SHOCKWAVE THERAPY
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SHOCKWAVE THERAPY
HIGHLY EFFECTIVE PAIN TREATMENT

The BTL Shockwave therapy is a new non-invasive solution for chronic musculoskeletal pain. The Extracorporeal Shockwave therapy is frequently used in physiotherapy, orthopaedics and sports medicine. Applications are mostly associated with the treatment of chronic muscular and tendon disorders, back and cervical pain.

Most common indications include: painful shoulder, epicondylitis, low back pain, Achilles tendon pain, tendonitis and trigger points. During the therapy, a high-intensity acoustic wave interacts with the tissues of the body. This leads to a cascade of beneficial effects including neovascularisation ingrowth, reversal of chronic inflammation, stimulation of collagen and dissolution of calcium build-up. Stimulation of these biological mechanisms creates an optimal healing environment. As the injured area is returned to normal, functionality is restored and pain is relieved.

The BTL Shockwave is the most powerful and compact shockwave system on the market. It is supplied with ergonomically shaped applicator with extremely long lifetime.

In 2014, the BTL–6000 SWT Topline achieved the Red Dot Design Award, one of the most respected worldwide awards in product design. The BTL–6000 SWT Topline won this coveted award due to its superior functionality, level of innovation, formal design quality and technological expertise.

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FAST PAIN RELIEF AND MOBILITY RESTORATION
SHOCKWAVE THERAPY

FAST AND PERMANENT RELIEF FROM PAIN

• Unique, non-invasive solution for musculoskeletal pain
• Just three to four treatments needed at weekly intervals
• A therapy session only takes about 10 minutes

FIELDS OF APPLICATION

• Orthopaedics
• Rehabilitation
• Sports medicine

MECHANISM OF ACTION

A shockwave is an acoustic wave which carries high energy to painful spots and myoskeletal tissues with subacute, subchronic and chronic conditions. The energy promotes regenerating and reparative processes of the bones, tendons and other soft tissues.

Shockwaves are characterized by jump change in pressure, high amplitude and non-periodicity.

The kinetic energy of the projectile, created by compressed air, is transferred to the transmitter at the end of the applicator.
ANALGESIC EFFECT – ELIMINATION OF PAIN

DECREASE OF MUSCLE TENSION, INHIBITION OF SPASMS
Hyperaemia is one of the basic effects of shockwave therapy in the body. It provides better energy supply to hypertonic muscles and their ligamentous structures. Furthermore, it causes the lessening of pathological interactions between actin and myosin. This leads to significant reduction of muscle tension.

ENHANCED DISPERSION OF SUBSTANCE P
The activity of Substance P (a pain mediator and growth factor) leads to the stimulation of afferent nociceptive fibres. It also supports the development of oedema and supports the secretion of histamine. The reduction of its concentration reduces pain in the affected area and decreases the development of oedema.
ACCELERATION OF HEALING

INCREASE OF COLLAGEN PRODUCTION
The production of a sufficient amount of collagen is a necessary precondition for the repair processes to the damaged myoskeletal and ligamentous structures.

IMPROVED METABOLISM AND MICROCIRCULATION
The SWT technology accelerates removal of nociceptive metabolites, increases oxygenation and supplies the damaged tissue with a source of energy. It supports removal of histamine, lactic acid and other irritating agents.

MOBILITY RESTORATION

DISSOLVING OF CALCIFIED FIBROBLASTS
The SWT technology dissolves calcified fibroblasts and starts subsequent biochemical decalcification of primary calcaria or secondary symptoms of arthrosis.
MOST COMMON INDICATIONS

- Painful shoulder (Calcification, tendonitis, impingement syndrome)
- Tennis elbow – Epicondylitis humeri radialis/ulnaris
- Heel spur – Calcaneus calcanei
- Plantar fasciitis
- Tibialis anterior syndrome
- Jumper’s knee – Patella tip syndrome
- Carpal tunnel
- Pain in the groin area
- Bursitis trochanterica
- Exostoses of small hand joints
- Pain in the hamstring insertions
- Achillobodynia
- Trigger Points
- Chronic enthesopathies
SCIENTIFICALLY PROVEN RESULTS
BTL–5000 SWT POWER
THE MOST POWERFUL SHOCKWAVE

BTL–5000 SWT POWER
• High pressure up to 5 bars
• High frequency up to 22 Hz

FEATURES & BENEFITS OF THE BTL–5000 SWT POWER
• Touch operation - intuitive operation with colour touch screen (8.4”)
• Easy-to-use by any therapist – therapeutic encyclopaedia with colour anatomical images, user-defined protocols for experienced users
• Ergonomic applicator for comfortable use – ergonomy designed by users
• Burst mode – for extra-sensitive patients
• Modular system – up to 4 therapies in a single device

Touch operation
Intuitive operation with colour touch screen (8.4”)

Ergonomic applicator for comfortable use
Ergonomy designed by users
4-IN-1 THERAPIES
THE ONLY SWT COMBINED WITH OTHER PHYSICAL THERAPIES

The BTL-5000 SWT POWER gives the user a wide range of therapeutic possibilities along with the opportunity of saving on investment, office space and time.

THE BTL-5000 SWT CAN BE COMBINED WITH

ELECTROTHERAPY

• Analgesic effect
• Spasmolytic effect
• Muscle relaxation

MAGNETOTHERAPY

• Accelerates modelling and healing of the skeleton and soft tissues
• Antiedematous effect

LASER

• Bio-stimulation
• Regenerative effects
• Anti-inflammatory effects

ULTRASOUND

• Muscle relaxation
• Antiedematous effect
BTL-6000 SWT TOPLINE
THE STRONGEST PORTABLE SHOCKWAVE

BTL-6000 SWT TOPLINE

• Pressure up to 5 bars
• Frequency up to 20 Hz

FEATURES & BENEFITS

• Touch operation – intuitive operation with colour touch screen (5.7”)
• Compact and portable – only 7 kg including the built-in compressor
• Easy-to-use by any therapist – therapeutic encyclopaedia with colour anatomical images, user-defined therapies for experienced users
• Ergonomic applicator - ergonomy designed by users

Touch operation
Intuitive operation with colour touch screen (5.7”)

Compact and portable
Only 7 kg including the built-in compressor

Ergonomic applicator for comfortable use
Ergonomy designed by users

12 BTL-6000 SWT TOPLINE
BTL-6000 SWT EASY
COMPACT & EASY TO USE DEVICE

BTL-6000 SWT EASY

• Pressure up to 4 bars
• Frequency up to 15 Hz

FEATURES & BENEFITS

• User friendly operation with LED interface, 7 preset protocols, adjustment of the parameters during the course of the therapy
• Compact and portable – only 7 kg including the built-in compressor
• Ergonomic applicator – ergonomy designed by users

Ergonomic applicator for comfortable use
Ergonomy designed by users

Compact and portable
Only 7 kg including the built-in compressor
ERGONOMY
DESIGNED BY USERS

ERGONOMICALLY SHAPED HANDLE

• Ergonomic shape of the handle allows comfortable (“gun-like”) gripping of the applicator
• The most comfortably-shaped applicator on the market

SPECIAL ERGONOMIC GRIP

• Prevents the handpiece from slipping out of the therapist’s hand during treatment
• The ergonomic shape allows the therapist to hold the handpiece comfortably in many different positions; the handpiece can be gripped in either the right or left hand and can be effectively used by both men and women
• Provides sufficient support for the therapist’s hand to prevent fatigue during extended use

ELIMINATION OF BACKWARD SHOCKS

• Spring-loaded applicator to eliminate the transfer of reverse shocks to the therapist’s hand
• Provides appropriate contact between the treated tissue and the applicator during therapy
• Built-in air dumper

MULTIFOCUSED TRANSMITTERS

• Specially-designed transmitters with several focal points
• Allow a more effective energy transmission into the target tissue
SIMPLE OPERATION

JUST 3 STEPS

1. Locate painful spots using palpation
2. Apply gel
3. Deliver shockwaves

Following the latest medical research, BTL has developed the shockwave therapeutic encyclopaedia for easy and effective treatment.

PROGRAMME W-0108 RADIAL/ULNAR EPICONDYLITIS

**Therapy parameters**
- type of shocks: continuous
- pressure: 2 bar
- frequency: 10 Hz
- number of shocks: 2000

**Patient position**
Lying on back or sitting upright with the arm at a right-angled flexion at the elbow; arm should be comfortably supported, preferably with a soft cushioning pad

**Frequency of treatments**
5-10 days

**Number of treatments**
3-5 sessions

**Process of treatment**
- Manually localize painful points in the area of radial/ulnar epicondyle and along the corresponding muscle groups of the forearm.
- Application of gel.
- Start the therapy with 400 shocks at 2 bar and 5 Hz around the most painful point.
- Manually localize the most painful point with approximately 1000 shocks.
- Successively apply to the corresponding muscle groups of the forearm the last 400 pulses applied with a frequency of 10 Hz

**Note**
- Painful points are indicated by the dotted areas in the picture.
- The arrows indicate the direction of movement of the applicator.
MOST COMMON APPLICATIONS

The examples below illustrate therapy application in the different locations. The applicator allows holding in either right or left hand. There are many ways to hold and grip the BTL handpiece. It is suprisingly easy and comfortable to use.

**PAINFUL SHOULDER**
*(CALCIFICATION, TENDONITIS, IMPINGEMENT SYNDROME)*

| Therapy parameters       | pressure: 3–4 bar  |
|                         | frequency: 10–15 Hz |
|                         | number of shocks: 2000 |
| Patient position        | lying on back or sitting upright |
| Frequency of treatments | 5–10 days           |
| Number of treatments    | 3–5 sessions        |

**HEEL SPUR, PLANTAR FASCIITIS**

| Therapy parameters       | pressure: 2.5–3.5 bar  |
|                         | frequency: 10–15 Hz    |
|                         | number of shocks: 2000 |
| Patient position        | lying prone supported under the ankle |
| Frequency of treatments | 5–10 days             |
| Number of treatments    | 3–5 sessions          |

**RADIAL/ULNAR EPICONDYLITIS**

| Therapy parameters       | pressure: 2–2.5 bar  |
|                         | frequency: 5–10 Hz   |
|                         | number of shocks: 2000 |
| Patient position        | lying on back or sitting upright  |
|                         | with the arm at a right-angle flexion at the elbow; arm should be comfortably supported, preferably with a soft cushioning pad |
| Frequency of treatments | 5–10 days           |
| Number of treatments    | 3–5 sessions        |

**ACHILLODYNIA**

| Therapy parameters       | pressure: 2–3 bars  |
|                         | frequency: 5–10 Hz  |
| Patient position        | lying on back supported with knee |
| Frequency of treatments | 5–10 days           |
| Number of treatments    | 3–5 sessions        |
## TECHNICAL PARAMETERS

<table>
<thead>
<tr>
<th>Model</th>
<th>BTL–5000 SWT POWER</th>
<th>BTL–6000 TOPLINE POWER</th>
<th>BTL–6000 SWT TOPLINE</th>
<th>BTL–6000 SWT EASY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part number</strong></td>
<td>P014.002</td>
<td>P6000.205</td>
<td>P6000.200</td>
<td>P6000.203</td>
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<tr>
<td><strong>User interface</strong></td>
<td>8.4” colour touch screen</td>
<td>5.7” colour touch screen</td>
<td>5.7” colour touch screen</td>
<td>LED interface</td>
</tr>
<tr>
<td><strong>Max. pressure</strong></td>
<td>up to 5 bars</td>
<td>up to 5 bars</td>
<td>up to 4 bars</td>
<td>up to 4 bars</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>1-22 Hz</td>
<td>1-20 Hz</td>
<td>1-15 Hz</td>
<td>1-15 Hz</td>
</tr>
<tr>
<td><strong>Single mode &amp; Continuous mode</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td><strong>Burst mode</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td><strong>Intensity gradient mode</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td><strong>Preset programs</strong></td>
<td>27</td>
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<tr>
<td><strong>Encyclopaedia</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Encyclopaedia with anatomical images</strong></td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td><strong>User-defined protocols</strong></td>
<td>100</td>
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<td><strong>Electrotherapy upgrade</strong></td>
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<tr>
<td><strong>Ultrasound upgrade</strong></td>
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<tr>
<td><strong>Laser upgrade</strong></td>
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<tr>
<td><strong>Magnetotherapy upgrade</strong></td>
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<tr>
<td><strong>Dimensions</strong></td>
<td>230 × 390 × 260 mm (main unit)</td>
<td>330 × 220 × 300 mm (air compressor)</td>
<td>320 × 190 × 280 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Weight: main unit (without accessories)</strong></td>
<td>4.7–5.3 kg</td>
<td></td>
<td>7 kg</td>
<td></td>
</tr>
<tr>
<td><strong>Weight: compressor</strong></td>
<td>20 kg</td>
<td></td>
<td></td>
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<tr>
<td><strong>Mains supply</strong></td>
<td>230 V / 50–60 Hz, 115 V / 50–60 Hz</td>
<td></td>
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<tr>
<td><strong>Class: MDD 93/42/EEC</strong></td>
<td>IIb</td>
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<tr>
<td><strong>Equipment protection class</strong></td>
<td>II (in accordance with IEC 536)</td>
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### Standard accessories
- Transmitters: 9, 15 mm multi-focused and 15 mm focused, exchangeable kit, trolley, gel 1000 ml, touch screen pen pointer
- Transmitters: 9, 15 mm multi-focused and 15 mm focused, gel 300 ml, touch screen pen pointer

### Optional accessories for BTL–5000
- Part number P007.011 Gel 1000 ml
- Part number P014.015 Exchangeable kit
- Part number P014.030 SWT transportation case (big)
- Part number P014.031 SWT foot pedal to start/stop the treatment
- Part number P002.009 BTL–5000 SWT trolley
- Part number P015.015

### Optional accessories for BTL–6000
- Part number P014.015 Exchangeable kit
- Part number P6000.211 BTL–6000 trolley
- Part number P007.010 Gel 300 ml
- Part number P002.010 BTL–5000 SWT trolley
- Part number P6000.210 SWT transportation case (small)