SIEMENS

SONOCUR Plus

New system for analgesic therapy of chronic pain in orthopedics



From the pioneer in extracorporeal sound wave systems Flexible and easy handling Including high-quality ultrasound imaging Effective and gentle sound wave therapy

SONOCUR Plus therapeutic unit and ultrasound imaging from a single vendor

Siemens now provides the system solution for the analgesic therapy of chronic pain in orthopedics: SONOCUR Plus.

It consists of the easily maneuverable therapy unit and highly versatile ultrasound system, SONOLINE® Prima.

The heart of the system is the sound wave head with the in-line ultrasound probe for quick positioning of the sound wave focus and precise treatment monitoring.

Range of applications

SONOCUR Plus is designed for the non-invasive treatment of near-to-bone soft tissue pains. An articulating arm enables flexible movement in three planes and supports the therapeutic sound wave head.

Primary orthopedic applications currently include therapy for these near-to-bone soft tissue pains:

► Shoulder:

Rotator cuff of the shoulder with and without calcification (Tendinosis calcatea)

► Elbow:

Golf and tennis elbow (Epicondylitis humeri ulnaris and radialis)

► Foot: Plantar heel spur and Achilles tendon.

SONOCUR Plus, with the experience of over 5000 patient treatments

Orthopedic applications of sound wave therapy, including the treatment of chronic pain symptoms, have been investigated and researched by Siemens since 1992. The effectiveness of sound wave therapy has been evidenced in scientific publications of our research partners. The experience gained from over 5000 patient treatments has been incorporated into the design of the SONOCUR Plus. The result is a system designed for the special clinical demands of pain therapy. SONOCUR Plus Therapy unit with sound wave head suspended by articulating arm



SONOLINE® Prima: unmatched image quality for universal applications in diagnostic imaging



SONOCUR Plus from the pioneer in extracorporeal sound wave therapy systems

For more than a decade, Siemens has been developing and producing sound wave technology for lithotripsy, and has delivered 600 LITHOSTAR® systems to date worldwide. The same successful and proven technology has been optimized for pain therapy with SONOCUR Plus, which continues our tradition in guaranteeing reliability and clinical dependability.

SONOCUR Plus with suspended sound wave head for flexible and simple coupling of the sound head to the patient

Suspension of the sound wave head on a unique articulating arm allows current applications such as shoulder, elbow and foot pain, to be performed easily and successfully. Future applications include hip, knee, and back pain. An increased penetration depth is provided to meet the requirements for these applications.

Electromagnetic sound wave source enables a range of low and highenergy treatment strategies for universal orthopedic applications:

- SONOCUR Plus is equipped with an electromagnetic sound wave emitter for the application of finely-calibrated sound wave energy.
- The wide energy range of the sound waves enables low-energy, anesthesia-free procedures.
- Ambulatory treatments are effective and cost-efficient.
- Higher energy settings can be used to perform certain orthopedic applications that were previously limited to large systems.

SONOCUR Plus, a versatile system for effective orthopedic therapy in a wide range of energy settings.

SONOCUR Plus

General description

Pain therapy system, consisting of a sound wave head mounted on an articulating arm.

Multipurpose ultrasound unit* for in-line focusing and monitoring of acoustic sound waves.

Therapy

During therapy the focus of the sound wave is positioned in the pain center. The correct location of the examination point is determined using an in-line ultrasound sector scanner with rotatable image plane. Position and sound wave focus are continuously monitored during the examination. Therapy impulses are applied with an adjustable frequency of up to 4 Hz.

System characteristics

- The sound wave head is attached to an adjustable arm for flexible positioning and can be locked into defined positions.
- Depth of penetration of the sound wave focus is set by regulating the water flow to the coupling head.
- Focus of the sound wave is represented on the ultrasound screen* by a center cross-hair.
- The multipurpose ultrasound system* can also operate with additional linear scanners and be used independently of the therapy system.

Technical specifications are subject to change. Siemens reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Sales Representative for the most current information.

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Technical data sound wave therapy unit:

| Constant focus: | 55 mm +/- 10 % |
|--|--|
| Depth of penetration: | 0 to 50 mm |
| Shock wave energy density in focal region: adjusted through 8 energy level selections | 0,04 mJ/mm ² to 0,5 mJ/mm ² |
| Frequency of shock impulse: | selectable from 1 Hz to 4 Hz |
| Line voltage: | 115 V, 230 V ± 10 % 50/60 Hz |
| Power consumption: | max. 1,5 kVA (incl. SONOLINE Prima) |
| Weight: | 155 kg |
| Dimensions: | 80 cm x 55 cm |

Options included:

Sound wave therapy system including selectable 5/6/7.5 MHz Micro-Sector applicator integrated into the shock wave head. Ultrasound system SONOLINE Prima SLC* including integration software for automatic representation of the sound wave focus.

* refer to separate SONOLINE Prima data sheet