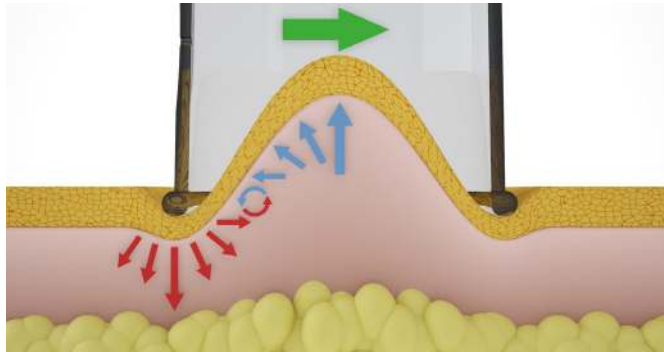


**Principles of Suction Wave**

The force conversion zone – from decompression to compression – is present around the complete inner diameter of the VACU-Cup and follows the movement of the VACU-Cup in dynamic application. This provides a rolling, gliding stretch to the tissue, performing a connective tissue massage. The mechanic effect reaches from skin level into the profound subcutaneous tissue layers to fascia and muscle fibres.



Schematic illustration of the VACU-ACTOR® technology



Example of the VACU-ACTOR® technology on the back

**»Suction Wave Therapy« indications**

- »Suction Wave Therapy« is an ideal tool to prepare tissue and patient for any kind of intense myofascial release technique – for example ESWT.
- Severe tissue adhesions or other structural connective tissue disorders
- Areas with subcutaneous metabolic malperformance

**»Suction Wave Therapy« with VACU-ACTOR® technology**

SWT applies a vacuum directly to the skin and creates a strong mechanical stress on the enclosed tissue which is sucked into the VACU-Cup. Vacuum is generated by the compressor of the MASTERPULS® MP200 »ultra«/DUOLITH SD1® Tower »ultra« and controlled by the touch screen menu.



MASTERPULS® MP200 »ultra«



DUOLITH SD1® Tower »ultra«

**Therapeutic effects**

**Constant/intermittent mechanical stress to skin and tissue layers**

- Stretching/straightening of fabric structures
- Dissolving adhesions between tissue layers
- Tissue mobilisation
- Direct myofascial release
- Subjective vasodilatory effect

**Stimulation of mechano-receptors and free-nerve endings**

- Direct muscular reaction with relaxation in the follow
- Reactive adaptation of tissue flexibility and elasticity
- Pain cover (Gate-Control-Mechanism)

**Metabolic activation**

- Pressure difference to surrounding environment leads to high reflow
- Local ischemia by seclusion creates high metabolic demand
- Expression of vasoactive agents (Histamine etc.)
- Mechanic blood-/lymphatic flow support
- Stimulation of reflective pathways

**VACU-Cups with safety hole**

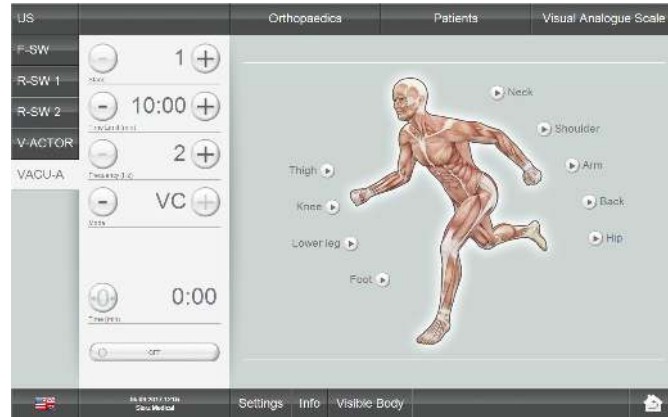
- XS: Small, localised areas
- S: Extremities/cervical spine
- M: Extremities/thoracic/lumbar spine
- L: Large areas of the body (gluteal area, thigh, calf)



XS Ø 25 mm    S Ø 33 mm    M Ø 47 mm    L Ø 62 mm

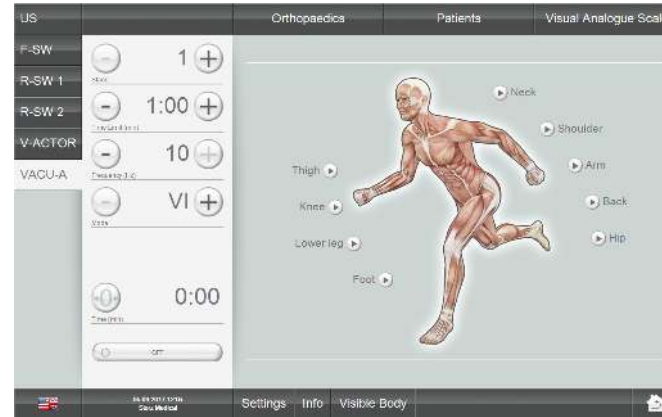
**VC mode: Constant vacuum/static application**

Delivering a constant vertical stress to tissue and a substantial pressure difference to neighbouring tissue, creating a strong metabolic surge.



**VI mode: Intermittent vacuum/dynamic application**

Providing a pulsating vacuum with a frequency selection of 2 to 5 Hz (120 to 300 pulses per minute). Higher loosening quality due to rhythmic pull- and release pattern.



**Static application – one treatment spot at a time**

- Trigger points/local painful spots
- Joint problems
- Vegetative disorders

Maximum desired suction effect should be reached with safety hole on VACU-Cup closed. Opening the safety hole will release the vacuum to allow easy removal of the VACU-Cup.

- Maintain for 30 to 60 sec (max.)
- Repeat 5 to 10 times per spot

**Dynamic application – gliding movement over an area**

A single VACU-Cup moves in regular patterns horizontally over a defined treatment area. Closing/opening the safety hole allows an intensity dosage of the vacuum effect and permits easier movement of the VACU-Cup.

- Muscle and Tissue relaxation
- Myofascial release
- Lymphatic and metabolic flow activation

The use of a gliding agent (body-oil, water) is advised to reduce friction and enables easier movement.

- Steady, rhythmic strides
- Parallel or orthogonal movements (higher stretch) to fabric structures of treated tissue

**Treatment examples**

**Trigger point / Muscle ache**



Mode	Intensity	Duration	Sessions
Static, VC/VI	1 – 3	5 – 15 min	3 – 6

**Connective tissue massage**



Mode	Intensity	Duration	Sessions
Dynamic VI	2 – 4	5 – 15 min	3 – 6

**Myofascial release**



Mode	Intensity	Duration	Sessions
Dynamic VI	2 – 4	5 – 15 min	3 – 6

**Lymphatic flow**

Mode	Intensity	Duration	Sessions
Dynamic VI	2 – 4	10 – 20 min	3 – 6