D-ACTOR® 200
Radial Acoustic Wave Therapy
Aesthetics with a fine medical tradition

STORZ MEDICAL AG is a Swiss member company of the KARL STORZ Group, established in 1945. Our products have proved their efficacy all over the world in the medical disciplines of urology, orthopaedics, sports medicine, rehabilitation, gastroenterology, cardiology and dermatology.

Close co-operation with leading medical institutes in the United States, Switzerland and Germany has enabled us to develop a pioneering treatment that sets new standards in aesthetic and cosmetic anti-ageing medicine. This new treatment method is referred to as Acoustic Wave Therapy or briefly AWT®.

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Successful cellulite treatment

Acoustic Wave Therapy (AWT®) performed with the radial D-ACTOR® handpiece uses high-energy acoustic waves that are introduced into the patient’s body in the form of high-frequency pulses. AWT® is the first effective and long-lasting treatment modality for cellulite.

Acoustic waves have been used in medicine with great success since 1980 for the disintegration of kidney stones (ESWL) and since 1992 for the treatment of orthopaedic conditions such as tendon and muscle disorders (ESWT).

Radial AWT® is primarily used for the following aesthetic indications:
- Cellulite treatment
- Circumference reduction
- Treatment of striae/pregnancy stretch marks
- Lymphatic drainage
- Connective tissue tightening
- Wellness massage

Effects on the epidermis and connective tissue

**Before AWT®:**
Enlarged fat cells bulge upwards towards the skin surface. The inelastic vertical connective tissue fibres do not stretch along with the surrounding adipose tissue. Local blood circulation is significantly reduced. This gives the skin the typical orange peel appearance.

**During AWT®:**
Acoustic waves are introduced into the body. The connective tissue relaxes, and the firmness of the epidermis increases. Blood circulation in the tissue is significantly enhanced and the size of the fat cells is reduced.

**After AWT®:**
The results of AWT® are improved firmness and restored natural elasticity of the skin and connective tissue along with a visible and long-lasting improvement in skin texture.
The Acoustic Wave Therapy device D-Actor® 200 has been designed to treat aesthetic indications with pressure waves.

**D-Actor® 200 System**
- Weight: 6.5 kg
- Touch screen operation
- Integrated AWT® software treatment guide, including demonstration pictures
- D-Actor® handpiece: radial therapy
- V-Actor® handpiece: vibration therapy (optional)
- Available in the following colours: blue, green, silver

**D-Actor® Mode**
- Radial waves
- Pressure: 1.4 – 5.0 bar
- Frequency: 1 – 21 Hz

The D-Actor® handpiece uses high-energy acoustic waves to penetrate deep layers of the epidermis, dermis and subcutaneous tissue. Specific transmitters reach different parts of this structure: DI15 for deep penetration, D20-S for superficial penetration and vibration treatment of small areas, D35-S for superficial penetration and vibration treatment of big areas.

**Radial Transmitters**

- **DI15 »Gold«**
  - Ø 15 mm
  - Deep Impact® power transmitter: for treatment of epidermis, connective tissue fibres and fat activation

- **D20-S**
  - Ø 20 mm
  - Radial pressure waves and vibration pulses: for the activation of blood and lymph circulation, for relaxing tissue

- **D35-S**
  - Ø 35 mm
  - Radial pressure waves and vibration pulses: for the activation of blood and lymph circulation, for relaxing tissue
V-ACTOR® – the ideal complement to Acoustic Wave Therapy

Vibrating waves are produced with the V-ACTOR® hand-piece. Vibration treatment stimulates metabolism and has a positive impact on the lymphatic flow, which accelerates the elimination of waste products. Wellness massage offers a relaxing experience including muscle tone regulation.

The vibration therapy is an ideal complement to Acoustic Wave Therapy and contributes to long-lasting treatment results.

Vibration therapy
- stimulates metabolism and accelerates the elimination of waste products.
- offers a relaxing wellness experience before and after radial treatment.

V-ACTOR® mode
- Available vibration heads: 25 or 40 mm
- Pressure: 1.4 – 5.0 bar
- Frequency: 1 – 35 Hz

Vibration therapy stimulates metabolism and tissue

Treatment with V-ACTOR®

Vibration heads
Several clinical observational studies have been conducted to assess the effects of AWT® in the field of dermatology. Acoustic Wave Therapy has been found to be the first non-invasive treatment method to ensure effective and long-lasting treatment of age-related connective tissue weakness, especially in the treatment of cellulite. Acoustic waves stimulate microcirculation in connective tissue and fat cells and improve existing metabolic regulation disorders to reduce the visible signs of cellulite.

Measurements of skin elasticity values confirm significant improvements in the course of Acoustic Wave Therapy. The measured parameters of the mechanical skin properties, skin structure and degree of satisfaction of the female subjects are very promising in terms of the long-term effectiveness (> 6 months) of this treatment.

According to Dr. Voss (medical specialist in dermatology), Director of Dermatest GmbH in Münster/Germany, the results are to be considered as exceptional.

AWT® in the treatment of cellulite

Improvements in skin elasticity (MPa)
Study: 8 treatment sessions, 42 patients

Long term reduction of oxidative stress

Text/Chart sources pages 11/13:

AWT® case study 1

before AWT®
Source: Dr. Johnson, Grapevine, USA

after AWT®

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AWT® case study 1

Source: Dr. Johnson, Grapevine, USA
Acoustic waves provide an ideal body shaping treatment option. They are applied to tissue and stimulate cells. Cellular membrane permeability is thus increased and free fatty acids and glycerol are released from the cells. Metabolic products accumulate in the intercellular space and are removed via the lymphatic and blood systems. Acoustic waves improve tissue metabolism and enhance the transport of catabolic products to the liver for use in energy metabolism.

The additional energy sources created inside the body as a result of fat cell activation need to be eliminated by a slight diet, physical exercise and by drinking plenty of fluids.

The results of the conducted studies confirm the effectiveness of the body shaping treatment.

- body shaping effect on thighs:
  - 2.5 – 7 cm circumference reduction
- smoother skin surface:
  - in all of the subjects treated

AWT® – the ideal circumference reduction treatment

**AWT® case study 2**

*before AWT®*

*after AWT®*

*Source: Dr. Goisis, Milan, Italy*

**AWT® case study 3**

*before AWT®*

*after AWT®*

*Source: Dr. Rümmelein, Zurich, Switzerland*

**Glycerol: acute effect of AWT®**

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**Free fatty acids: acute effect of AWT®**

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Experiences with D-ACTOR® 200

Sharon Gilmartin, Ireland
»I conducted AWT® trials for about four months, to determine whether I would invest in it for my clinic and to see how effective it is. The conclusion was that AWT® is comfortable to have done and gives fast and long lasting results.«

Dr. Paul Pfeiller, Austria
»Already after the second or third treatment session, women start bringing their friends, especially because of the significant skin tightening effect. We have great results.«

Marina Mörth, Austria
»It often only takes three to four weeks until stage 1 and stage 2 cellulite aren’t visible anymore.«

Dr. Gerhard Sattler, Germany
»In our clinic, we have the best results with younger women having moderate cellulite.«

Dr. Tatjana Pavicic, Germany
»This method helps against minor and medium cellulite. The treatment is comfortable, just like a massage. The skin feels tighter and smoother and the cellulite disappears almost completely.«

Dr. Bettina Rümmelein, Switzerland
»I am using AWT® in my clinic for more than one year and treatment with AWT® has become a key component of the services my practice offers.«

Angelica Nikopoulou, Sweden
»DermaCenter has an average of 8 treatments per day since the start with AWT® and it is very profitable for the clinic.«

For further information about experiences with AWT® and D-ACTOR® 200 visit www.cellulite-therapy.com.