



the
art of
shock
wave

The new MASTERPULS® R-SW generation
with »Deep Vibration«
Radial Shock Wave Therapy – mobile and versatile



STORZ MEDICAL

STORZ MEDICAL



MASTERPULS® R-SW100



The new MASTERPULS® R-SW generation

Compact. Reliable. Ready for use.

Our new R-SW generation impresses with powerful performance, innovative design and maximum cost-effectiveness – **delivering efficiency in its most compact form.**

Proven technology in a new design

The MASTERPULS® R-SW line seamlessly continues the success of the MASTERPULS® »ultra« models and offers maximum performance combined with intuitive operation. Whether for classic indications such as epicondylitis, heel spurs or myofascial trigger points – the FALCON® handpiece

provides a precise, ergonomic and powerful tool. For fascia therapy and muscle stimulation, the MASTERPULS® R-SW100 employs V-ACTOR® vibration therapy »Deep Vibration«, offering a unique deep effect.

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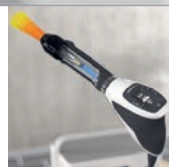
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The new MASTERPULS® R-SW generation

Mobile and versatile

The new best in class MASTERPULS® R-SW models set unrivalled standards in radial shock wave therapy.

Thanks to their low weight and compact design, they are ideal companions – both in practices and on the go for home visits or sporting events. Integrated compressor technology, minimal maintenance and simple operation make this new generation of radial devices the modern solution for the highest therapeutic demands.

The highlights at a glance

- Portable system with integrated **touch screen**
- Radial shock wave therapy with the proven **FALCON® handpiece**
- »Deep Vibration Therapy« with the powerful **V-ACTOR® handpiece** (R-SW100 only)
- Intensity and frequency are controlled **directly on the handpiece**, which has its own display
- Consistently high intensity across all frequency levels

Convenient to carry in your hand ...



... or in the exclusive carrying case





The new MASTERPULS® R-SW generation

Efficiency through flexibility

MASTERPULS® R-SW50

The ideal starter model for radial shock wave therapy:

The **FALCON® handpiece** can be used to treat all classic musculoskeletal complaints.

- Intensity: 0.3–4.0
- Frequency: 1–18 Hz
- Radial transmitters included: R15, D20-S



MASTERPULS® R-SW100 with »Deep Vibration«

The powerful model – expanding functionality twofold:

Two connections for the radial **FALCON® handpiece** and the »Deep Vibration« **V-ACTOR® handpiece** enable combined treatment with one device.

- Intensity: 0.3–5.0
- Frequency: 1–21 Hz
- »Deep Vibration« V-ACTOR®: 1–50 Hz
- Radial transmitters included: R15, DI15, D20-S





FALCON® – The reliable handpiece

Maximum control. Right in your hand.

The **FALCON® handpiece**, part of the new generation of radial shock wave generators, allows intuitive, precise and always visible control of key treatment parameters.

With the **»Active-tip-control« display**, you benefit from precise control and a high level of operating comfort. All key parameters – such as **intensity, frequency and number of pulses** – can be set directly on the handpiece, allowing for uninterrupted work with maximum efficiency.

Thanks to its **wide intensity range from 0.3 to 5.0** (MASTERPULS® R-SW100), the FALCON® handpiece is suitable for both pain-sensitive patients and high-energy applications in deeper areas of the body.

Advantages at a glance

- **»Active-tip-control« display** for control directly from the handpiece
- **Intensity can be finely adjusted**
- **Integrated operation:** Pulse counter, frequency control and intensity regulation
- **Ergonomic handpiece design** with non-slip, elastic handle and vibration absorption
- **Compatible** with all radial transmitters from STORZ MEDICAL
- **Easy to maintain** and reliable

Transmitters for targeted therapy

Precise. Tailored to indication. Effective.

The unique STORZ MEDICAL transmitter range

Radial transmitters for all standard indications

The radial transmitters cover a wide range of classic shock wave indications. Different materials and shapes are suitable for different anatomical structures and therapeutic target regions.

PERI-ACTOR® transmitters for fascia therapy

The four PERI-ACTOR® transmitters according to Swart/Di Maio were specially developed for fascia treatment. Their shapes and material properties, which are adapted to the musculature and tissue structures, enable the targeted release of fascial restrictions and ensure noticeably improved mobility.

SPINE-ACTOR® transmitters for the spinal muscles

The three SPINE-ACTOR® transmitters with their characteristic »double tip« shape are designed for use in the paravertebral region. They allow precise treatment along the entire spine for targeted treatment of the muscles. SPINE-ACTOR® transmitters are ideally used for back pain, muscular imbalances or functional complaints in the spinal area.

PERI-ACTOR® transmitters



SPINE-ACTOR® transmitters





Radial Transmitters for Trigger Points/Enthesopathies

F15 »White Soft«



- Ø 15 mm, PTFE
- Superficial pain regions, muscles of mastication, cervical spine

T10 »Finger«



- Ø 10 mm, steel
- Trigger points, deep-lying enthesopathy

A6 »AkuSt«



- Ø 6 mm, steel
- Shock wave acupuncture

DI15 »Deep Impact«



- Ø 15 mm, titanium
- Deep-lying pathologies, chronic conditions, high-energy application

R15 »Basic Energy«



- Ø 15 mm, steel
- Any type of enthesopathy

C15 »CERAmA-x«



- Ø 15 mm, ceramic
- Any type of enthesopathy

D-ACTOR® Transmitters for Myofascial Treatment

D20-S »Basic Oscillator«



- Ø 20 mm, steel
- Muscle tissue and connective tissue

D20-T »Golden Oscillator«



- Ø 20 mm, titanium
- For professional athletes, high-energy application

D35-S »Large Oscillator«



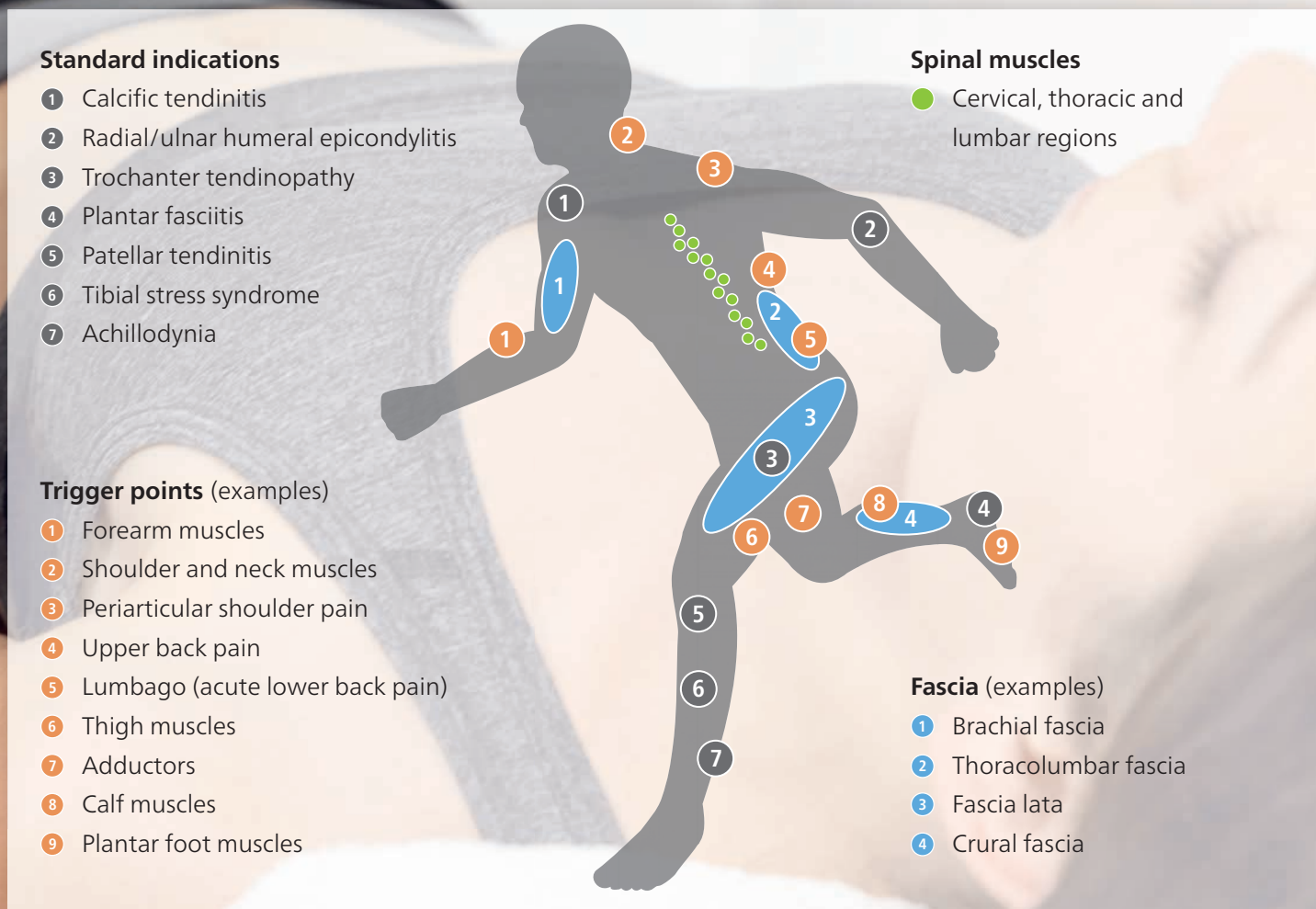
- Ø 35 mm, steel
- Muscle tissue and connective tissue, large muscles

Radial shock wave therapy

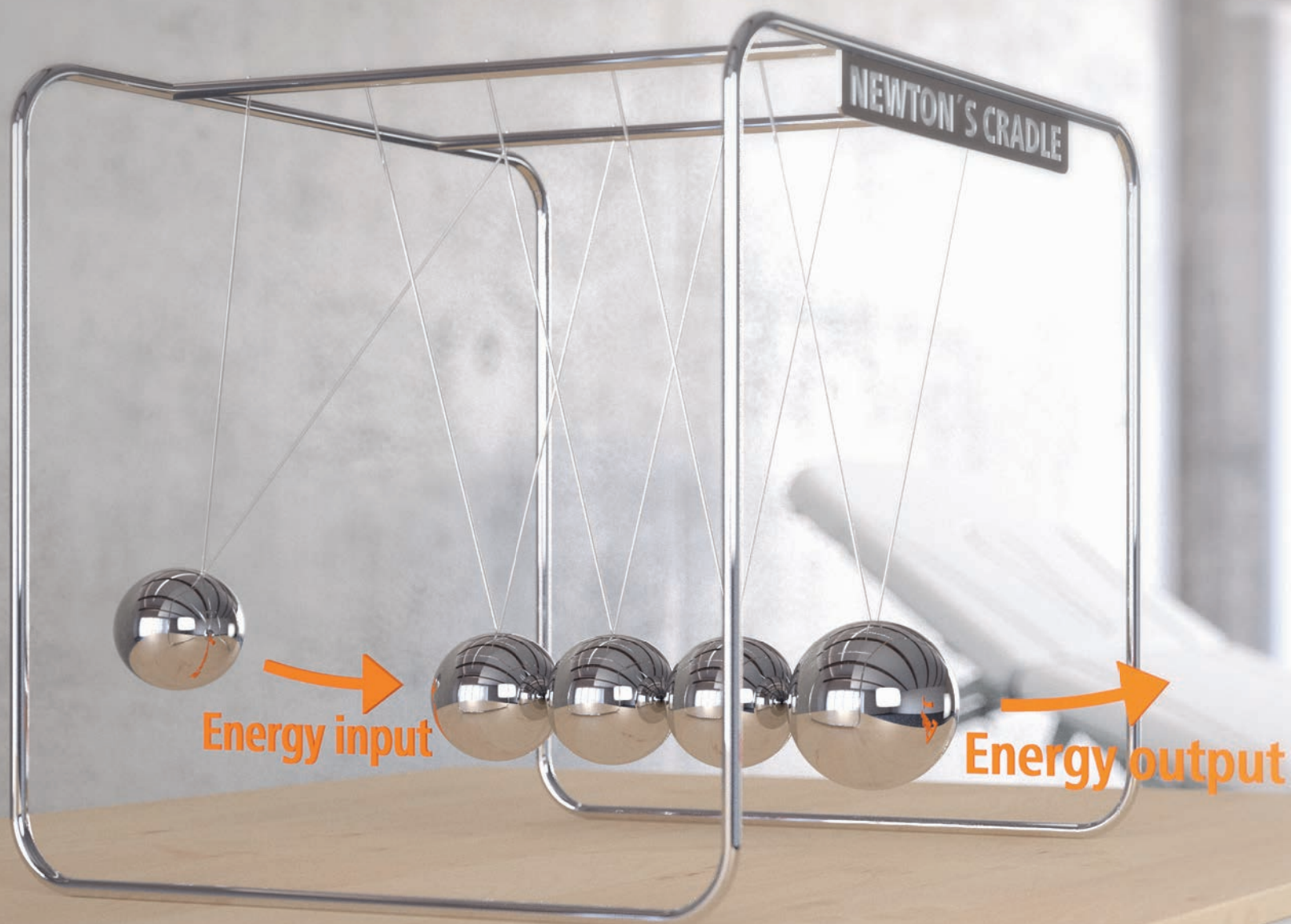
Indications



The mechanical effect of shock waves in the tissue activates the nervous system and releases VEGF (vascular endothelial growth factor) and other important messenger substances such as nitric oxide. These biological reactions promote an increase in metabolism, support neoangiogenesis and promote tissue regeneration. Consequently, they can lead to a significant **reduction in both acute and chronic pain** and help to restore physical function.



The »MASTERPULS® principle«



Radial shock waves simplified

The physical principle behind this form of therapy

Radial shock wave therapy is now one of the most proven methods for treating musculoskeletal complaints. But how does it work? Here is a look at the physics of ballistically generated radial shock waves.

Basic physical principle

In addition to focused shock waves, radial shock waves are also used in modern medicine. These can be generated by the collision of solid bodies.

The operating principle of radial shock wave devices, such as the MASTERPULS® devices from STORZ MEDICAL, is based on a projectile accelerated by compressed air striking a transmitter. The transmitter, which is attached to the handpiece, is brought into direct contact with the body surface above the painful area to be treated.

This produces two effects:

- The impulse transmission triggers a movement of the transmitter, which is visible and clearly perceptible as a deflection of the transmitter. This macroscopic movement is also described as an acoustic pressure wave.
- The transmitter is stimulated to vibrate at its natural frequency, resulting in a high-frequency wave generated through coupling with ultrasound gel on its surface, which then propagates throughout the body.

Both effects have in common that they spread radially from the surface of the transmitter; hence, the term radial shock wave.

Ballistically generated shock waves have their highest energy density at the surface of the transmitter, decreasing with increasing depth.

Transmission of the radial shock wave into the tissue with the MASTERPULS® handpiece



Start/stop button

Ergonomic and non-slip grip

Interchangeable V-ACTOR® transmitters

»Deep Vibration« V-ACTOR® transmitters



V10
Selective muscle and
trigger point treatment



V25
Tissue massage and
muscle relaxation



V40
Treatment of large
muscle areas

V-ACTOR® – »Deep Vibration Therapy«

Massage. Muscle relaxation. Deep stimulation.

The unique **V-ACTOR® handpiece** was developed specifically for the MASTERPULS® R-SW100. It promotes resonance vibrations in the muscles, as a key driving force behind microcirculatory processes, with a frequency of up to **50 Hz**, making it an ideal complement to radial shock wave therapy.

It is applied directly to the skin, either over a large area or at specific points, using specially developed transmitters. The vibrations stimulate mechanoreceptive structures in the tissue, promote local metabolism, improve microcirculation through compression and decompression, and help to release muscular tension even in deeper tissue regions.

Metabolic products are transported away via the blood and lymph. The V-ACTOR® stretches the fasciae and muscle fibres, promoting the normalisation of muscle tension by alleviating shortening and rigidity.

During treatment at 50 Hz, a stretching reflex occurs 50 times per second, causing the muscle to contract continuously. This reflex activity is also known as the tonic vibration reflex (TVR).

Holistic treatment concepts can be realised, especially when combined with the radial FALCON® handpiece – addressing the root cause of pain and supporting functional aftercare.

Advantages and effects

- Muscle and connective tissue relaxation, loosening of adhesions
- Improvement of microcirculation
- Stimulation and acceleration of metabolic activities
- Improvement of neuromuscular performance
- Improved mental wellness through increased hormone release (serotonin)
- Stress reduction through lowering cortisol levels
- Revitalisation

»Deep Vibration« V-ACTOR® facts

- Effective stimulation of deep tissue layers
- Quick change between radial shock wave and vibration therapy (only with the R-SW100)
- High patient satisfaction thanks to pleasant application and lasting effects
- 1–50 Hz high-frequency vibration therapy
- Intensity: 1–5 for superficial and deep tissue zones as well as for large muscle areas

V-ACTOR® – »Deep Vibration Therapy«

Experience from the field

Therapists and medical professionals report on their experiences with the V-ACTOR® in everyday clinical practice. Therapy procedures are complemented in a meaningful way, patient satisfaction is increased, and new treatment options are opened up.

Carlo Di Maio, orthopaedic surgeon

»The V-ACTOR® is particularly suitable for pain-sensitive patients. Its wide frequency range enables strong desensitisation of the tissue – ideal for preparing for radial or focused shock waves. I use it primarily for chronic pain, sports injuries, scar adhesions and muscle soreness (DOMS).«

Paul Hobrough, sports physiotherapist

»Patients find the V-ACTOR® comfortable, which increases their willingness to undergo follow-up shock wave treatments. I appreciate its versatility, both as a stand-alone method and as a support for more intensive radial shock wave therapy.«

Peter Heckert, Olympic Training Centre Frankfurt/Germany

»We are increasingly incorporating vibration therapy with the V-ACTOR® into our daily work. We, the therapists and athletes, have accepted this form of therapy as an ideal complement to shock wave therapy.«

Jens Lundgren, Sweden

»I prefer to use the V-ACTOR® over shock wave treatments for patients with increased sensitivity to pain.«







Discover more.
Learn more.



HUMANE TECHNOLOGY FOR PEOPLE



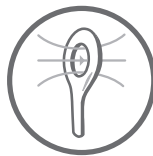
Focused Shock
Wave Therapy



Deep Radial Shock
Wave Therapy



Radial Shock Wave
Therapy



Extracorporeal
Magnetotransduction
Therapy



Vacuum Therapy



Vibration Therapy

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