

Making surgical excellence universally accessible

# Spine Series

Surgical Training Technologies for Spine Surgery



Interactive Brochure 2024

### Life-like as never before!

The modularity and compactness of this series enable advanced cadaver-free training in any setting, with optimized costs.



**Anterior CervicalBox** 

Multilevel Spondylotic Myelopathy and Radiculopathy | C3 - C7



**Posterior LumbarBox** 

7

11

Posterior Approaches to the Lumbar Spine | **L1 - S1** 



**Anterior-Lateral** LumbarBox

Anterior, oblique and lateral approaches to the Lumbar Spine L2-S1





**Posterior CervicalBox** 

Multilevel Posterior Cervical Compression | C2 - C6



9

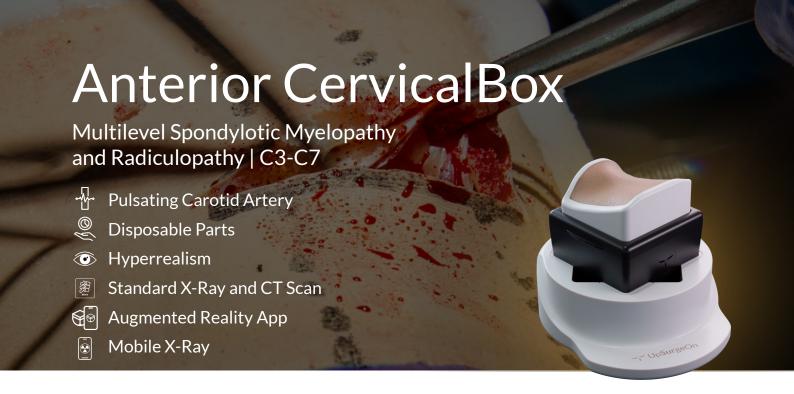
**ThoracolumbarBox** 

Posterior Approaches to the Thoracolumbar Spine | T8 - S1



**Endoscopic LumbarBox** 12

Endoscopic Approaches to the Lumbar Spine | L1 - S1



#### What you can do

Skin incision

Layer by layer soft tissue dissection

Platysma incision

Detection of carotid artery

Multilevel decompressions for spondylotic myelopathy

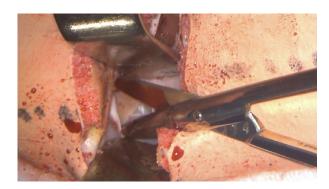
Multiple discectomies and corpectomies

Any kind of anterior cervical spine fixation

Fluoroscopy and CT scans

#### **Pulsating Carotid Artery**

Dissect, palpate, and observe a life-like pulsating carotid artery containing blood, being careful not to damage it.



Click here to download the **Datasheets** 

#### **Augmented Reality App**

Get the Neurosurgery App to explore cases, navigate 3D models, and utilize Augmented Reality on the Box to strategize your procedure.





#### **Standard Imaging**

Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants.

#### Mobile X-Ray

For the first time, surgical fluoroscopy is accessible through a user-friendly App\*, marking a groundbreaking shift in training and courses.

Download the App

Use of the tools integrated with the simulator.



\*Attention: Mobile X-Ray module works on Apple Devices only.



Designed to specifically mimic the properties of human tissues, such as softness, elasticity, and texture.



Box Reusable



Spine Level



Skin Level



### Composition of Anterior CervicalBox

#### Skin Level | Disposable

Bleeding skin and subcutaneous tissue Platysma Connective tissues Sternocleidomastoid muscle Trachea and esophagus (medial mass) Pulsating Carotid Artery



Prevertebral fascia
Paravertebral muscles
Vertebral bodies and discs from C3 to C7
Spinal cord
Peridural fat







# **Posterior CervicalBox**

Multilevel Posterior Cervical Compression | C2-C6



Disposable Parts



Hyperrealism



Mobile X-Ray



Standard X-Ray and CT Scan



Standard Navigation

#### What you can do

Multilevel decompressions for spondylotic myelopathy

Laminectomies

Flavectomies

Laminoplasty

Any kind of posterior cervical spine fixation

Fluoroscopy and CT scans



Click here to download the **Datasheets** 

#### Navigation\*

Upload the CT scan on the navigator and start navigating the Box.



\*Contact us at support@upsurgeon.com to check the compatibility of your Navigation technology.

#### **Standard Imaging**

Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants.

#### Mobile X-Ray

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Box Reusable



Spine Level



Skin Level



### Composition of Posterior CervicalBox

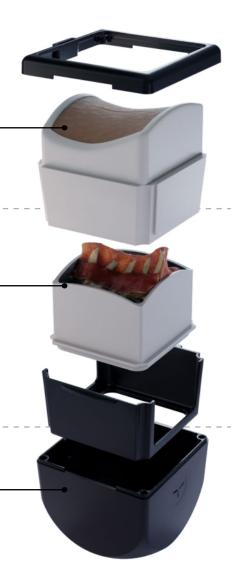
#### **Skin Level** | Reusable

Dissected Skin and subcutaneous tissue Dissected paravertebral muscles

#### **Spine Level** | Disposable

Ligaments Vertebras from C2 to C6 Spinal cord Peridural fat Vertebral arteries

#### **Box** | Reusable



# Posterior LumbarBox

1 Central Herniation

1 Canal Stenosis

#### 5 Operable Levels | L1-S1

- 3 Paramedian Herniations
- 2 Foraminal Herniations
- 2 Extraforaminal Herniations



Disposable Parts



Hyperrealism



Mobile X-Ray



Standard X-Ray and CT Scan



Standard Navigation

#### What you can do

Laminectomies

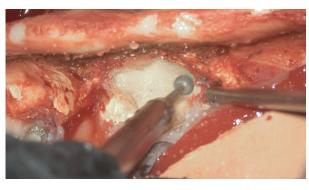
Flavectomies

Discectomies

Corpectomies

Any kind of posterior lumbar spine fixation

Fluoroscopy and CT scans





Click here to download the **Datasheets** 

#### Navigation\*

Upload the CT scan on the navigator and start navigating the Box.



\*Contact us to check the compatibility of your Navigation technology.

#### **Standard Imaging**

Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants.

#### Mobile X-Ray

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Designed to specifically mimic the properties of human tissues, such as softness, elasticity, and texture.





Open and Minimally Invasive Skin Level



#### Composition of Posterior LumbarBox

#### Skin Level | Reusable

Dissected Skin and subcutaneous tissue (Open & MIS Skin) Dissected paravertebral muscles



#### **Spine Level** | Disposable

- L1-2 Left | Paramedian Herniation
- L1-2 Right | Extraforaminal Herniation
- L2-3 | Central Herniation
- L3-4 Left | Foraminal Herniation
- L3-4 Right | Paramedian Herniation
- L4-5 Right | Extraforaminal Herniation
- L4-5 | Canal Stenosis
- L5-S1 Left | Foraminal Herniation
- L5-S1 Right | Paramedian Herniation

#### Base | Reusable





## **ThoracolumbarBox**

10 operable levels | T8-S1

- Disposable Parts
- Hyperrealistic
- Mobile X-Ray
- Standard X-Ray and CT Scan
  - 🗡 Standard Navigation



Posterior decompression and fixation of the lower thoracic and lumbosacral segments

**PLIF** (Posterior Lumbar Interbody Fusion)

**TLIF** (Transforaminal Lateral Interbody Fusion)

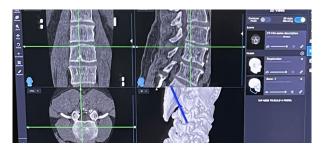
**Open** and **MIS** Approaches (using open Reusable Skin Level and MIS Disposable Skin Level, respectively)



Click here to download the **Datasheets** 

#### Navigation\*

Upload the CT scan on the navigator and start navigating the Box.



\*Contact us at <a href="mailto:support@upsurgeon.com">support@upsurgeon.com</a> to check the compatibility of your Navigation technology.

#### **Standard Imaging**

Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants.

#### Mobile X-Ray

For the first time, surgical fluoroscopy is accessible through a user-friendly App\*, marking a groundbreaking shift in training and courses.

**Download the App** 

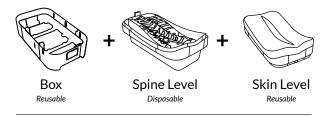
Use of the tools integrated with the simulator.



\*Attention: Mobile X-Ray module works on Apple Devices only.

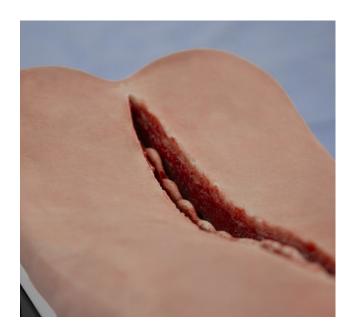


Designed to specifically mimic the properties of human tissues, such as softness, elasticity, and texture.



Open and Minimally Invasive Skin Level





# Composition of ThoracolumbarBox

#### **Skin Level** | Reusable/Disposable

Reusable: Open Skin (Dissected Skin and subcutaneous tissue ) Disposable: Closed Skin - MIS (Minimally invasive surgery)



#### **Spine Level** | Disposable

Vertebras from T8 to S1 Ligaments Cauda equina and lumbar nerve roots Peridural fat Lumbar discs with herniations



#### Base | Reusable







Multilevel Discopathy | L2-S1



☼⇔ Dual Surgical Position



Standard X-Ray and CT Scan



Mobile X-Ray

The simulator is designed to simulate both supine and lateral positions, facilitating the simulation of all oblique and lateral anterior approaches to the lumbosacral spine.

#### What you can do

ALIF (Anterior Lumbar Interbody Fusion)

OLIF (Oblique Lumbar Interbody Fusion)

XLIF (Extreme Lumbar Interbody Fusion, aka LLIF, Lateral Lumbar Interbody Fusion)

#### **Dual Surgical Position**







Lateral



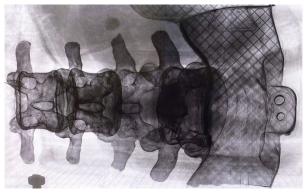


Click here to download the **Datasheets** 

#### **Standard Imaging**

Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants.





#### **Mobile X-Ray**

For the first time, surgical fluoroscopy is accessible through a user-friendly App\*, marking a groundbreaking shift in training and courses.



Use of the tools integrated with the simulator.

\*Attention: Mobile X-Ray module works on Apple Devices only.





**NEW** 

# Endoscopic LumbarBox

#### 10 Operable Levels | L1-S1 Left/Right

- 3 Paramedian Herniations
- 2 Foraminal Herniations
- 2 Extraforaminal Herniations
- 1 Central Herniation
- 1 Canal Stenosis



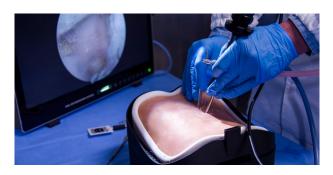
- Disposable Parts
- Hyperrealistic
- © Smart Water Management
- Mobile X-Ray
- Standard X-Ray and CT Scan\*

#### What you can do

**PELD** (Percutaneous Endoscopic Lumbar Discectomy)

**TELD** (Transforaminal Endoscopic Lumbar Discectomy)

Monoportal and biportal procedures



#### **Smart Water Management**

The simulator is equipped with an internal water drainage and outflow system, facilitating the management of high endoscopic flows anywhere and preventing any leakage during surgical procedures.



Click here to download the **Datasheets** 

#### Mobile X-Ray

For the first time, surgical fluoroscopy is accessible through a user-friendly App\*, marking a groundbreaking shift in training and courses.

#### Download the App

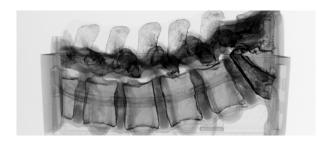
Use of the tools integrated with the simulator.



\*Attention: Mobile X-Ray module works on Apple Devices only.

#### Standard Imaging\*

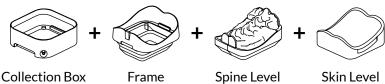
Scan the box with X-Ray and CT to verify the level and visualize the positioning of the fixation implants. \*Feature available upon request.





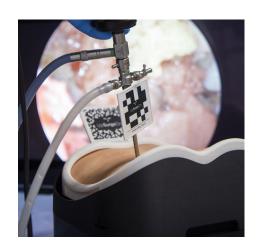
Reusable

Designed to specifically mimic the properties of human tissues, such as softness, elasticity, and texture.



Disposable





### **Composition of Endoscopic LumbarBox**

#### Skin Level | Disposable

The most durable Skin ever Reusable multiple times

Reusable

#### **Spine Level** | Disposable

- L1-2 Left | Paramedian Herniation
- L1-2 Right | Extraforaminal Herniation
- L2-3 | Central Herniation
- L3-4 Left | Foraminal Herniation
- L3-4 Right | Paramedian Herniation
- L4-5 Right | Extraforaminal Herniation
- L4-5 | Canal Stenosis
- L5-S1 Left | Foraminal Herniation
- L5-S1 Right | Paramedian Herniation

#### Frame | Reusable

The frame with the drainage grid for the Water Management System

#### **Collection Base** | Reusable

Water collection base











# Contact

For direct purchase or if you need assistance in setting up your Lab or organizing a course, feel free to contact us for a tailored quotation.

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