BodiTrak2 Pressure Mapping

Supporting your needs
The **BES** Promise

**Best in Class Solutions**

BES provides various **Education and Training** sessions aimed towards understanding postural management, clinical needs, and assessment tips and tricks, to ensure healthcare professionals get the best from our products.

**Superior Service**

BES promises **Superior Service** through fast turnaround of orders, highly trained office and sales personnel that can help you whenever needed, national coverage, and a dedicated engineering team.

Our team of Assistive Technology Specialists provide demonstrations and assessments to help therapists and carers find the right equipment for the user.

---

**‘Best in Class’ Solutions**

BES brings to the UK excellent quality equipment from around the world. We appreciate that every client is different, hence the need for equipment is not always the same. We do not treat equipment as commodities, but as solutions to improve the quality of life for users.

We aim to bring together **‘Best in Class’** products which not only promote postural support, but also provide comfort. We make sure that individuals get the right equipment to suit their needs.

---

**Get in touch with us:**  
Telephone: +44 (0) 1179 666 761  
Fax: +44 (0) 1179 637 373  
General Enquiries: info@beshealthcare.net  
Orders: orders@beshealthcare.net  
Web address: www.beshealthcare.net
Welcome to BES Healthcare Ltd’s BodiTrak2 Pressure Mapping Brochure

Incorrect posture and pressure injuries are of significant concern to clinicians and individuals, as they can have a damaging effect to quality of life, and can incur unnecessary costs.

In order to prescribe the most appropriate solutions, it is important that a healthcare professional is able to carry out a comprehensive assessment, and evaluate how various equipment impacts the client’s pressure distribution.

With more than 25 years of experience, it has been a key part of BES Healthcare Ltd’s mission to assist healthcare professionals with limiting the occurrence of pressure injuries by promoting best practice and providing world-class solutions.

To help achieve this goal, BES Healthcare presents the BodiTrak2 Pressure Mapping Systems.

The systems’ innovative technology records the distribution of pressure between an individual and their interface. This provides the healthcare professional with a visual overview of the impact of interventions, such as repositioning the client or utilising different support surfaces.

BodiTrak technology is relevant to all healthcare professionals who deal with pressure care and postural management from occupational therapists and tissue viability nurses, to mobility retailers and community nurses.

For more information about the BodiTrak2 Pressure Mapping Systems, please visit our website (www.beshealthcare.net), or contact our Customer Service team on 01179 666 761.

Our Customer Service team is always happy to help, should you need any additional guidance on a particular product. Simply send an email to info@beshealthcare.net or call 01179 666 761.
Why is Pressure Mapping Important?

Pressure Mapping Systems, combined with clinical judgment, can help inform healthcare professionals towards the appropriate interventions for individual clients.

Through highly sensitive sensors, a Pressure Mapping System can measure and display areas of high pressure, allowing the healthcare professional to make objective decisions on position and equipment provision.

Pressure mapping has proved effective in reducing the occurrence of pressure injuries in a number of reports including a study made by Siddiqui et al. concluding that **90% of healthcare professionals reported an improvement in detection of pressure injuries when using Pressure Mapping Systems**¹.

Additionally, a study by Allegretti et al. found that **a reduction of pressure injuries by 12%** in cases where clinical reasoning had been used in combination with pressure mapping².

---

**Pressure Distribution**
Pressure Mapping Systems visually display an individual's distribution of pressure when sitting or resting on a surface, whether it’s a seat or a bed.

**Risk of Shear Damage**
Pressure Mapping can indicate the risk of shear (which can cause tissue damage) by showing areas with a greater range of change in pressure between two points.

**Client Positioning Information**
Pressure Mapping Systems can assist healthcare professionals in making objective decisions based on data.

---


² Allegretti, A et al (n.d.) Pressure Ulcer Outcomes With and Without Use of Pressure Mapping. LDepartment of Rehabilitation Science and Technology and Department of Occupational Therapy, School of Health and Rehabilitation Sciences, University of Pittsburgh.
The Damaging Effects of Shear Strain

Pressure Mapping Systems monitor pressure distribution with the aim of preventing injuries and damage to the skin. However, shear strain can have a much more damaging effect to the deeper tissue of the skin.

Too much pressure over a prolonged period can be damaging, causing blood vessels to be occluded, and vertical distortion of tissues. The damaging effects are not immediate, and hence regular changes of posture are advocated to stop localised pressure build-up.

However, where there’s pressure, shear stress occurs which produces immediate and potentially more harmful deformation to both blood vessels and cell tissue. Thus, shear strain creates greater distortion which can have detrimental effects on the tissue of the skin.

This is because the distortion caused by shear forces affects the cell’s ability to control its contents: this ‘reshaping’ of the cell disrupts the active and passive transport of nutrients and waste products across the cell walls. As a result shear strain can lead to cell death skin tissue within 24 hours whereas pressure can take 5-6 days to kill skin tissue.

With the Gradient View on the BodiTrak2 software, one can assess areas that are at high risk of shear, illustrated by the rate of change in pressures between two points. This helps healthcare professionals make objective decisions based on the effects of shear and pressure in combination.

“Shear may be 10 times more destructive to the tissues than pressure.” (Fontaine et al. (1998))
Assessing with BodiTrak2

BodiTrak2 Pressure Mapping Systems are easy to use with plug and play setup, enabling simple and comprehensive client assessment and documentation. BodiTrak2’s innovative technology not only makes pressure mapping accessible and affordable, but also enables effortless, data-driven assessments.

- The BodiTrak2 Pressure Mapping Systems’ plug-and-play capabilities, such as the calibration and sensor information stored within the mat, makes them simple to use. They easily plug into a PC or laptop’s USB port for instant pressure imaging.

- The software enables customisation of parameters appropriate to the client e.g. client weight. BodiTrak2’s easy to read display helps interpret and analyse data which makes assessments objective and stress-free.

- It also allows comparison of various products, and highlights the impact of pressure and shear forces that could compromise tissue integrity.

- The BodiTrak2 mat is easy to clean and can be wiped down with an anti-bacterial agent.
BodiTrak2 Pressure Mapping Systems also serve as an educational tool for both Healthcare Professionals and their clients.

The instant visual feedback makes for a great tool for healthcare professionals to learn how interventions can improve pressure distribution and postural management.

From the client’s perspective, BodiTrak2 Pressure Mapping Systems’ visual data can illustrate how a change in intervention can impact clinical outcomes.

Training and Calibration

As part of the BodiTrak2 package, we offer training and demonstrations of the Pressure Mapping Systems so you know the ins and outs of the technology.

Additionally, our Assistive Technology Specialists can support your site with a calibration service to ensure that your system is always up-to-date and accurate, when monitoring.

Visual Recommendations to Client

The BodiTrak2 Pressure Mapping Systems allow healthcare professionals to share visual findings with the client to illustrate clinical recommendations. Teaching clients to recognise need for repositioning or change of surface enables them to be active participants in their care.

Continuous Education of Healthcare Professionals

The ability to record the impact of interventions on a client gives healthcare professionals an objective tool to identify the client’s requirements to make the appropriate decision for the client. This data can be saved easily onto client records, and be used as evidence of clinical assessment.
Features of the BodiTrak2 Systems

The BodiTrak2 System is available in three configurations: Lite, Pro, and the Bed Mat option. The three variations share similar features, but also have their own specialisations based on their own unique features. Each of these offerings are suited to different healthcare environments and individual assessment needs.

BodiTrak2 Lite

**Risk over Time**
Displays pressure loading over time to indicate areas where client may be a risk of pressure trauma.

**Compatible with Smartphone and Tablets**
Plug and play into tablets and Smart Phones, making the Lite a great mobile option.

**Instant Visual Feedback**
Displays snapshot of gradients in pressure, allowing for instant visual feedback.
### BodiTrak2 Pro

**Continuous Data Capture**
The Pro has the ability to record changes in pressures over a prolonged period of time, and save this data.

**Comparison Views**
Compare various pressure images to see effect of various interventions at the same time.

**Compatible with Multiple Mats**
Compatible with various mat options such as seat, torso, and back.

**Compatible with Microsoft Office**
Extract and save the recorded data into Microsoft Office formats (Word/Excel). Compatible with PC and laptop.

### BodiTrak2 Bed Mat

**Risk over Time**
Similar to Lite, the Bed Mat comes with a feature to monitor pressure over time for a client in bed.

**Turning Alarm**
It has a turning alarm that can be used as part of a turning regime to prevent pressure damage.

**Bed Exit Alarm**
Comes with a bed exit alarm that detects client’s movements.

**Tablet Compatible**
The bed system works on android tablets.
BodiTrak2 Lite

The BodiTrak2 Lite is designed for situations where the healthcare professional requires a system that can monitor the effects of pressure over time without requiring the ability to save larger sets of data. The system is compatible with Android and Smart Phones which increases the ability to transport the BodiTrak2 Lite between locations.

Android and Smart Phones compatibility makes BodiTrak2 Lite a mobile, easy to transport option.

Includes an algorithm based on the Reswick-Rogers curve and displays pressure loading on tissue over time. This draws attention to where the client may be at risk of a pressure trauma.

Instant visual feedback to assist with making the right interventions.

BodiTrak2’s Gradient View function indicates potential shear strain as a result of insufficient envelopment or off-loading.
BodiTrak2 Pro

BodiTrak2 Pro is designed for more intensive and complex rehabilitation settings and client needs. It includes the ability to capture snapshots, record data, and generate reports in an effective and timely manner. The system works on both PC and laptop.

**Powerful Data Collection**

The BodiTrak2 Pro allows the user to gather continuous data that is easy to store and share through Microsoft Office formats such as Word and Excel. Additionally, there is the option of collecting data from specific pressure areas if the need to analyse pressure distribution of a specific area arises.

**In-depth Scan Comparisons**

The Four comparative displays help illustrate the impact of pressure on a client when using different interventions. Healthcare professionals can use this visual tool to evaluate comparatively the most effective solution for the client.

**A Range of Mat Options**

The BodiTrak2 Pro comes in various seating options to suit individuals’ pressure assessment needs, including seat, torso, back, and bed mats. These mats can also be used in conjunction with each other when measuring pressure distribution of a client’s torso and seat simultaneously.
BodiTrak2 Bed System

**Bed Exit Alarm and Time-to-Turn Feature**

The BodiTrak2 Bed System has a Bed Exit Alarm built into the Smart Fabric Bed Sensor detecting the client’s movements. The sensor also allows for a Time-to-Turn indicator that can be customised to the individual client. The sensor alerts caregivers as part of their turning regime to prevent pressure damage.

BodiTrak2 Bed System is designed to address the two major harms: pressure injuries and falls. This is due to its easy-to-use interface and Bed Exit Alarm.

The system incorporates an algorithm to monitor patient movement in areas outside a defined safe zone indicating an intent to exit the bed. The Bed Exits feature can then be set and adjusted to the individual client’s body type and movement.

Additionally, the bed mat is made from an elastic material that preserves the immersion properties of the support surface for the most accurate reading. These features make the **BodiTrak2 Bed System** a stress-free solution that easily integrates into the required healthcare setting.
## BodiTrak2 Order Codes

### BodiTrak2 Pressure Mapping Systems*

<table>
<thead>
<tr>
<th>BodiTrak2 System</th>
<th>Order Code</th>
<th>Sensing Cells (Rows x Columns in cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Standard Seat/Back Sensor</td>
<td>BT2-1616-200</td>
<td>16x16</td>
</tr>
<tr>
<td>Pro Standard Seat &amp; Back Sensor</td>
<td>BT2-1616-200x2</td>
<td>16x16</td>
</tr>
<tr>
<td>Lite Standard Seat/Back Sensor</td>
<td>BT2-1616-203</td>
<td>16x16</td>
</tr>
<tr>
<td>Standard Torso Sensor</td>
<td>BT2-2732-100</td>
<td>27x32</td>
</tr>
<tr>
<td>Standard Pro Bed Sensor</td>
<td>BT2-2764-100</td>
<td>27x64</td>
</tr>
<tr>
<td>Pro High Res Seat/Back Sensor</td>
<td>BT2-3232-200</td>
<td>32x32</td>
</tr>
<tr>
<td>Pro High Res Seat &amp; Back Sensor</td>
<td>BT2-3232-200x2</td>
<td>32x32</td>
</tr>
<tr>
<td>Lite High Res Seat/Back Sensor</td>
<td>BT2-3232-203</td>
<td>32x32</td>
</tr>
</tbody>
</table>

*BES offer more pressure mapping options such as Treadmill, Orthotest, Balance, Glove, and Equine. For more information email info@beshealthcare.net, or call 01179 666 761.

### Calibration Kits

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC16</td>
<td>Standard Small Calibration Jig (Seat)</td>
</tr>
<tr>
<td>ACC21</td>
<td>Medium Calibration Jig (Torso)</td>
</tr>
<tr>
<td>ACC19</td>
<td>Long Calibration Jig (Bed)</td>
</tr>
<tr>
<td>ACC1630</td>
<td>High Pressure Calibration Jig</td>
</tr>
<tr>
<td>ACC13</td>
<td>Auto Calibrator (Bed and Seat sensors)</td>
</tr>
</tbody>
</table>

BES Healthcare Ltd offers various training options, service and calibration packages, extended warranties, along with delivery and installation options.

For more information, please email info@beshealthcare.net, or call 01179 666 761.
BES Services

Assessments and Technical Support

BES’ Assistive Technology specialists can help with BodiTrak assessments and technical support. We also provide advice and recommendations on postural challenges and solutions, with the aim to ensure that those in need have the best setup to maximise function.

Training and Education

As part of our ethos, our aim is to provide information and training on best practice guidelines, and inform our customers of new innovations within the industry.

We offer BodiTrak training for healthcare professionals and retailers, along with educational days and training road shows across the UK and Ireland.

Seating Clinics, Product Demonstrations, and Business Cases

We can support you with all-day clinics while you assess for clients. Our team can also provide demos of our solutions, including the BodiTrak Pressure Mapping System, at your site. We can also support with writing business cases for assessment tools, such as the BodiTrak or i-Drive Assessment Kit.
More Assistive Technology Solutions from BES...

BES Healthcare Ltd offers a whole range of Assistive Technology Solutions including:

- Shear Comfort natural wool targeted pressure care
- Bodypoint wheelchair belts and harnesses
- Varilite wheelchair cushions and back supports
- Stealth secondary supports
- And more....

Our full range of products for adults can be found in our Assistive Technology Solutions Catalogue available from our website www.beshealthcare.net

For further information about our Assistive Technology range, contact BES Healthcare Ltd on 01179 666 761 or email info@beshealthcare.net