

**Spinal** Technology



**Custom Scoliosis Orthoses** Overview

**Custom Flex Foam® Spinal Orthoses** Overview



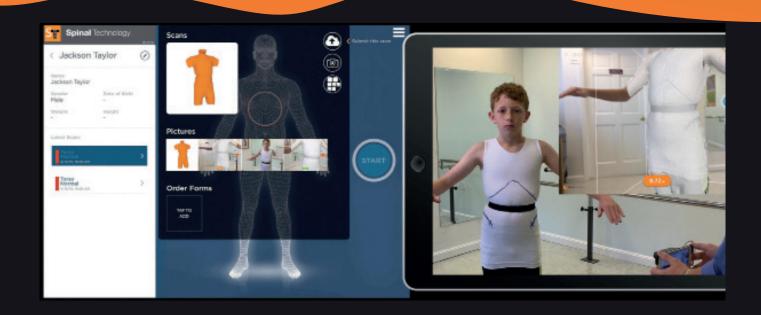


**Custom Spinal Orthoses** Overview

Specialists in Custom Scoliosis & Spinal Orthotic Fabrication



# Spinal Technology Offers an App for Practitioners



With this app, practitioners can take 3D scans, include images to denote anatomical landmarks, then write comments and instructions on the images.

The SpinalTech3D™ Scan app is designed to work seamlessly with an Apple iPad® and Structure Sensor

Our **SpinalTech3D™ Scan app** refines the process of ordering custom spinal orthoses from SpinalTechnology by electronically integrating scans, orthometry forms.

Powered by TechMed 3D software, our app combines all images and documentation into emailed directly to Spinal Technology.

When the file is received in-house, we use our proprietary software to modify the scan based on the patient's information and the brace design selected. The modified 3D model is fine-tuned and uploaded into one of our six carvers to produce a positive mold of the patient's torso: used to fabricate a precise custom orthosis.

#### **Key Advantages:**

- Cuts out the time and mess of casting
- Improves and streamlines the patients experience
- Creates precise models and measurements
- Eliminates the costs and time required for shipping casts
- EasvTo Use!!!
- •There is no cost for the SpinalTech3D ™ Scan app
- Available on the Apple iPad® App Store

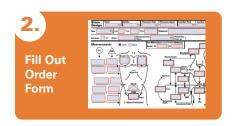




# Do you have our Scan App yet?

What are you waiting for? It's as easy as 1-2-3.







#### You do all this directly within the SpinalTech3D™ Scan app





#### SpinalTech3D™ Scan App

Download the SpinalTech3D™ Scan app (FREE) from Apple's iPad® App Store.



# Both the Structure Sensor (Mark II)

The Structure Sensor is the first 3D sensor (used to scan) for iPad®.



Scan QR code to visit our website and get your quick start guide and the app.



**Spinal** Technology

# **Custom Scoliosis Orthoses**

# Overview

# Providence Nocturnal Scoliosis Brace

#### **Product Overview**

The Providence Nocturnal Scoliosis® System has been successful in treating all curve types: lumbar, thoracic, double major, and thoracolumbar.





## Boston (Style) Scoliosis Brace

#### **Product Overview**

The Boston (Style) scoliosis orthosis is a TLSO designed to slow the progression of scoliosis in growing spines. The brace has been clinically proven to control curve progression in Lumbar, Thoracic and Thoracolumbar spinal curves. This orthosis is effective for treatment of Adolescent Idiopathic Scoliosis (AIS).





### SCT 3D Boston (Style) Scoliosis Brace

#### **Product Overview**

Our SCT 3D Boston (Style) orthosis is designed using CAD/CAM technology. This orthosis provides a brace design that corrects the spine based on three body planes, the Sagittal, Coronal and Transverse (SCT) and provides a precise combination of lateral and rotational forces that move the spine into a corrected position.





## SCT 3D Chêneau (Style) Scoliosis Brace

#### **Product Overview**

The SCT 3D Chêneau (Style) brace is a corrective TLSO uniquely constructed to bring the body and spine into the best possible postural and morphological 3D corrected alignment by using a combination of forces applied to the body surface by specifically designed pads, facilitated by expansion or relief spaces. The brace is open in front and can be considered rigid and dynamic at the same time.





## Kyphologic Brace

#### **Product Overview**

The Kyphologic style w/ Anterior opening & "Cow Horns" that attach laterally and allows for a corrective force at the apex of kyphosis. The brace is used to correct Kyphosis and stabilize adult patients.



Kyphosis Brace with Anterior Opening & Cow Horns



## Kyphosis Brace

#### **Product Overview**

In a healthy spine, its natural curve should be at an angle around 20-45 degrees. Those who have kyphosis, however, their abnormal curvature in their spine sits at an angle of over 50 degrees.



Low Profile with Custom Sternal Shield



# Custom Flex Foam® Spinal Orthoses Overview

#### TLSO Flex Foam® 1 - Bivalve

(Thoracic Lumbar Sacral Orthosis) Smooth Overlap

#### **Product Overview**

The anterior and posterior sections of the high profile TLSO Flex Foam 1 - Bivalve opening are connected by a set of three heavy-duty hook and loop straps on each side, allowing compression, expansion and adjustability, with good lateral control. The patented frame is lined with soft foam, available in several thicknesses, to maximize comfort. Multiple opening and frame designs are available to accommodate medical needs.





#### TLSO Flex Foam® 2 - Bivalve

(Thoracic Lumbar Sacral Orthosis) Smooth Overlap

#### **Product Overview**

The anterior and posterior sections of the high profile TLSO Flex Foam 2 - Bivalve opening are connected by a set of three heavy-duty hook and loop straps on each side, allowing compression, expansion and adjustability, with good lateral control. The patented design of the Flex Foam 2 sandwiches a plastic frame between a soft foam inner lining and a firm outer foam. Desired rigidity is achieved by fabricating the inner frame with optional plastic types and thicknesses. Multiple opening and frame designs are available to accommodate medical needs.











#### TLSO Flex Foam® 1

(Thoracic Lumbar Sacral Orthosis) Anterior Opening with Tongue

#### **Product Overview**

This particular TLSO Flex Foam® 1 presents a single opening with a foam tongue for comfort and ease of donning. This orthosis allows compression, expansion, adjustability and is easily trimmed. It's comprised of our patented foam and plastic frame structure with adjustable straps. Great comfort for all ages.





#### TLSO Flex Foam® 2

(Thoracic Lumbar Sacral Orthosis) Anterior Opening with Tongue

#### **Product Overview**

The Flex Foam® 2 TLSO orthosis has the plastic frame internally, within the foam, instead of externally. This orthosis design is fabricated with the frame sandwiched between a soft foam inner liner and firm foam outer liner. The inner frame can be fabricated with any desired plastic type and thickness for desired rigidity.







# Custom Flex Foam® Spinal Orthoses Overview

## Flex Foam<sup>®</sup> 1 - Frame Design Options



Standard Posterior Frame Cut-Out



Standard Anterior Frame Cut-Out



Custom trim available allowing for boney reliefs and access to necessary ports



Figure Eight Design allows posterior conversion to LSO



Small Abdominal cut-out allows anterior conversion to LSO

## Flex Foam® 1 - Overlap Options



Anterior into posterior trim foam



Anterior over posterior trim foam



Anterior into posterior overlapping foam



Open with tongues



Anterior over posterior foam overlapping foam





# **Product Options**

#### **Recommended Plastic**

Copolymer (CP) 3/32", 1/8" or 5/32" depending on patient size (Call for available color options)

#### **Available Plastics**

Polyethylene (PE) 3/32", 1/8", 5/32", 3/16" (Least Rigid) Modified Polyethylene (MPE) 1/8", 5/32", 3/16" (Semi Rigid) (if Transfer pattern is requested)

#### Standard Flex Foam® Liner

1/4" (soft) x 1/8" (firm)

#### **Other Liner Thickness Available**

3/16" (soft) x 1/8" (firm) 1/8" (Soft) x 1/8" (firm)

#### **Spinal Reliefs**

Surgical relief (wide and gradual) Spinous Process (narrow)

#### **Sternal Extensions**

Sternal Shield (axilla or shoulder straps)
Cow Horns C.A.S.H. Pad - Cruciform Anterior Spinal Hyperextension (articulating pectoral pads)

### **Loops & Chafes**

Plastic Loop and Chafe Extended Plastic Chafe\* Extended Dacron Chafe\*

#### **Fasteners**

Screws and Barrel Nuts Speedy Rivets Aluminum Rivets

## Other available options

Shoulder straps

\*Only available with bivalve design



# **Custom Spinal Orthoses**

# Overview

#### TLSO - Bivalve

(Thoracic Lumbar Sacral Orthosis) Smooth Overlap

#### **Product Overview**

The TLSO - Bivalve is a high profile orthosis that allows compression, expansion, and adjustability. This brace covers the entire torso and utilizes a set of three straps on both sides.





#### LSO - Bivalve

(Lumbar Sacral Orthosis) Smooth Overlap

#### **Product Overview**

The LSO with a bivalve opening allows for tightening on both sides, connecting the anterior and posterior. The low profile orthosis allows compression, expansion, adjustability and good lateral control.









#### **TLSO**

(Thoracic Lumbar Sacral Orthosis) Anterior Opening with Tongue

#### **Product Overview**

This TLSO utilizes a single anterior opening. One piece of plastic is measured to wrap around the patient and tighten in the front (anterior), using three straps. An additional piece of plastic (tongue) is placed behind the straps.





#### LSO

(Lumbar Sacral Orthosis) Anterior Opening with Tongue

#### **Product Overview**

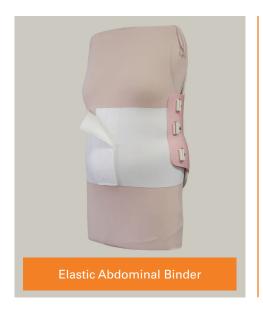
This LSO utilizes a single opening. One piece of plastic is measured to wrap around the patient and tighten in the front (anterior), using three straps. An additional piece of plastic (tongue) is placed behind the straps. This brace is a good solution for patients that need total circumferential control.







# **Accessories**













Send your orders to: orders@spinaltech.com



# **Product Options**

#### **Recommended Plastic**

Polyethylene (PE) 3/32", 1/8", 5/32", 3/16" (Least Rigid) Modified Polyethylene (MPE) 1/8", 5/32", 3/16" (Semi Rigid) (if Transfer pattern is requested)

#### **Available Plastics**

Copolymer (CP) 1/8" or 5/32" depending on patient size (Call for available color options)

#### **Standard Liner**

3/16" Aliplast

#### **Other Liner Thickness Available**

1/8", 1/4" Aliplast

Note: This orthosis can also be unlined.

### **Spinal Reliefs**

Surgical relief (wide and gradual) Spinous Process (narrow)

#### **Sternal Extensions**

Sternal Shield (axilla or shoulder straps)

Cow Horns C.A.S.H. Pad - Cruciform Anterior Spinal Hyperextension (articulating pectoral pads)

## **Loops & Chafes**

Plastic Loop and Chafe

Extended Plastic Chafe\*

**Extended Dacron Chafe\*** 

#### **Fasteners**

Screws and Barrel Nuts Speedy Rivets Aluminum Rivets

### Other available options

Shoulder straps Paraspinal reinforcements

\*Only available with bivalve design



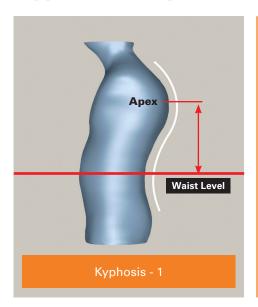
## **Abdominal Shape / Relief**

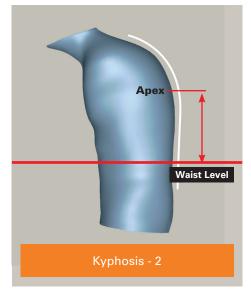


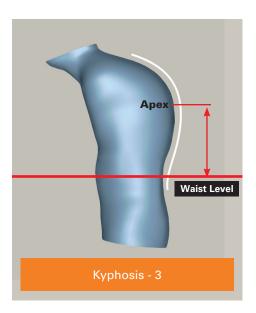




## **Kyphotic Shapes**







**Note:** When measuring kyphosis please provide a length from waist level to the apex of the kyphosis and the degree of kyphosis.



Introducing stWear™ Compliance Monitoring System



# What's New

- Sleek design
- Extended battery life
- Web based Clinician interface
- Share data between physicians, parents and orthotists
- Parent access through stWear<sup>™</sup> smartphone app

# Get the NEW stWear™ today!

The new and improved compliance monitor will replace our stTracker compliance system.

Please ask our Customer Service team to add a new compliance monitor to your next order.

The new stWear™ Compliance Monitoring System can be added to any custom orthotic devices and can be purchased with or without your custom scoliosis orthosis from Spinal Technology.

Once we set you up with a new account, it is easy to see your patient's data in between follow-up appointments.

Parents get their own login, and can help monitor their child's success through the app.





Download the stWear™ app today





At Spinal Technology, we believe that sharing our knowledge, absorbing that of others, and working together as a team, is the most effective way to advance the treatment and care for all patients.

Adolescent Idiopathic Scoliosis (AIS) is recognized as the most common type of spinal deformity and estimated to affect anywhere from 2% to 5% of all children. The course of treatment can vary depending on the severity and can include observation, physical therapy, orthotic bracing, surgery, or various combinations thereof. For most patients with scoliosis, this means that they will likely have interactions with multiple practitioners of varying expertise throughout their youth. Communication, continuity, and collaboration among all disciplines involved, including support of the patient's family, are paramount to successful outcomes and quality of life for each patient.

As part of the clinical team, we are driven to go beyond the physical products that we provide, and offer our expertise and support with all the resources we have. With a passion for treating scoliosis, we make it our priority to share our knowledge, teach what we know best, and create the tools and materials for improving patient care.

The introduction of varying brace designs can often present conflicting perspectives on the appropriateness of any particular method of treatment. As extensive research is presented on a broad scope of new concepts, the basic principles and understandings of effective bracing tend to become less clear. We believe a concise foundation of knowledge is critical to successful scoliosis management.

At Spinal Technology, we recognize the importance of continuous education and are pleased to provide informational material and support to those who share our commitment to advancing the care of patients challenged with scoliosis.

The Clinical Development & Education Team at Spinal Technology.



