

## TREATMENT METHODS

**SpinaTrak®** You can perform force and position decompression treatments using Spin Trak robotic decompression device. Having a unique algorithm, it offers a sensitive and comfortable treatment opportunity.



Disc Herniation



Regression of Herniation after Decompression



Increasing the Disc's Nutrition

### Treatment with Force:

In this method, the device keeps applying traction up until the force you have set according to the treatment protocol. Less resistance is detected by the device's force sensor as the patient gets relaxed or the muscle spasms gets decreased during the treatment. In this case, the traction system keeps applying traction to the patient until the set force is reached. Thus, traction is applied to the patient with the same force throughout the treatment.

### Treatment with Position:

In this method, the device applies traction as limited by the pre-set distance and the system limits the traction force even if the resistance on the force sensor lessens. Traction is applied at the set distance throughout the treatment. Time is given for the muscles in spasm to relieve and the tissue lifting injury is prevented.

### Decompression Treatment Profiles:

In addition to the existing treatment protocols, Spina Trak makes it possible to perform the traction treatment with novel and different decompression profiles. You can easily perform a patient-specific treatment by Spina Trak. The static, intermittent and gradually released traction treatments that can be found in literature can be performed through the device. You can provide a comfortable, effective and efficient treatment to your patient with the pulse-decayed traction profile, developed exclusively for Spina Trak.

### Static Traction Profile:

In this profile, a static and continuous force is applied to the patient throughout the session. In addition to the mechanical impact of the traction, it is rather used to relieve the muscle spasms. Since the applied force is continuous, the traction forces are low.

### Intermittent Traction Profile:

In this profile, a static force is applied to the patient for a while and then this force is reduced to zero with a period of relaxation. This cycle is applied to the patient throughout the session.

### Pulse-Decayed Traction Profile:

In this profile, a treatment protocol unique to Spina Trak, traction is started to be applied softly and intensified until the set traction force is reached. After the traction force is applied for the set period, the force is reduced by half and the decompression treatment is performed for a given time with half force. This decompression profile is applied to the patient in a cycle. Such an application of traction alternating between the set traction force and half force increases the mobility between the vertebrae and creates a vacuum impact within the disc.

### Adjustable Traction Profile:

This option enables the healthcare professional to create a patient-specific treatment protocol with desired profiles and durations. Decompression and relaxation durations, force amounts and treatment profile type can be set through the interface.

## WHAT IS SpinaTrak® USED FOR ?

- Disc herniation
- Spinal root injuries
- Extrinsic and protective muscle spasm
- Intervertebral space narrowing
- Spondylolisthesis
- Joint hypomobility
- Degenerative articular disease
- Ligament injuries
- Discogenic pain
- Arthralgia



• **Force concentration** on the discs C3-C7 in the cervical region, L1-S1 in the lumbar region.



• **Manual positioning** according to human anatomy



• **Spasm prevention** in paravertebral muscles with **corset heating** system



• 3-dimensional **mobilization** treatment



• **Always safe** and comfortable treatment with 4-layered safety system



• Ability to create **personalized** treatment protocols

## Technical Specifications

Maximum Patient Weight	130 Kg
Maximum Cervical Decompression Force	350 N / 35 kg
Maximum Lumbar Decompression Force	1000 N / 100 kg
Maximum Bed Angle	85°
Cervical Level System	C3-C7
Lumbar Level System	L1-S1
Device Dimensions (In Vertical Position)	1950 x 850 x 2120 mm (L x W x H)
Required Room Height	min 2350 mm
System Weight	~ 400 kg
Network Connection	220 - 240 VAC 50/60 Hz
Panel PC	Medical Touchpad 10.4"
Treatment Safety	4-Level Safety System
Medical Device Standard	Class IIa -



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# SpinaTrak

## ROBOTIC SPINAL DECOMPRESSION DEVICE



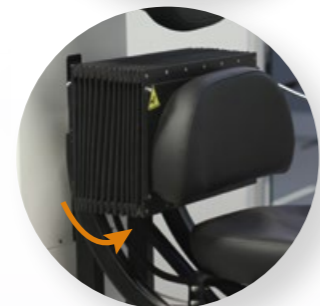
**Spina Trak** is a spinal decompression device used in the treatment of **cervical and lumbar disc herniation**. The unique robotic decompression treatment system is used to reduce and stop acute or chronic **neck and back pains** and treat spinal diseases including **disc herniation**.

The main objective of the system is separating the vertebrae and relieving the **internal pressure of the discs**.

Different from the single-axis traction systems, the matchless design of Spina Trak robotic spinal decompression device allows for decompression by **3-dimensional** patient positioning. This enables you to position all of the spine movements of your patient **in accordance with anatomy**. The patented positioning system of Spina Trak provides you with the opportunity to position your patient 3-dimensionally during decompression in accordance with the spinal anatomy.

Spinal positioning on a total of 11 axes in the cervical and lumbar regions can only be performed using Spina Trak. Thanks to the robotic decompression system and multi-axis positioning, intervertebral disc pressure is decreased 3-dimensionally.

Computer-controlled robotic decompression system of Spina Trak offers a **comfortable and safe** treatment for your



### Cervical Mobilization

Only Spina Trak offers you the opportunity to mobilize and position your patient on a total of 5 axes, including flexion/extension, rotation, lateral flexion, protraction and decompression in the cervical region. 3-dimensional positioning and mobilizing allow you to reach all of your patient's discs and provide an effective treatment. Anatomically compatible rotation centers provide a comfortable and right treatment for your patients.

### Lumbar Level System

The system sets the lumbar flexion angle and ensures that the decompression force is concentrated on the desired disc between the L1-S1 vertebrae.

### Lumbar Mobilization

Only Spina Trak offers you the opportunity to mobilize and position your patient on a total of 4 axes, including lateral flexion, rotation, hip flexion, and decompression in the lumbar region. You can mobilize your patient 3-dimensionally and in accordance with anatomy and reach their desired disc.



### Session Stop Button

Your patient can pause the treatment any time using the sensible and high-safety session stop button.



### Touch Screen Computer Console

Having a touch screen and a user-friendly interface, the device can be rapidly and efficiently controlled. The interface offers an easy implementation of treatment protocols and shorter session durations. Since the console is mobile, you can move it to any location you want around the device and easily control Spina Trak.



### Personalized Treatment Protocol

Using Spina Trak, you can create records for each patient. Patient's name, age and weight are recorded on the device. You can easily create personalized treatment protocols and track the treatment history through the interface.



### Corset Heating System

Optional thermal system on the corset prevents muscle spasms during decompression treatments.



### Automatic Locking System

One-button locking-unlocking system provides an easy use during mobilization and positioning. Lumbar rotation and hip flexion movements can be implemented through the automatic locking system without trouble.

