar fasciitis is one of the most common causes of heel pain. It can affect middle-aged women and men, people who stand frequently, or people involved in sports. It is accompanied by swelling of the thick tissue that connects the sole of the foot to the toes. Plantar fasciitis usually causes a sharp pain in the morning with the first steps. As the person moves, the pain decreases, but it can be renewed when standing for long periods of time or when getting up after sitting.



### TIBIAL STRESS SYNDROME

Runner's leg syndrome, also known as "medial tibial stress syndrome", is an exercise-related condition of severe and painful pain on the inner surface of the tibia in people who exercise excessively or are new to sports. In patients with Tibial Stress Syndrome, there is mild swelling in the leg and pain when light pressure is applied to the bone, and it is often observed after excessive running activity. ESWT Shock wave therapy uses shock waves to stimulate the body's natural healing process and reduce pain.





## ACHILLES TENDON

Achilles tendon problems is a general term used to describe a variety of conditions that affect this structure that runs between the heel bone and the calf muscles. People affected by such problems usually experience pain in the tendon, which runs along the heel bone and calf muscles, and may experience limited movement in the affected leg. In mild cases, the Achilles tendon naturally goes away within a few days. If Achilles tendon pain persists for a long time, it is considered a sign of overstretching. Therefore, Achilles tendon is a common diagnosis among athletes and is considered an injury. Degenerative changes caused by improper mechanical stress or prolonged overstretching can affect the Achilles tendon. As the structure of the tendon changes, the blood and oxygen supply can also be affected, which can affect the healing process. Tendons regain mobility faster, more successfully and permanently than desired with Modus Radial Extracorporeal Shock Wave Therapy.



## SHOULDER SCLEROSIS

Calcific tendonitis is one of the most common causes of shoulder pain. It is caused by calcium deposits and inflammation in the tendons and usually occurs in the shoulder, knee, wrist, elbow and ankle. When it occurs in the shoulder, it causes severe pain, discomfort and limitation of movement, especially at night. Long-term pain can cause muscle weakness. ESWT promotes the release of substances that reduce pain by increasing circulation in the area where it is applied. This accelerates the healing process and increases mobility.



## FIBROMYALGIA

This condition is a disease associated with the musculoskeletal system. Widespread pain, stiffness and tension in the muscles are common. There is tenderness in the areas where pain and stiffness are felt. It is a rheumatologic disease and is most common in women. This syndrome manifests itself with symptoms such as fatigue, muscle pain, sleep disorders, anxiety disorders and loss of function. It is also called soft tissue rheumatism. There is no surgical treatment.



## MYOFASCIAL EXAMINATION POINTS

Myofascial Trigger Points (MTP) are painful and tender knots that form in muscle fibers, causing muscle stiffness, tension and restricted movement. They often occur after poor posture, overuse or trauma. ESWT reduces muscle spasm, increases circulation and promotes muscle relaxation by acting directly on these points. Its noninvasive nature reduces pain and improves muscle function.



## GOLFER'S ELBOW/TENNIS ELBOW

Radial and ulnar humeral epicondylitis are two common muscle-tendon conditions that cause pain and inflammation in the elbow. Lateral epicondylitis (tennis elbow) occurs on the outside of the elbow, while medial epicondylitis (golfer's elbow) occurs on the inside. Both conditions are associated with overuse and repetitive use of the forearm muscles and tendons. Symptoms can include pain and tenderness around the elbow and decreased grip strength. Daily activities, especially wrist movements and grip functions, become challenging for patients. ESWT (Extracorporeal Shock Wave Therapy) is used in these cases to reduce pain, increase blood flow and promote the healing process.



## TRIGGERS POINT

Trigger point, also known as trigger point: An area of painful muscle where the normal functional relationship of the muscle fibrils is disrupted and the tenderness has a localized distribution character. Trigger points affect the muscle by making it weak and tense. They cause strong contractions in the muscle group they are located in. They especially cause shoulder, arm and lower back pain. Muscles that are in constant contraction also put pressure on the bones, causing these symptoms to occur in neighboring joints and disrupting the blood circulation of the neighboring area. With the deterioration of circulation, oxygen and nutrients required for metabolism decrease, and metabolic wastes begin to accumulate, leading to the onset of pain.



## CARPAL TUNNEL SYNDROME

Carpal tunnel syndrome is a condition that causes numbness, tingling and pain in the hand and forearm. This condition occurs when the median nerve, one of the main nerves in the hand, is compressed as it passes through the wrist. The median nerve is located in the canal in question, together with the tendons that allow the fingers to move. The median nerve controls sensation in the fingers and the movement of certain muscle groups. Carpal tunnel syndrome occurs when the nerve is compressed in the canal. ESWT treatment is a preferred method to prevent compression of the nerves in the region and to relieve numbness, tingling and pain.



## TROCHANTERIC BURSITIS

Trochanteric Bursitis is a painful condition caused by inflammation of the bursa located on the outside of the hip. Bursae are fluid-filled sacs that reduce friction and provide cushioning in the joints. Inflammation of this bursa, especially near the bony prominence called the trochanter, can develop as a result of repetitive activities such as running, climbing stairs, cycling or direct trauma. Patients usually experience pain, tenderness, swelling on the side of the hip and discomfort when lying on the affected side. Even walking or simple daily activities can become difficult. ESWT helps to reduce inflammation, increase blood flow and speed healing by providing mechanical stimulation to the tissue in trochanteric bursitis. It stands out as an effective method for reducing pain and increasing mobility. The fact that surgery is not required and there is no risk of infection makes the treatment more advantageous.



## AVASCULAR NECROSIS (AVN)

Avascular Necrosis (AVN) is a serious condition in which bone tissue weakens and deteriorates as a result of impaired blood flow to the femoral head. Reduced blood circulation leads to insufficient nourishment of bone cells and, over time, bone tissue collapses. This leads to deformity, pain and limitation of movement in the hip joint. Normally, bone is constantly regenerated at the micro level. However, AVN disrupts this natural cycle. The femoral head becomes unable to regenerate itself and deformation begins. The rotational ability of the hip joint decreases, and the patient starts to have difficulty in daily movements. ESWT contributes to the reconstruction of bone tissue by increasing circulation. It supports the formation of new blood vessels, stimulates bone cells and promotes regional healing. Thanks to these features, it offers a noninvasive and effective treatment option in the early stages of AVN.



## BROKEN BONE

Patients show symptoms such as pain, bruising, swelling, deformity, impaired symmetry, inability to move, restriction of movement due to disorders in joints, bones and adjacent tissues such as fractures, dislocations and sprains that occur after trauma. ESWT has an effect on fracture healing, bone and cartilage tissues. In non-healing fractures (pseudoarthrosis), it has been observed that when shock waves are applied to the fracture periphery, osteoblastic (bone-forming cell) activity increases and healing is accelerated by stimulating the periosteum (bone membrane). ESWT transmits shock waves directly to the focal point. ESWT (shock wave therapy) can be used in non-union or late-union fractures, usually after the main treatment is completed, under the supervision of a doctor, as it stimulates bone repair by increasing circulation to support bone healing by applying it around the fracture.



## RADIAL SOFT APPLICATOR FOR PAINFUL AND SENSITIVE AREAS ↘

The soft applicator, designed for the Radial ESWT device, ensures that shock waves applied to painful areas are delivered more efficiently and gently.



**Comfortable and Targeted Treatment with Soft Applicator Technology**





## WHY RADIAL SHOCK WAVE?

This is a powerful application that delivers high pressure and high energy in a very short time, reducing session and treatment duration. With its lightweight and ergonomic handpiece design, it makes the treatment practical and easy. The applicator delivers pulses to the body at frequencies up to 22 Hz. The soft applicator offers ease of use especially for sensitive area applications.



## WHY FOCUSED SHOCK WAVE?

This is a practical and effective application in which shock waves are delivered from outside the body to the targeted area via a fluid-filled silicone applicator. The silicone applicator and handpiece deliver full energy transmission to the selected anatomical area, allowing the shock wave to reach deep tissues quickly. High energy and penetration depth make the treatment more effective.

## EFFECTIVE TREATMENT IN ORTHOPEDICS WITH RADIAL & FOCUSED SHOCK WAVE TECHNOLOGIES ↘

**Radial shock wave therapy** is the most commonly used type of shock wave in musculoskeletal disorders. When applied to superficial tissues, it delivers effective results with high energy density. In this method, the pressure waves lose energy as they penetrate the body; therefore, it is ideal for treating superficial conditions such as plantar fasciitis, tennis elbow, and Achilles tendinitis.

**Focused shock wave therapy**, on the other hand, is a treatment approach that targets deeper and more specific tissues. It delivers energy directly to the designated area, providing high success in conditions close to the bone such as soft tissue problems, calcifications, and non-healing fractures. The focused system is more intensive and targeted, reducing session time and accelerating recovery.

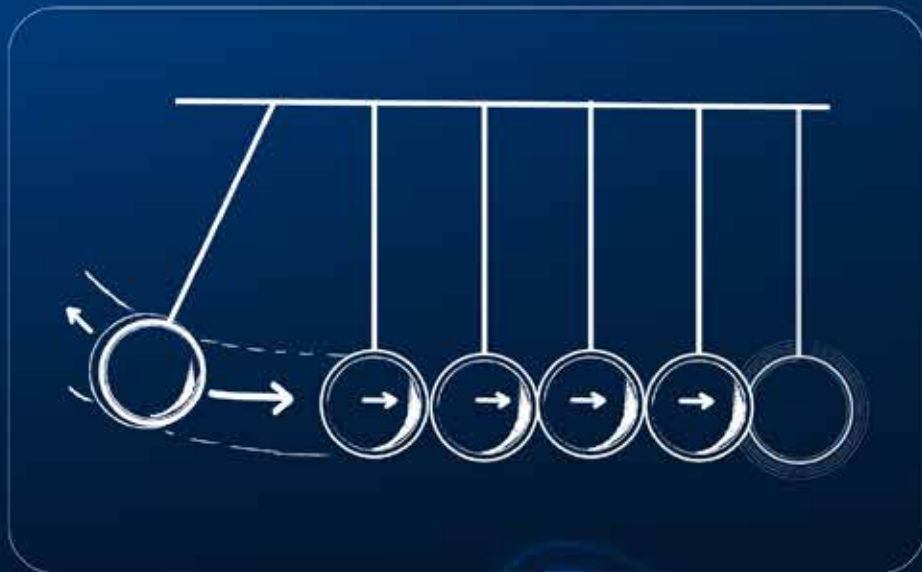
The **Modus Combined ESWT** system offers a flexible treatment option by combining radial and focused shock wave technologies in a single device. It enables fast and effective results by selecting the appropriate mode based on the type, depth, and patient-specific need. It is a reliable choice for treating non-union fractures, painful tissue disorders, and various musculoskeletal conditions.



## > RADIAL SHOCK WAVE TECHNOLOGY BASED ON NEWTON'S LAW

**Modus Radial ESWT** device bases its working principle on the Law of Action-Reaction put forth by physicist Sir Isaac Newton in 1687. This law forms the foundation of the mechanism behind the formation of radial pressure waves.

Inside the device, a projectile accelerated by compressed air strikes a metal transmitter head. The mechanical energy resulting from this impact transforms into acoustic pressure waves when applied to the skin. These waves spread to the target tissues, creating a biological stimulus and activating natural healing processes. This technology, based on a physical principle, offers a reliable and effective alternative for the treatment of musculoskeletal disorders due to its non-invasive nature and proven effectiveness.

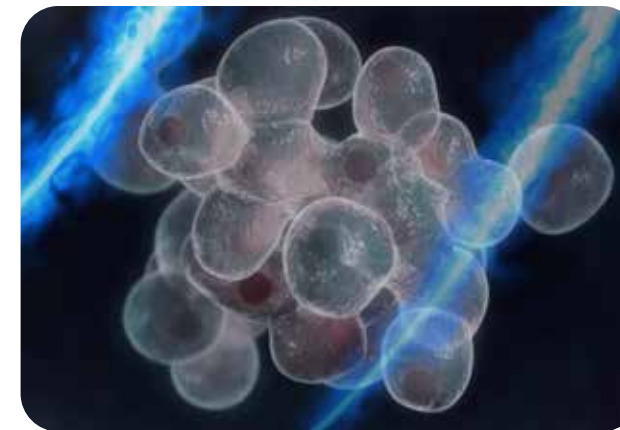


## MODUS COMBINED ESWT RADIAL AND FOCUSED SHOCKWAVE THERAPY

## > RADIAL SHOCK WAVES THAT PROVIDE STRONG STIMULATION EFFECT ↘

Radial shock waves create mechanical stimulation in the target tissue, initiating a pain-relieving and regenerative process in the body. These waves spread across a wide surface area of the tissue, stimulate cells, and activate the body's natural healing mechanisms.

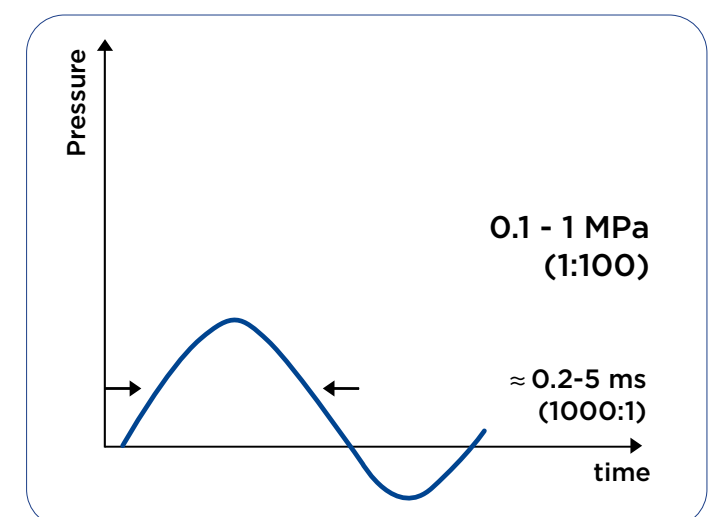
High-frequency and rhythmic pulses can be effectively used, especially in musculoskeletal system problems.



## > PRESSURE CHARACTERISTICS OF RADIAL SHOCK WAVES

**Pressure profile:** Radial shock waves have a low-pressure (0.1-1 MPa) and long-duration (0.2-5 ms) effect profile.

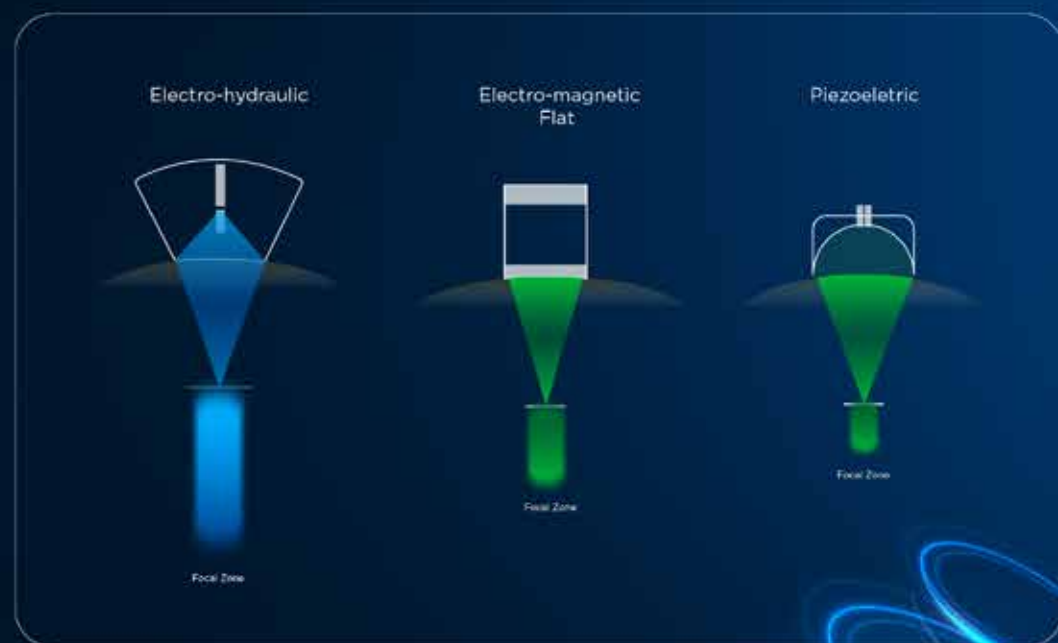
**Effect pattern:** The waves rise gently, spread over a broad area, and provide therapeutic effects in superficial tissues. This structure offers both effective and comfortable application in muscle and tendon treatments.



# > MODUS FOCUSED ESWT POWERFUL AND DEEP-ACTING SHOCK WAVE TECHNOLOGY

**Modus Focused ESWT** is an innovative shock wave therapy system operating on the electrohydraulic principle. The electrical discharge generated with high voltage produces a powerful acoustic shock wave in a fluid medium. These waves, directed through specially designed reflectors, deliver maximum energy transfer to a narrow focal point within the target tissue.

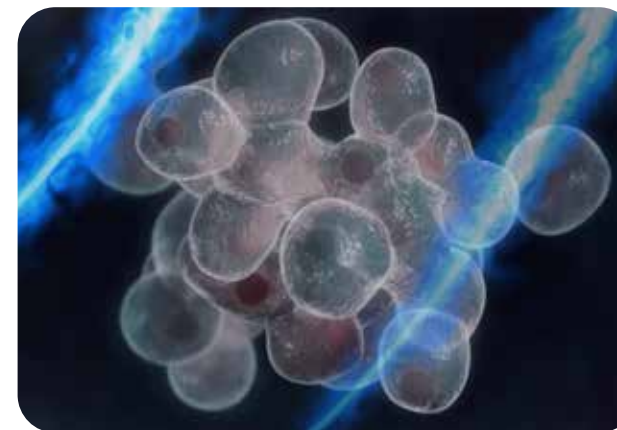
This technology offers a broader focal area compared to competing piezoelectric and electromagnetic ESWT systems, enabling faster and more effective treatment.



## MODUS COMBINED ESWT RADIAL AND FOCUSED SHOCKWAVE THERAPY

# > FOCUSED SHOCK WAVES THAT TRIGGER CELLULAR REGENERATION ↘

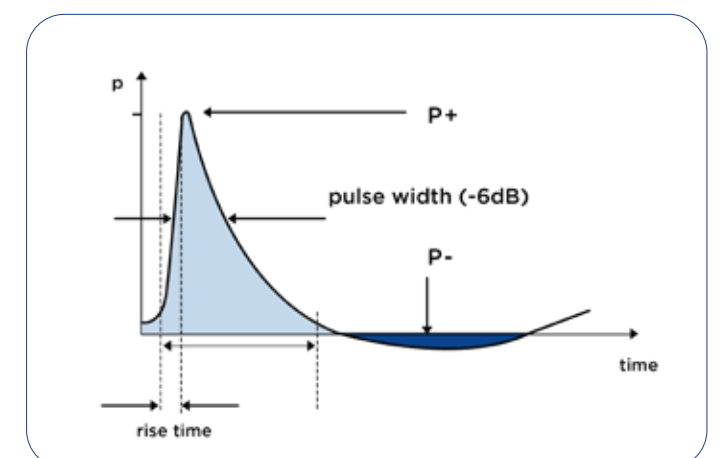
Focused electrohydraulic shock waves deliver intense mechanical force and high energy transfer to the target tissue. This biomechanical stimulation triggers cellular regeneration, accelerates blood circulation, and activates the regenerative process. Thanks to deep and precise focusing technology, it provides rapid healing and long-lasting therapeutic effects.



# > PRESSURE CHARACTERISTICS OF FOCUSED SHOCK WAVES ↘

**Pressure profile of the shock wave:** The graph shows the change in pressure of the shock wave over time. P+ (positive pressure) rapidly rises to a peak and then gradually decreases, transitioning into negative pressure (P-).

**Pulse width and rise time:** The area labeled as "Pulse width (-6dB)" indicates the effective duration of the pulse, while the "Rise time" region represents the time it takes for the pressure to reach its peak level. A short rise time indicates that the shock wave creates a fast and powerful effect.

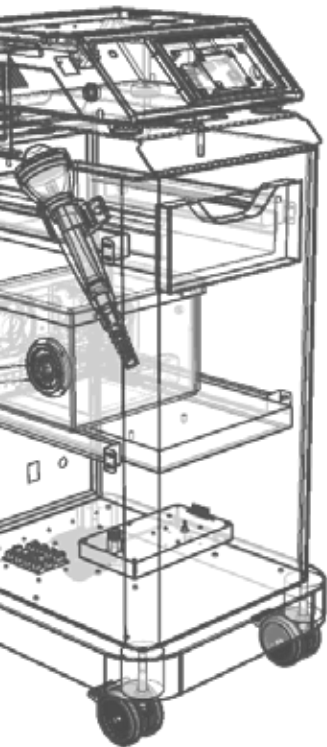




# TECHNICAL FEATURES



Manufacturer	INCELER MEDIKAL SAGLIK HIZ. SAN. TIC. LTD. ŞTI.
Model	Modus Combined ESWT
Quality and Classification	According to EN 60601-1 Class I Type B According to EN 93/42 MDD Class IIb IEC 60601-1 IEC 60601-1-2
Radial User Modes	Single, Continuous, Burst, Auto
Focused User Modes	Continuous, Burst, Auto
Focused Power Levels	1-25 Electrohydraulic / Focused Electropneumatic / Radial
Display	Touchscreen
Compressor	Built-in Compressor
Radial Output Pressure	1 – 5 Bar
Radial Frequency Range	1 - 22 Hz
Focused Frequency Range	1 - 4 Hz (Optional 6 Hz)
Voltage & Frequency	200-240 ±% 10 VAC, 50/60 Hz
Start/Stop Settings	Radial: Main screen button and handpiece button Focused: Main screen button
Memory Buttons	3 Programmable Memory Keys (S1, S2, S3)
Treatment Protocols	20 - 30
Radial Handpiece	Suspension system, 3 million shock pulses
Applicators	Ø 6 mm Radial Ø 10 mm Radial Ø 15 mm Radial Ø 15 mm Trigger Ø 15mm Focus Ø 20 mm Radial Ø 35 mm Radial Ø 36 mm Radial (Optional) Ø 35 mm Radial Soft
Dimensions	116 mm x 387 mm x 316 mm (Main Unit) 450 mm x 350 mm x 930 mm (Including Trolley)
Weight	60 kg
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 COMBINED ESWT RADIAL AND FOCUSED SHOCKWAVE THERAPY

# PAIN TREATMENT IN 4 STEPS



### 1. EXAMINE

Locate the painful area.



### 2. MARK

Mark the painful area.



### 3. APPLY GEL

Apply medical gel to the treatment area to ensure the shock waves are effectively transmitted to the skin and underlying tissues.



### 4. APPLY SHOCK WAVES

Place the applicator of the device on the treatment area, then perform the therapy by applying moderate pressure to effectively deliver the shock waves.



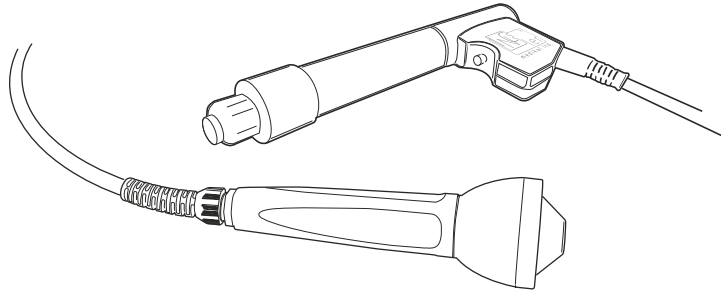
Shock Wave Therapy

# Faster Recovery for Athletes!



## MODUS COMBINED ESWT

*It supports tissue regeneration,  
providing a painless healing process.*



Technology For Health

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