

# SBRT Patient Positioning + Immobilization Solutions

for improved patient outcomes + clinical efficiencies

 **Body Pro-Lok™**



**CIVCO®**  
Radiotherapy  
a better way

# Body Pro-Lok™: Customizable, Efficient, Reproducible

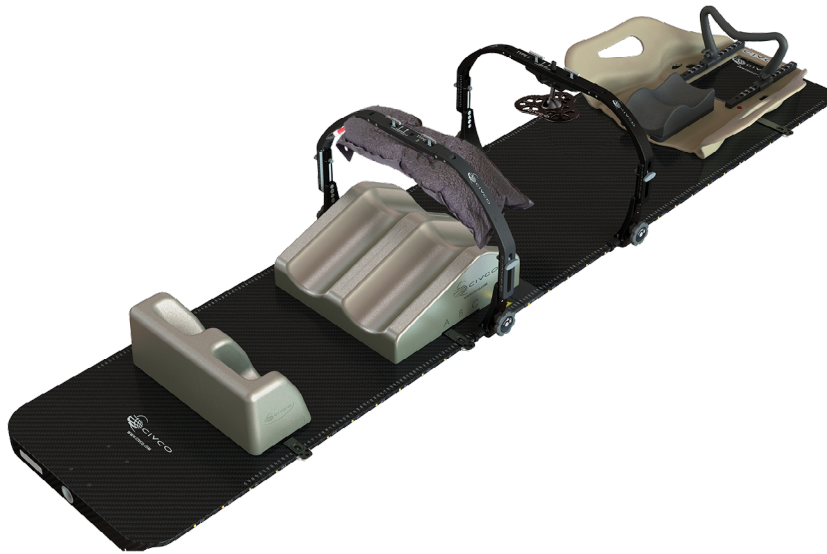
The Body Pro-Lok System provides an easy-to-use modular system for complex SBRT patient setups. These modular components are indexable to allow for same setup day to day, including bridges, respiratory plate and respiratory belt options to help control patient breathing.

## Customizable & Efficient

- Provides total body immobilization for hypo-fractionation treatments
- Kevlar Platform provides seamless setup of patient from MR imaging/simulation to the Linac unit
- Customized setups meet the patient's needs, including two options for reducing respiratory motion

## Reproducible

- Components are indexable, allowing you to reproduce the same setup from day to day
- Immobilization above and below the patient are reproducible following published guidelines
- Setup sheet simplifies daily record keeping



## Support for SBRT & Body Pro-Lok

Fifty percent of lung tumors move >5 mm during treatment and unfixed tumors in the lower lobe can easily move >10 mm. This motion is not one-dimensional.<sup>1</sup>

"4DCT generated target MIP images may not adequately capture the entire target motion span, which can result in dosimetric inaccuracy in SBRT lung treatments...Targeting is more accurate when abdominal compression is used to reduce motion, compared with even sophisticated free breathing approaches."<sup>2</sup>

1 <http://www.ncbi.nlm.nih.gov/pubmed/14752729>

2 Huang L, Park K, Boike T, Lee P, Papiez L, Solberg T, Ding C, Timmerman RD. "A Study on the Dosimetric Accuracy of Treatment Planning for Stereotactic Body Radiation Therapy of Lung cancer using Average and Maximum Intensity Projection Images." Radiotherapy and Oncology: Journal of the European Society for Therapeutic Radiology and Oncology. 2010 April 27.

# Respiratory Restriction

## Respiratory Plate & Respiratory Belt

- Respiratory Plates place pressure at the level of the diaphragm to assist in restricting respiratory movement.
- Respiratory Belts provide pneumatic compression and immobilization to the abdominal region for SBRT treatments.



## Wide Respiratory Plate with ComfortCare™ Cushion

- Wide Plate helps diffuse pressure across the abdominal region resulting in a more comfortable compression for the patient.
- ComfortCare Cushions, featuring innovative and patented technology by Pearl Technology AG, provide a new dimension of customized comfort at a reproducible pressure level.



## Body Pro-Lok Bridges

- Three bridge options accommodate different patient sizes and provide immobilization from above.



High precision radiotherapy with IMRT and SBRT are becoming standard of practice and require reliable and reproducible immobilization devices. The new Body Pro-Lok from CIVCO fulfills that need with a very ergonomically designed solution. We have been using it in our practice, especially with SBRT treatments, and found it to be easy to use while providing firm immobilization and ease of transfer of patients from the CT to the linac unit.

**Nikos Papanikolaou, Ph. D., The University of Texas Health Science Center, San Antonio, TX**



Standard Respiratory Plate



Respiratory Belt



Wide Respiratory Plate with ComfortCare Cushion (Shown with ONEBridge™)

# Body Pro-Lok™ on Universal Couchtop™

## Seamless Integration

- Body Pro-Lok positioning devices natively connect to CIVCO's Universal Couchtop, allowing customized setups with bridges that secure directly to couchtop.
- CIVCO's Universal Couchtop is available for Linac and CT, providing an environment in simulation that is reproducible and dosimetrically matched in treatment.

## No Dosimetric Compromises

- CIVCO's Universal Couchtop is a strong, lightweight couchtop that offers DoseMatch™ Technology which reduces your chance of setup errors by creating safe and efficient treatment planning and imaging.
- Seven extensions, all Body Pro-Lok enabled, are available to treat without using dose-attenuating overlays or support rails.



 **Universal Couchtop™**  
Long Extension





# MR Compatibility

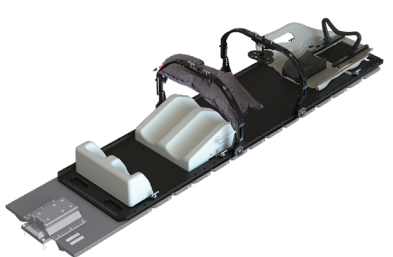
The Kevlar Platform provides an MR Safe base for Body Pro-Lok and many accessories. Always refer to product labeling to identify whether a device is MR Safe or MR Conditional.

## Kevlar Platform

- Provides seamless setup of patient from imaging/simulation to the Linac unit
- Compatible with existing CIVCO positioning equipment via standard two-pin (Carbon Fiber) and three-pin (Kevlar) indexing
- Provides low attenuation with homogeneous design for planning consistency



## Carbon Fiber Platform Option (not MR Compatible)



See CIVCO's **MR Positioning Solutions** brochure for additional information on the MRSeries line

### Carbon Fiber & Kevlar Platform Packages

	Lite	Ultra-Lite
Platform (Carbon Fiber or Kevlar)	Qty 1	Qty 1
Type 1B Bridge	2	1
Type 2 Bridge	2	1
Type 3 Bridge	1	-
Standard Respiratory Plate	-	1
Respiratory Belt	-	1
T-Pin Lok-Bar	4	4
Clam-Lok Cushion	1	2
Kneefix™ 3 Cushion	-	1
<b>Carbon Fiber</b>	<b>MTSBRT001L</b>	<b>MTSBRT320</b>
<b>Kevlar</b>	<b>-</b>	<b>MTSBRT420K</b>

For a full list of compatible accessories, see CIVCO's **Solutions Guide** catalog or visit [www.CivcoRT.com](http://www.CivcoRT.com)!

# Additional Body Pro-Lok Integration

Additional solutions are available to accommodate the use of Body Pro-Lok accessories when Universal Couchtop™ is not available and avoidance of an overlay or platform is preferred.

## Rails-Only for 53 cm Varian Exact®

- Provides full compatibility of Body Pro-Lok Bridges and accessories
- Integrated Lok-Bars™ provide additional stability
- Rails-Only T-Pin Lok-Bars provide compatibility with two-pin indexable products
- Exact indexing version features toggle and clamp design providing secure attachment

### Accessory Packages

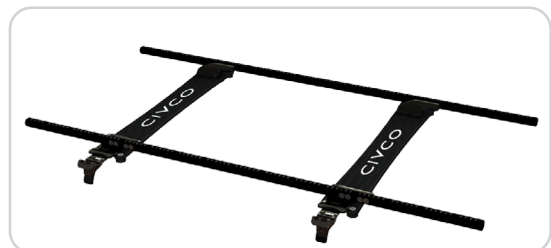
	Respiratory Restriction
Type 1B Bridge	Qty 1
Type 2 Bridge	1
Type 3 Bridge	-
Standard Respiratory Plate	1
Respiratory Belt	1
Forehead Restraint	-
Shoulder Restraint Bridge 2	-
Patient Handle	-
Patient Handle (mirror)	-
Clam-Lok™ Cushion	-
	<b>MTSBRT350</b>



Rails-Only patient setup




Rails-Only with Bridge and Respiratory Plate



Rails-Only

### Rails-Only Systems

MTSBRT060 53 cm – Varian Exact  MRSeries™

# System Customization

## Body Pro-Lok™ Bridges

Three bridge options accommodate different patient sizes and provide immobilization from above.



## Wide Respiratory Plate with ComfortCare™ Cushion

Helps diffuse pressure across the abdominal region, resulting in a more comfortable compression for the patient.



## Clam-Lok™ Cushion

Attaches to the bridge and forms to comfortably enhance immobilization from above.



## Carbon Fiber Platform

Provides seamless setup of the patient from imaging/simulation to the Linac unit.



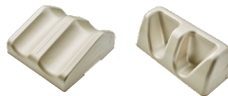
## Monarch™ Overhead Arm Positioner

Dual function hand grips allow for natural flexion of the patient's wrists while providing increased positioning options for the clinician.



## Kneefix™ 3 & Feetfix™ 3 Cushions

Contributes to better stability and reproducibility in the supine position.



## Forehead Restraint

Attaches to the bridge and provides a padded restraint mechanism for the head.



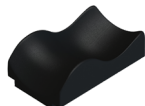
## Storage

Two storage options, a cart and a wall mounted unit, are available.



## Headrests

Provide enhanced repositioning, accuracy and patient comfort.



## Respiratory Belt

Provides pneumatic compression and immobilization to the abdominal region.



## Standard Respiratory Plate

Places pressure at the level of the diaphragm to assist in restricting respiratory movement.



## Kevlar Platform

Provides seamless setup of the patient from imaging/simulation to the Linac unit.



## T-Shape Vac-Lok™

Provides arms-up positioning while cradling the torso region. May be used with the Monarch Overhead Arm Positioner or a Wing Board™.



## Patient Handles

Provide a stable place for immobilized patients to place their hands.



## Lok-Bars

Lok-Bars allow indexing of positioning devices to the couchtop or platforms.



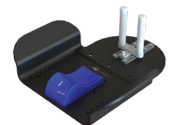
## Shoulder Restraint Bridge 2

Provides padded cups to aid in comfortably immobilizing the shoulders.



## Extended Wingboard

Can be used with a T- or U-Grip handle and is indexable for enhanced reproducibility from imaging through treatment.



## Adapters

Allows Body Pro-Lok™ Bridges and Respiratory Belt to connect directly to the Universal Couchtop™.



For a full list of compatible accessories, see CIVCO's Solutions Guide catalog or visit [www.CivcoRT.com](http://www.CivcoRT.com)!



# CIVCO

Radiotherapy



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