Supports and Orthoses
Quality down to the last detail

Bauerfeind AG is one of the most innovative companies in the area of orthopedic devices. This is the result of the company's consistent efforts to innovate, maintain a consistently high standard of product quality and employ the best-qualified staff.

Bauerfeind has taken on the mission of using modern orthopedic technology to make leading an active and pain free life a reality, even well into old age.
Bauerfeind's therapeutic orthopedic supports and orthoses set the standard for medical aids right from the start. They offer support during recovery from injuries, degenerative changes and surgery, as well as provide new levels of mobility. Bauerfeind's high quality standards guarantee excellent product functionality.

All company products fulfill the standards set by German Medical Products Law and EU directives. CE-certification and the TÜV-seal guarantee quality you can trust.
The functional and dynamic designs of Bauerfeind products have received many awards. Additionally, all materials and textiles are tested to prove that they are non-toxic before being implemented.

Supports and Orthoses
Innovative concepts for greater mobility

...Train Active Supports

Whenever joint problems stop movement, Train active supports help restore mobility.
Bauerfeind's Train product group offers anatomically knitted compression supports with viscoelastic inserts. Activity is not restricted – on the contrary. **Train active supports work with the body to exert a therapeutic effect. The intermittent massage combined with the compression exerted by the specially knitted fabric helps stimulate circulation, enhance metabolism and thus accelerate recovery.** We have all the main joints covered with our Train active supports. The breathable materials and quality workmanship are additional features that ensure maximum wearer comfort.

...Loc Stabilizing Orthoses

The Loc product group includes both splints and orthoses. The focus of the products in this category is stability. This concept characterizes the main features of the Loc group, leading to the following intended benefits: **relief, stabilization and support**. The Loc products work in a fundamentally different way from the Train active supports, which primarily employ the principle of compression therapy. All Loc products incorporate **supporting elements such as metal or plastic bars and are made from modern, breathable materials**. As with the Train active supports, Loc stabilizing orthoses are available for the medical management of all of the principal joints.

SecuTec®... Functional Orthoses

The primary objective of functional orthoses is to restore and maintain mobility of the locomotor apparatus. They represent an important component in the therapeutic arsenal, thanks to their **function-securing, mobilizing and corrective properties**. SecuTec® can be used directly after trauma or surgery, or conservatively to restore, secure and protect joint function in connection with degenerative conditions. The exclusive use of high-quality materials in the production of SecuTec® ensures maximum comfort and patient compliance. These functional orthoses help ensure optimal medical management of the knee and spine.

SofTec®... Multifunctional Orthoses

SofTec® multifunctional orthoses are Bauerfeind's technically most advanced products. This group includes versatile orthoses that can be adjusted to suit individual patient requirements. SofTec® multifunctional orthoses have been designed to meet the demands of modern medical care. At the same time they also satisfy a wide variety of demands due to their innovative structure, construction and design. For example, SofTec® Genu can be used in cruciate ligament ruptures and is characterized by **a combination of well thought-out details such as the vector-oriented knitted fabric, the technically intelligent joint mechanism and the viscoelastic profile insert**. As a result, SofTec® Genu works dynamically, as well as providing the necessary degree of stability in each case, thus creating the ideal conditions for rapid therapeutic success.

Visco ... Viscoelastic Heel Cushions

This superior viscoelastic shock-absorbent product is used exclusively for the foot, relieving pain and redistributing pressure. Visco products can be used to manage **a wide variety of foot-related indications**, with materials of differing thicknesses, densities and shapes to match the respective function.

AchilloTrain

Active support for relief of the Achilles tendon.

material award 2007

product design award 2007

Indications

- Achillodynia (Tendinosis, paratendinitis, bursitis subachillea, [Haglund's deformity])
- Follow-up treatment of Achilles tendon ruptures

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for effective compression and excellent wearing comfort.
- The active knitted support is anatomically contoured for maximum comfort.
- The integrated tendon pad is viscoelastic and anatomically contoured.
- A removable heel wedge is integrated into the support.
- A separate heel cushion is also provided for the unaffected leg to offset the length difference.

Mode of action

- The profile insert runs alongside the Achilles tendon to produce uniform application of pressure and a local massage effect during movement. This mode of action improves metabolism locally and reduces edema.
- The integrated viscoelastic heel wedge raises the heel (approx. 6 mm) to relieve the Achilles tendon.
- Coordinated muscle control is assisted via the effect on proprioception.

Colors

AchilloTrain Pro

Active support with high-reaching friction insert.

Indications

- Achillodynia (Tendinosis, paratendinitis, bursitis subachillea, [Haglund's deformity])
- Postoperative, e.g. following chronic diseases of the Achilles tendon/ligaments

Features

- The new viscoelastic insert is provided with soft, proprioceptive stimulating nubs on the inside as well as longitudinal grooves. The upper third tendon and the muscle-tendon transition with the related operating "nerve endings" (place receptors) are stimulated by two wing-like inserts.
- The knit with integrated stretch zone in the ventral tibia area makes it easier for the patient to apply and remove the support.
- If needed, a heel lift with a shock absorbing heel cushion is recommended.
- The short knit section in the foot area prevents pressure points on the fifth metatarsal bones.
- The active support is anatomically knit to provide an excellent fit and is very comfortable to wear.

Mode of action

- The continuous transition between compression and decompression (similar to a friction massage) through the integrated nubs accelerates the healing process and through the longitudinal grooves reduces edema.
- The simultaneous proprioceptive stimulation of the nerve endings in the muscle transitions improves muscular control. The sensorimotor quality is positively influenced and the neuromyonal system supported. This leads to synchronization of muscle activities.

Colors

MalleoTrain®

Active support for muscular stabilization of the ankle.

material award 2007

product design award 2007

Indications

- Postoperative and post-traumatic irritation (e.g. after sprains)
- Joint effusions and swelling resulting from osteoarthritis and arthritis
- Tendomyopathies
- Ligamental weaknesses

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for effective compression and excellent wearing comfort.
- Two viscoelastic profile inserts, anatomically shaped and aligned.
- Compression-reduced edges divert pressure at the ends of the support.
- Secure fit through the anatomical knit and lined inserts.

Mode of action

- Graduated compression promotes the reabsorption of edema, effusions and hematomas.
- The insert redistributes compression away from the prominent malleoli to the surrounding soft tissues.
- Intermittent compression is exerted during movement to promote circulation via the joint capsule and tendon insertions.
- Effects on sensomotory function support active stabilization of the ankle.

Colors

MalleoTrain® S NEW

Active support for greater ankle stability and security during physical activity.

Indications

- Ligament instability
- Post-operative rehabilitation
- Mild sprains
- Supination prophylaxis, especially when playing sports

Features

- The active support is a superior alternative to taping.
- New knitting concept: very stretchy, breathable and moisture-wicking for effective compression and excellent wearing comfort.
- Semi-rigid strap system stabilizes the ankle at the supination and pronation level.
- The strap system is wrapped in a vertical figure-8 pattern.

Mode of action

- MalleoTrain® S has the same qualities as functional bandages.
- Effects on sensory-motor function support active stabilization of the ankle.
- The strap system can be adjusted individually, it can be easily tightened, and it heightens perception at every level of movement without restricting the physiological range of motion.
- The “figure 8” stabilizes the ankle and has a protective effect on it.

Colors

MalleoTrain® Plus NEW

Active support for increased ankle stability and security.

Indications

- Chronic, post-traumatic or post-operative irritation of soft tissue in the ankle area
- Early functional treatment of capsular ligament strain in the upper/lower ankle
- Ligament insufficiency
- Supination prophylaxis, particularly during sports activities
- Post-operative rehabilitation

Features

- Active support with the qualities of a functional tape dressing for the ankle.
- Stabilization of the ankle joint in all planes of movement thanks to a 3-level strap system (elastic, inelastic, semi-elastic).
- A strap binds the midfoot with the distal lower leg in the form of a vertical figure of eight.

Mode of action

- The MalleoTrain® Plus uses the same mechanism as a functional tape dressing.
- The intensification of the tactile skin stimulus improves the unconscious movement control in the ankle joint during each movement.
- The strength of the strap can be adjusted continuously by means of a Velcro fastening without restricting the normal planes of movement.
- Pads embedded in the medial and lateral sides are wrapped up tightly in a figure of eight pattern and provide extra stability.
- The qualities of the MalleoTrain® Plus are effective for preventing injury and in the rehabilitation of previously injured joints.

AirLoc®

Stabilizing orthosis for stabilization of the ankle.

Indications

- Acute capsular ligament injuries of the ankle
- Chronic instability
- Postoperative rehabilitation
- Relapse prevention

Features

- AirLoc® is a stabilizing orthosis incorporating an innovative flexible shell. This facilitates optimal adaptation to the individual foot width and the degree of swelling.
- The plastic shells are anatomically contoured and therefore fit the ankle comfortably.
- Patient-friendly fitting with four individually adjustable Velcro® straps.
- Individually inflatable air cushions facilitate very close fitting for the respective degree of swelling.
- The AirLoc® system provides a high degree of stabilization for the ankle.
- The streamlined shell design offers advantages when the shell is worn inside a shoe.
- AirLoc® is available in one universal size for the right and left foot.

Mode of action

- The orthosis supports sensorimotor function to counteract ankle twisting.
- The orthosis stabilizes the lateral capsular ligaments of the ankle, particularly when used in combination with a shoe.

MalleoLoc® NEW

Stabilizing orthosis for stabilization of the ankle.

Indications

- Early functional treatment for injuries of the lateral malleolar ligaments (and the bifurcate ligaments)
- Post-operative protection after ligamental suturing/reconstruction
- Chronic ligament insufficiency
- Conservative treatment of severe ankle joint sprains and ligament ruptures
- Capsular ligament strains
- Protection against sprains

Features

- Optimum treatment quality in emergency treatment, without any need for reshaping. Individual fitting is possible on request.
- The anatomical shape conforms to the outside edge of the foot to counteract supination, even without a shoe, and is also functionally effective.
- Special, anti-fatigue cushion ensures excellent wearing comfort.
- The neuromuscular effect of the plantar guide (ProprioPoint) helps to elevate the foot and thus counteracts supination.
- The Velcro strap system, wound in a figure of eight pattern, ensures that it is quick and easy to put on and guarantees extra comfort.

Mode of action

- The orthosis stabilizes the foot by preventing lateral twisting movements of the ankle without appreciably hindering the normal heel-toe stride.
- MalleoLoc® is positioned antero-laterally on the joint and counteracts the talar shift, without restricting freedom of movement in the plantar flexion.
- The degree of immobilization can be continuously adjusted without restricting the plantar flexion or dorsal extension.
- The plantar guide (ProprioPoint) helps create neuromuscular effects and thus actively stabilizes the ankle joint through the muscles.

CaligaLoc®

Stabilizing orthosis for partial immobilization of the ankle.

Indications

- Conservative treatment of torn ankle ligaments
- Postoperative protection after ligamental suturing/reconstruction
- Temporary stabilization for post-traumatic tarsal sinus syndrome and decompensated instability of the subtalar joint
- Permanent stabilization for chronic instability of the upper and/or lower ankle where surgery is contraindicated

Features

- CaligaLoc® is the logical outcome of the development of the proven MHH ankle splint.
- The stability element is anatomically contoured and can be reshaped if necessary.
- CaligaLoc® can be worn round the clock, as a support splint in normal shoes during the day and as a postural splint, without shoes, at night.

Mode of action

- CaligaLoc® stabilizes the ankle by counteracting supination.
- CaligaLoc® prevents abnormal load situations in the upper and, to a certain extent, lower ankle.
- The integrated pronating raised heel section takes the strain off the lateral malleolar ligaments.

ValguLoc®

Stabilizing orthosis for the correction of the big toe.

Indication

- Hallux valgus – conservative and postoperative treatment

Features

- ValguLoc® is a postural splint for the correction of hallux valgus.
- ValguLoc® is anatomically contoured and its simple construction ensures its ease of use by patients.
- Velcro® fastening allows infinitely variable adjustment of the correction pressure.
- ValguLoc® is worn without shoes and is not suitable for walking.

Mode of action

- The big toe is brought into correct axial alignment by the application of small forces.
- ValguLoc® corrects hallux valgus according to the 3-point principle and stretches shortened parts of the capsule and soft tissues.
- Postoperative loss of correction (e.g. due to scar formation), can be avoided, and the splinting helps protect the big toe from mechanical forces.

ValguLoc® II

Stabilizing orthosis for the correction of the big toe.

Indications

- Post-operatively after hallux valgus surgery
- Conservative and functional therapy for hallux valgus malpositioning

Features

- Multidimensional hinge
  – The hallux valgus angle can be adjusted to match the post-op position and adapted to the individual shape of the foot.
  – The setting of the hallux valgus angle does not change during flexion and extension.
  – Flexion and extension can be locked in a range of positions for post-op splinting or immobilization.
  – The flat construction and the hinge's shell-shaped anatomical contours unload the metatarsophalangeal joint.
- Can be worn in any wide urban footwear thanks to the slim, close-fitting design.
- The anti-fatigue padding and anatomically shaped splint and hinge translate into long-term wearing comfort.
- Easy to put on and take off thanks to the flat Velcro® fasteners.
- Thermoformable splint material prevents pressure points from forming.

Mode of action

- Post-operative splinting immobilizes the metatarsophalangeal joint.
- Maintains the post-op position (hallux valgus angle) during mobilization.

ViscoHeel®

Viscoelastic heel cushions for relief of tendons, ligaments and joints.

Indications

ViscoHeel® N

- Arthritis relief in the leg joints, hip or knee-prosthesis relief
- Achillodynia – tendomyopathy
- Haglund's deformity – partial relief
- Leg length differences up to approx. 1 cm (evening out)
- Calcaneal pain

ViscoHeel® K

- Varus or valgus alignment of the heel

Features

- ViscoHeel® heel cushions are made from viscoelastic material that is gentle on the skin.
- The wedge-shaped ViscoHeel® heel cushions are anatomically contoured.
- In the ViscoHeel® K version the surface of the pad slopes downward on one side.

Mode of action

- ViscoHeel® reduces impact loads on the ankle, knee, hip and spine.
- The heel pads provide effective relief for calf muscles and tendons.
- The soft cushioning reduces pressure discomfort under the heel.
- ViscoHeel® K can be used for pronation (lateral raising) or supination (medial raising).

ViscoSpot®

Viscoelastic heel cushions for the treatment of heel spurs.

Indications

- Calcaneal spur (Insertion tendopathy of the plantar aponeurosis)
- Arthritis relief in the leg joints, hip or knee-prosthesis relief
- Achillodynia – tendomyopathy
- Haglund's deformity – partial relief
- Leg length differences up to approx. 1 cm (evening out)
- Plantar fasciitis (calcaneal pain)

Features

- ViscoSpot® is a viscoelastic heel pad with anatomically contoured soft cushioning.
- The star-shaped anchoring of the blue spot ensures a smooth transition between the harder and softer materials, thereby reducing pressure at the edges.
- ViscoSpot® is available for use on either foot (with a compensating pad for the other foot) or both feet.

Mode of action

- The softer material (blue spot) incorporated in the "calcaneal spur" area provides targeted relief at this point.
- ViscoSpot® reduces impact loads on the ankle, knee, hip and spine.

ViscoBalance®

Viscoelastic heel cushion for leg-length differences.

Indications

- Leg-length differences
- Achilles tendon symptoms (achillodynia)

Features

- ViscoBalance® is a leg-length equalizer made from a viscoelastic, skin-friendly material.
- The leg-length equalizer is available in four sizes and three different heights, 3 mm, 5 mm and 10 mm.
- ViscoBalance® non-slip heel cushions can be worn in walking, sports and work shoes and can be changed from one shoe to the other without difficulty.

Mode of action

- Posture-related spinal, knee and hip symptoms can be improved as a result of the corrected length discrepancy.
- ViscoBalance® reduces the shock load on ankles, knees, hips and spine.

ViscoPed®

Viscoelastic insoles for the reduction of shock loads.

Indications

- Plantar pain
- Forefoot and toe deformities
- Pressure redistribution
- Arthralgia

Features

- ViscoPed® is a sole-length viscoelastic insert.
- ViscoPed® incorporates a metatarsal pad and a slightly contoured arch support.
- ViscoPed® inserts are non-slip and can be worn in walking, sports and work shoes.

Mode of action

- The viscoelastic inserts reduce shock loads, particularly in the forefoot and heel areas.
- Special soft pads in the metatarsal head (MTH) and heel areas reduce load peaks and alleviate, or eliminate, painful irritation.
- ViscoPed® reduces impact loads on the ankle, knee, hip and spine.

GenuTrain® NEW

Active support for relief and stabilization of the knee.

Indications

- Irritation (tendomyopathy, ligament insertion degeneration, osteoarthritis, arthritis, post-traumatic and postoperative)
- Feeling of instability

Features

- New Omega pad
  Integrated, ring-shaped viscoelastic pad surrounds the patella with two pressure points on the distal section of the pad and two lateral wings at the level of the menisci.
- New knitted fabric concept: highly elastic, breathable and moisture-wicking for excellent wearing comfort.
- New especially soft knit fabric for the popliteal area.
- Anatomically knit for an optimum fit and highly secure positioning.
- Compression-reduced edges divert pressure at the ends of the support.
- New integrated donning aid makes the support easier to put on.

Mode of action

- The Omega pad redistributes compression away from the patella to the surrounding soft tissues.
- Knee joint movement massages the parapatellar soft tissue structures through the formed padded ring.
- The compression and massage effects accelerate the reabsorption of edema and effusions and help relieve pain.
- The pressure points of the Omega pad exert pressure on the infrapatellar fat pad. They reduce pressure and alleviate pain in the retropatellar area.
- The lateral wings of the Omega pad reach the front parts of the meniscus and reduce pain by exerting intermittent compression.
- Complex stimulation of the proprioceptors by the support has a positive effect on the sensorimotor system and thus on muscle control.

Colors

GenuTrain® P3

The active knee support that improves patellar tracking.

material award 2007

product design award 2007

Indications

- Patellofemoral pain syndrome (chondropathy, chondromalacia)
- Lateralization of the patella (dislocation tendency)
- After lateral-release surgery
- Patellar tendonitis
- Feeling of instability
- Anterior knee pain

Features

- New knitted fabric concept: very elastic, breathable and moisture-wicking for excellent wearing comfort, especially in the popliteal area.
- A special fabric weave that is gentle on the skin covers the critical popliteal area.
- The side seam avoids pressure points in the popliteal area.
- The new anatomically formed pad makes for a lightweight brace. It helps secure its position and makes it more comfortable to wear.
- The adjustment strap is located at the lateral patellar margin.
- There are two friction points on the distal section of the pad.
- The proximal section of the pad extends to the muscle-tendon junction of the vastus medialis muscle.
- A crescent-shaped medial patella cover is integrated into the patella recess in the pad.
- The muscle-relaxing pad (the world's first) is located lateral to the upper edge of the brace.

Mode of action

- External compression accelerates the absorption of edema and effusion. Proprioception is enhanced helping joint stability.
- The soft knit fabric used for the popliteal area provides both excellent wearing comfort and medically effective compression.
- Together with the adjustment strap the pad centers the patella. It stops the patella from drifting laterally.
- After surgery, the corrective guide ensures positive surgical outcomes.
- The friction points reduce pressure and alleviate pain in the retropatellar area.
- The alternating compression of the three-dimensional anatomically formed knit fabric, in combination with the new pad shape that sits on the vastus medialis muscle, reduces pain and stimulates metabolism. Proprioception is improved and helps joint stability.
- The medial patella cover counteracts the medial tilting of the patella during activity. This helps physiological movement of the patella.
- Utilizing sensory-motor feedback, the muscle-relaxing pad slightly relaxes the iliotibial tract on the lateral patellar retinaculum, minimizing the lateral pull on the patella. This takes the strain off the patella and pain is reduced.

Colors

GenuTrain® A3

The active support for complex treatment of knee pain.

material award 2007

product design award 2007

DESIGN PLUS Innovations-Designpreis 2005

Indications

- Irritative conditions, especially gonarthrosis (also the onset of ligamentosis, tendomyopathy, post-traumatic and postoperative)
- Knee pain with functional instability due to general muscular imbalance
- Patellar lateralization
- Varus osteoarthritis

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for effective compression and excellent wearing comfort.
- The newly developed insert form encompasses typical pain areas and important receptor zones of the knee joint.
- In addition, the viscoelastic insert has friction zones that are covered with nubs.
- The patella corrective guide is imbedded in the insert zone.
- The breathable, anatomical knit is very comfortable to wear.
- Two spiral stays located on the sides retain the shape of the knit.
- A special, non-irritative weave is incorporated in the critical area behind the knee.
- A stretch zone in the lower leg area facilitates application and removal.

Mode of action

- The compression/decompression effect resulting from movement similar to a friction massage promotes the reduction of edema and resorption of swelling. This accelerates the healing process and leads to pain reduction in the medial subcapsular ligament area.
- The stimulation of skin receptors and nerve endings in the muscle-tendon transition supports the neuro-myonal system. This leads to a synchronization and activation of musculature.
  The vastus medialis is stimulated in particular. The rectus tendon is left free.
- The integrated corrective guide counteracts patellar drifting.

Colors

GenuTrain® S

Active support with sidebars.

material award 2007

product design award 2007

Indications

- Slight instability
- Osteoarthritis of the knee
- Arthritis (e.g. rheumatoid arthritis)

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for excellent wearing comfort especially in the popliteal area.
- The sidebars are additionally secured with circular, inelastic straps.
- Special knitting techniques make the support extremely comfortable to wear, including behind the knee.
- The anatomically shaped bars can be heated and reshaped and are inserted in lateral guide channels.
- A circular viscoelastic insert surrounds the patella and facilitates correct positioning of the support.

Mode of action

- The combination of joint bars and a strap system provides added passive support to the knee.
- The positive effect on the sensorimotor system provides added active support to the knee.
- Knee activity moves the padded ring, thereby massaging the parapatellar soft tissue structures.
- The compression and massage effects accelerate the reabsorption of edema and effusions.

Colors

MyoTrain®

Support for the treatment of muscle injuries to the thigh.

Indications

- Muscle injuries to the thigh (especially cramps, pulls, ruptures, tears)
- Prevention, especially of repetitive injuries
- Muscle bruising on the thigh
- Additional support for follow-up treatment

Features

- The anatomical knit, siliconized and pressure-reducing edges ensure an optimal fit and excellent comfort.
- Both pads (acute and functional pads) can be added and removed; MyoTrain® can also be worn without pads.
- The Velcro® straps make it easy to put on and remove and provide individualized compression.
- The anatomical knit also provides a proprioceptive effect, even when used without the straps.

Mode of action

- MyoTrain® works according to the principles of so-called muscle suspension bands (taping) using compression.
- Immediately following injury, an additional, smaller acute pad can add targeted compression to stop hemorrhaging and the spread of hematoma.
- The larger functional pad adds compression to the area around the injury to minimize the edematous swelling that typically arises.
- The lengthwise ribbing along the surface of the function pad improves lymphatic circulation.
- MyoTrain® regulates muscle tone and prevent reoccurring injuries.

SofTec® Genu

Multifunctional orthosis for stabilization of the knee.

Indications

- Anterior instability following rupture of the anterior cruciate ligament extending to "unhappy triad"
  – Conservative treatment
  – Pre-operative and postoperative management
  – Long-term rehabilitation – sports therapy
  – Chronic insufficiency
- Conservative functional treatment of collateral ligament injuries
- Treatment of "unstable knee joint"
  – Severe osteoarthritis of the knee
  – Rheumatoid arthritis – progressive rheumatoid arthritis
  – Endoprosthesis – sec. rehabilitation
  – Traumatology – posttraumatic
- Restricting the knee's range of movement (e. g. after meniscal suturing or meniscal implantation)

Features

- The contoured knit is breathable and provides large surface area contact with the leg.
- Because the anatomically shaped fabric provides large surface area contact with the leg, it prevents local pressure points from forming and it supports muscle activity.
- The anatomically knitted material consists of sections that are inelastic in one direction and other sections with particularly high-tension stability.
- Four inelastic Velcro® straps produce a stable, circular frictional connection.
- The lateral aluminum sidebars are anatomically contoured.
- Special orthosis hinges adapt themselves, independently of each other, to the compromise pivot points and thus take into account the position of the individual compromise axis of rotation of the knee in three-dimensional space.
- The hinges permit restriction of extension and flexion in 10° intervals.
- The pad ensures simple and correct positioning of the orthosis against the leg.

Mode of action

- The tension-stable inelastic knitted section in combination with the sidebars and Velcro® straps stabilize the knee in a 4-point system.
- Because the fabric is flexible, the orthosis allows muscle movements to occur simultaneously.
- The three-dimensional adjustment of the orthosis hinges to the individual compromise axis of rotation avoids harmful constraining forces on the knee.
- The pad supports the correct positional control of the patella and counteracts anterior knee pain.
- The compression knit and pad massage accelerate the reabsorption of effusions and edematous swellings.
- Stimulation of the proprioceptors by the special knit has a positive effect on the sensorimotor system and thus on muscle control.

Colors

SofTec® OA

Multifunctional orthosis for relief of the medial knee compartment.

Indication

- Medially affected osteoarthritis of the knee

Features

- The breathable, anatomically contoured knit, in addition to the large surface area in contact with the leg and excellent fit, makes the brace a pleasure to wear.
- The SofTec® knit provides a high degree of tension stability and the greatest possible muscle play.
- Two pads over the proximal and distal edges of the patella indicate the correct fit of the orthosis.
- Two zippers allow for easy fitting.
- Four non-elastic straps on both the upper and lower legs permit fine adjustment and secure the orthosis against any rotational forces that occur during movement.
- The anatomically contoured carbon-fiber sidebars can be heated and reshaped.
- The shells are connected by an extremely efficient, flat, duo-centric hinge that ensures effective load transfer of the whole system to the leg.
- The patient can adjust the valgus pressure at any time as required by filling and emptying the air bladder.
- Silicone pads are positioned between the air bladder system and the surface of the leg.
- Prior to any modifications or washing, the functional element can easily be removed from the fabric pocket of the knitted section by undoing the Velcro® fastenings.

Mode of action

- The functional element with the tensionstable knit and strap system relieves the medial knee compartment according to the 3-point principle.
- The valgus force can be varied individually by the patient according to the symptoms.
- The knitted section helps activate the muscles, and thus stabilize the joint, via sensomotory mechanisms.
- Its support effect accelerates the decline of soft tissue irritation, edematous swellings and joint effusions.

Colors

SecuTec® Genu

Functional orthosis for stabilization of the knee.

Indications

- Instabilities after rupturing the anterior and/or posterior cruciate ligament (ACL/PCL)
- After ligament surgery/syndesmoplasty
- Complex instabilities (traumatic, degenerative)
- To restrict the range of movement of the knee (e.g. after collateral ligament injuries, meniscal suturing or meniscal implantation)
- Conservative and postoperative therapy after patellar fracture

Features

- SecuTec® Genu is extremely light.
- The thin aluminum frame is anatomically contoured, flat and fits closely to the body.
- The special frame construction provides a simple and effortless leg-geometric fit with respect to the joint plane.
- The specially processed aluminum alloy makes the frame extremely light, stable and formable.
- The orthosis can be applied from the front of the leg.
- The physiological hinges can be easily adjusted for various therapeutic needs while on the leg. With 4-point security, the bi-axial hinge is highly stable.
- Protected from dirt and wear, the hinges have a damped 0 degree stop.
- The breathable and non-irritating padding has a slip-resistant coating and is easily removed and re-applied for cleaning.
- To fit the individual knee width (in swelling situations) there are condylar pads of varying thicknesses.
- Flexibly positioned condyle pads avoid skin irritations.
- The straps can be fastened in 2 positions for ease of application and are pivoting on the side so that the strap follows the geometry of the leg.
- The lower, distal strap near the joint is highly adjustable to fit the calf shape.
- To treat the PCL, the proximal strap near the joint can be shifted ventrally. To treat a complex instability, an additional strap can be used.
- Flexion and extension can be limited independently from each other.
  (Flexion: 0°, 10°, 20°, 30°, 45°, 60°, 75°, 90°, 120°)
  (Extension: 10°, 20°, 30°, 45°)

Mode of action

- The knee orthosis is based on the proven 4-Point-Principle.
- The torsionally stiff frame construction counteracts the anterior/posterior drawer effect and stabilizes the knee against varus/valgus forces.
- Possible constraining forces exerted by the orthosis on the knee are minimized through adaptation of the anatomically contoured frame to the duo-centric hinges.

MOS Genu

Functional orthosis for stabilization of the knee.

Indications

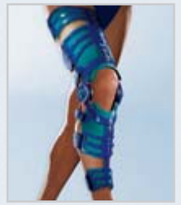
- Conservative
  - Functional therapy of injuries to the cruciate ligaments and the lateral ligaments
  - Complex instabilities including genu recurvatum
  - Support for the affected compartment in varus/valgus arthritis
- Conservative and postoperative therapy after patella fracture
- Postoperative MOS Genu short
  - After operations on the ligaments, i.e. artificial ligaments
  - Meniscal suturing and meniscal implantation
- Postoperative MOS Genu long
  - After tibial osteotomy
  - After complex reconstructions of the ligaments
  - In individual cases it is also indicated for fractures located close to joints – implant surgery

Features

- The aluminum frame is anatomically contoured and can subsequently be reshaped as required.
- The frame design is available as a long version that can readily be converted to the standard length by removal of the extension shells.
- The shell pads with a breathable, nonslip, skin-friendly coating ensure a secure fit with Velcro® fastenings.
- The monocentric joints are aligned with Nietert's compromise pivot axis and permit restriction of extension and flexion in 10° intervals.
- Condylar pads of differing thicknesses can be used to compensate for knee swelling of varying severity.
- An optional popliteal strap is used to stabilize the knee in the event of posterior instability or genu recurvatum.

Mode of action

- The knee orthosis is based on the known 4-Point-Principle and thus counteracts the anterior drawer phenomenon.
- The varus/valgus adjustment permits adaptation to the patient's individual leg axis and targeted relief of the knee compartment and lateral ligament.
- The frame design stabilizes the knee against varus/valgus forces; the long version has a longer lever arm.
- The popliteal strap takes the strain off the orthosis hinges by preventing hyperextension.
- The dorsal pressure exerted by the popliteal strap counteracts the posterior drawer phenomenon.
- Possible constraining forces exerted by the orthosis on the knee are minimized through adaptation of the frame to the monocentric hinges.



GenuLoc®

Stabilizing orthosis for immobilization of the knee.

Indication

- In any knee disorder, after surgery or trauma, for the temporary immobilization of the knee

Features

- The supporting material is breathable and washable.
- Velcro® straps facilitate easy fitting of GenuLoc to the recently injured or postop knee.
- Two integrated, anatomically contoured dorsal aluminum bars permit individual adaptation of the desired knee flexion angle.
- The aluminum bars are contoured to ensure a knee flexion angle of 20°.
- Lateral Velcro® strips allow for individual adaptation to the respective leg circumference.
- Lateral plastic bars stretch the supporting material and adapt themselves to the angle of the aluminum bars.

Mode of action

- The bar immobilizes the leg at a preset knee flexion angle.
- The pad behind the knee provides added support and enhances the secure positioning of the immobilization bar against the leg.

SofTec® Coxa

Multifunctional orthosis for stabilization of the hip joint.

product design award 2009

reddot design award winner 2009

Indications

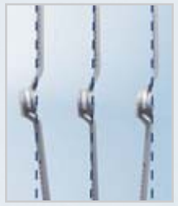
- Prevention of dislocation
- Total hip-replacement surgery
- Total hip-revision surgery
- Femoral-head resection (Girdlestone arthroplasty)
- Hip spacer for two-stage revision procedures

Features

- Very comfortable to wear due to the use of breathable materials that are gentle on the skin.
- Comfortable and easy for the patient to put on due to Velcro® fasteners with well-placed finger holds.
- The anatomically shaped pelvic harness that is integrated into the fabric guarantees that the orthosis can be positioned easily and correctly.
- The three-part pelvic harness can be adjusted to fit different girths using a simple insertion principle.
- The fabric portion and the tension straps on the pelvic and thigh harnesses can be trimmed to fit.
- The monocentric orthotic joint ensures an anatomically correct fit and makes it possible to optimally manage the care of the hip joint.
- The off-center joint geometry makes it possible to set adduction/abduction and flexion/extension in separate steps.
- The extension and flexion of the joint can be limited in 10° increments from -10° to +90°. Adduction and abduction can be adjusted continuously between -6° and +6°.
- The joint is available in offset and straight versions and can be used for either the right or left hip.
- The orthosis can be adjusted at the bedside and on a supine patient.

Mode of action

- The orthosis holds the head of the joint securely into the socket by a combination of:
  – secure positioning of the pelvic harness on the iliac crests
  – individual adjustment of the lateral thigh harness and
  – adaptating the orthosis hinge to suit the indication.
- This limitation of movement ensures positive surgical outcomes.
- Movements that could otherwise lead to recurrent dislocation are avoided.
- The combination of a soft fabric and a flexible pelvic shell creates uniform contact pressure, which securely immobilizes the joint head in the socket.



DorsoTrain®

Active support with stabilizing functional elements.

Indications

- Degeneration/muscular insufficiency of the spine
- Osteoporosis

Features

- DorsoTrain® is an orthosis for straightening and supporting the spine.
- DorsoTrain® incorporates 35 cm long fiberglass reinforced plastic stays (reclinator) that run alongside the vertebrae.
- The reclinator is anatomically contoured and can be adapted to the individual as required.
- Maximum freedom of movement.
- Breathable, skin-friendly textile fibers make DorsoTrain® extremely comfortable to wear.
- The supple body material ensures an ideal fit and is one of the reasons for the particularly good patient compliance.
- The combination of a long zipper and a front-facing gusset fastener guarantee easy fitting and removal of DorsoTrain®.

Mode of action

- The spinal column is straightened and supported by a semi-flexible reclinator combined with non-elastic functional zones on the body section.
- The waist belt permits individual adjustment of the compression exerted on the abdominal cavity.

LumboTrain®
LumboTrain® Lady

Active support for muscular stabilization of the lumbar spine.

material award 2007

product design award 2007

Indications

- Lumbar syndrome (acute)
- Degeneration/muscular insufficiency of the spine (mild)
- Discectomy
- Conservative treatment after prolapse

Features

- Anatomically contoured, individually adjustable, knitted active support for maximum comfort.
- Practical hand straps mean that the support can be fitted easily without the need to expend considerable effort.
- The perforated closure gives increased air permeability.

Mode of action

- The combination of active support and viscoelastic massage pad relieves pain, helps ease tension and activates muscle control via enhanced proprioception.

LordoLoc®

Stabilizing orthosis for relief of the lumbar spine.

Indications

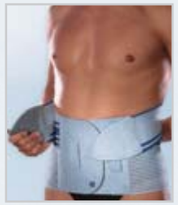
- Lumbar syndrome (chronic)
- Degeneration/muscular insufficiency of the spine (moderate)

Features

- LordoLoc® is a lightweight stabilizing orthosis for the lumbar spine and lumbosacral transition with muscle-activating and relieving properties.
- The elastic, breathable product adapts itself to the anatomy, and boasts a compact design for maximum comfort.

Mode of action

- The flexible stays integrated at the back can be adapted individually to provide anatomically correct support for the affected area.
- The additional elastic tension straps permit individually adjustable compression and thus variable adjustment of the stabilizing effect.



SacroLoc® NEW

Stabilizing orthosis for relief of the pelvis and the sacroiliac joints.

product design award 2010

reddot design award winner 2010

Indications

- Sacroiliac joint syndrome
- Sacroiliac joint osteoarthritis
- Sacroiliac joint instability
- Sacroiliac joint dysfunction
- Myalgia and tendinopathy in the pelvic area
- Pelvic girdle instability
- To prevent recurrent sacroiliac joint dysfunction and myotendinopathies (rectus abdominis muscle, piriformis adductor muscle)
- Symphysis diastasis and loosening
- Structural instability after spondylodesis of lumbar vertebrae

Features

- Two-part friction pad for targeted effect.
- Combination of elastic and inelastic fabric and functional straps so degree of stabilization can be individually adjusted.
- Anatomical shape for high wearing comfort and secure fit.
- This orthosis can be put on comfortably with little effort thanks to its practical hand straps.
- High patient compliance because this orthosis can be worn undetected under clothing.

Mode of action

- The two-part pad promotes blood flow to the ligaments and muscles through micromassage.
- The proprioceptive input improves muscle tone.
- The orthosis stabilizes and relieves the sacroiliac joint and pelvis with its combination of elastic and non-elastic knitted fabric.
- The intensity of stabilization can be individually adjusted with the functional straps.

LumboLoc

Stabilizing orthosis for relief of the lumbar spine.

Indications

- Lumbar syndrome
- Degeneration/muscular insufficiency of the spine (moderate)
- Facet syndrome

Features

- The anatomically-contoured knit ensures individual adaptation to the patient's shape for maximum comfort.
- Practical hand straps mean that the support can be fitted easily without the need to expend considerable effort.

Mode of action

- The stabilizing orthosis relieves the back by individually-adjustable compression of the abdominal cavity.
- Anatomically contoured corset stays incorporated at the back facilitate an anatomically correct posture in the area of the lumbar spine, while permitting problem-free individual adaptation to the patient's shape.

LumboLoc® Forte

Stabilizing orthosis for optimal spinal posture and relief of the lumbar spine.

Indications

- Degeneration/muscular insufficiency of the spine (severe)
- Spondylolysis/spondylolisthesis
- Lumbar syndrome

Features

- Anatomically-contoured, knitted stabilizing orthosis ensures individual adaptation to the patient's shape for maximum comfort.
- Practical finger pockets and LPT strap system (Low Power Tension) mean that the orthosis can be fitted easily without the need to expend considerable effort.

Mode of action

- Anatomically-contoured corset stays incorporated at the back facilitate an anatomically correct posture in the area of the lumbar spine, while permitting problem-free individual adaptation to the patient's shape.
- The lumbar spine is relieved by the individually adjustable compression of the abdominal cavity.
- The adjustable function strap permits individual adjustment of the force exerted, with respect to location and intensity, and supports the effect of the pad.
- A back pad that can be adapted to the correct anatomical position exerts continuous, extensive massage of the back muscles (lumbar or sacral pad). Stabilizing orthosis and pad form one functional unit.

SecuTec® Lumbo

Functional orthosis for the reduction of lordosis.

Indications

- Spondylolysis/spondylolisthesis
- Discectomy (posterior column)
- Lumbar spinal stenosis

Features

- The anatomically-contoured knit combined with the LPT strap system (Low Power Tension) ensures optimal adaptation to the patient's shape.
- Light, compact CFR bridging frame (carbon-fiber reinforced plastic) can be adapted individually to the patient's shape.
- Practical finger pockets mean that the orthosis can be fitted easily without the need to expend considerable effort, maximum comfort.

Mode of action

- The design of the new SecuTec® Lumbo allows lumbar lordosis to be reduced in a targeted manner while restricting rotational movements.
- The LPT tension strap system permits the application of considerable force against the body, enabling the bridging frame to produce the optimal effect without much effort on the patient's part.
- The adjustable abdominal fastener combined with the LPT tension strap system permits individual adjustment of the compression exerted on the abdominal cavity.

SecuTec® Dorso

Functional orthosis for the graduated support of the lumbar and lower thoracic spine.

Indications

- Spondylolysis/spondylolisthesis
- Discectomy (anterior column)
- Conservative treatment after prolapse
- Osteoporosis
- Degeneration/muscular insufficiency of the spine

Features

- The anatomically-contoured knit ensures an optimal fit.
- The LPT strap system (Low Power Tension) permits the application of considerable force against the body without much effort on the patient's part.
- Practical finger pockets mean that the support can be fitted easily without the need to expend considerable effort.
- Maximum comfort thanks to the skin-friendly, breathable, lightweight materials.

Mode of action

- The eight-ten corset stays arranged in a circle around the back are structurally linked in the grid system. The compression exerted on the abdominal cavity by the base material of the orthosis relieves the lumbar spine and provides added support up to the lower thoracic spine.
- The corset stays can be individually shaped for an anatomically correct fit.

SofTec® Lumbo by Prof. Harms

Multifunctional orthosis for stabilization of the lower spine.

Indications

- Spondylolysis/spondylolisthesis
- Fractures (lumbar spine)
- Tumors (metastases)
- Degeneration/muscular insufficiency of the spine
- Facet syndrome
- Discectomy
- Conservative treatment after prolapse
- Spondylodesis
- Lumbar spinal stenosis

Features

- The orthosis can be adapted directly at the hospital bed, even if the patient is supine.
- Easy fitting for the patient without considerable effort thanks to the LPT tension straps. Maximum comfort.
- The modules used during treatment continue to be made available even after the orthosis is downgraded, thus allowing further upgrading of the system with CFR rods or the half-shell according to the indication.

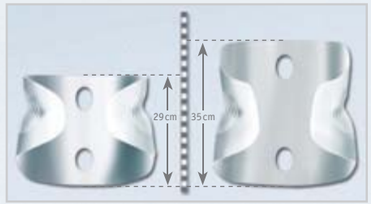
Mode of action

- The modular design of SofTec® Lumbo permits controlled treatment according to an individually adaptable 3-stage regimen.

Multifunctionality

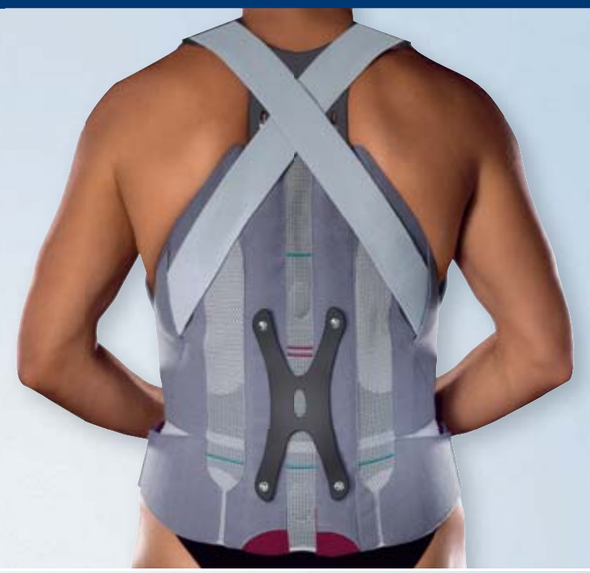
The modular construction of SofTec® Lumbo permits a 3-stage treatment regimen

- **Stage 1 (Stabilization phase):** For effective postoperative or initially conservative stabilization of segments the orthosis is used together with the shell.
- **Stage 2 (Mobilization phase):** During the initial stages of mobilization with progressive rehabilitation, the shell is removed and the textile element in the affected lumbosacral area is reinforced with CFR rods.
- **Stage 3 (Activity phase):** As patients become increasingly active, the CFR rods are replaced by corset rods, thereby reducing the external supportive effect.



SofTec® Dorso by Prof. Harms

Multifunctional orthosis for straightening and stabilizing the spine.



Indications

- Fractures (up to T8)
- Spondylodesis
- Tumors (metastases)
- Osteoporosis

Features

- SofTec® Dorso is a hyperextension orthosis for stabilization of the lumbosacral transition (L2–T8) and for straightening the spinal column.
- The CFR rods (carbon-fiber reinforced plastic) are arranged parallel to the spine, which means that, during postoperative use, no direct pressure is exerted on the wound area.
- The straightening shoulder strap and the tension straps permit adjustment of the intensity of the force exerted against the body without much effort on the patient's part. The finger pockets mean that frail and elderly patients in particular can apply the support with ease and without the need to expend considerable effort.
- SofTec® Dorso is extremely comfortable to wear, thereby ensuring a high degree of patient acceptance.

Mode of action

- The tension-stable special knit, together with the CFR frame and the additional fitting of a stabilizing carbon cross, act together to secure the pelvis.
- SofTec® Dorso is designed to counteract kyphosis.
- The degree of flexibility of the CFR frame is infinitely adjustable.
- The straightening shoulder strap permits continuously adjustable load transfer according to the needs of the individual patient.

ManuTrain®

Active support for the wrist.

material award 2007

product design award 2007

Indications

- Osteoarthritis
- Post-traumatic conditions
- Tenosynovitis

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for effective compression and excellent wearing comfort.
- ManuTrain® is an active support to stabilize the wrist.
- Anatomically-contoured, double-stretch knitted support.
- Shapeable stay on the inner hand allows functional adjustment of the hand for varying indications.
- An additional Velcro® strap supports the stabilizing effect of the inner hand stay.

Mode of action

- Stabilizes the wrist.
- Support pads relieve the pressure on nerves and blood vessels.
- The circular compression accelerates the healing of soft tissue irritation.

Colors

ManuLoc®

Stabilizing orthosis for immobilization of the wrist.

product design award 2010

Indications

- Postoperative irritant conditions
- Post-traumatic conditions
- Mild carpal tunnel syndrome

Features

- ManuLoc® is a stabilizing support for immobilization of the wrist.
- Anatomically shaped metacarpal bar stabilizes the wrist in the desired position.
- The construction of the metacarpal bar provides a functional gripping movement; Preserves mobility.
- Breathable, and moisture wicking materials and quality workmanship (no seams) ensure maximum comfort.
- Large Velcro® fastenings facilitate fitting and removal of the stabilizing support.

Mode of action

- The integrated aluminum stays are anatomically formed and secure the wrist.
- The orthosis prevents incorrect positioning of the distal and proximal parts of the wrist.
- Sidebars limit radial and ulnar movement.

RhizoLoc®

Stabilizing orthosis for stabilization of the thumb saddle and first metacarpophalangeal joints.

Indications

- Thumb basal joint arthritis
- Skier's thumb

Features

- RhizoLoc® is a stabilizing support.
- Individually shapeable aluminum strap ensures maximum stability.
- Velcro® thumb tab allows optional adjustment of movement restriction at the base of the thumb.
- Velcro® fastenings ensure ease of handling, fitting and removal.
- Breathable material and air pores allow air to circulate.

Mode of action

- Stabilization of the thumb saddle and first metacarpophalangeal joints.
- Limitable release of movement at the base of the thumb.

EpiPoint®

Stabilizing orthosis for the treatment of tennis elbow.

Indication

- Humeral epicondylitis

Features

- EpiPoint® is a stabilizing orthosis providing targeted and graduated compression to the lower arm.
- Elastic band allows dynamic pressure adjustment.
- The red warning section on the adjustable band indicates whether the support has been fitted too tightly.
- One universal size.
- Since the pad can be rotated, EpiPoint® can be worn on the right or left forearm.
- It is indicated for muscle and tendon insertion irritations in the elbow region.

Mode of action

- The viscoelastic pad exerts highly targeted compression.

EpiTrain®

Active support for targeted compression of the elbow.

material award 2007

product design award 2007

Indications

- Osteoarthritis
- Postoperative irritant conditions
- Post-traumatic conditions
- Humeral epicondylitis

Features

- New knitting concept: particularly stretchy, breathable and moisture wicking for effective compression in the elbow area.
- Anatomically knit: for wearing comfort and secure positioning.
- Viscoelastic inserts with epicondyle cut-outs relieve pressure and facilitate secure positioning of the support.
- Reduced compression at the edges of the support reduces the risk of circulation problems.

Mode of action

- Regulated compression alleviates pain and helps resolve spasms.
- The insert redistributes compression away from the epicondyles to the surrounding soft tissues.
- The profile insert provides intermittent compression for improved metabolism in the radial and ulnar areas.

Colors

OmoTrain®

Active support for early functional treatment of the shoulder joint.

Indications

- Osteoarthritis
- Postoperative irritant conditions
- Post-traumatic conditions

Features

- OmoTrain® is an active support for treatment of the shoulder.
- The anatomically-contoured knit ensures optimal adaptation to the shape of the body for maximum comfort.
- A viscoelastic shaped insert with Velcro® tabs can be optionally inserted and positioned as required.

Mode of action

- The support centers the glenohumeral joint.
- OmoTrain® improves joint function.
- During movement, the shaped insert produces a local massage effect on the soft tissues of the shoulder.