



Improving Care. Improving Business.

Noble Hinge™ Technology

CHANGING THE FOUNDATION OF SPINAL BRACING

Noble Hinge™ Technology: Simplifying the process

Noble Hinge™ Technology (NHT) is a unique and innovative combination of high quality, lightweight hardware built into a flexible panel. This creates a formable frame that can capture the unique shape of an individual's anatomy and, when locked into place, creates a rigid foundation of support.

NHT is the first and only spinal technology that allows you to fit a brace and adjust the curvature while on the patient. Heat guns, bending irons, and CAD/CAM models are not needed. NHT allows you to get a patient specific fit in less time and the patient gets their brace the same day it is fitted. NHT also provides the ability to make progressive adjustments as the patient's needs change.

Every patient has a unique shape and situation. **NHT gives the clinician a prefabricated brace that can be adjusted on the spot specifically for their patient.**

Clinical Advantage: NHT braces use a posterior approach to spinal alignment. This allows precise gentle reintroduction and support of the lumbar curve helping to reduce the thoracic deformity and unload the anterior column. This is beneficial for the treatment of vertebral compression fractures, disc pathologies, as well as other indications where extension is the recommended mechanism of action. Anterior approach devices often create uncomfortable pressure across the chest and abdominal area, while also creating shear force, which makes these devices less effective and reduces patient compliance. NHT was designed to provide a better, more comfortable fit, resulting in a better patient experience.

All spine braces are NOT created equal. DeRoyal brings you innovative technology that changes the foundation of spinal bracing. *It is unlike anything you have used before.*

- 1 Apply the **Orthosis**
- 2 Position the **Patient**
- 3 **Lock** into place



NOBLE HINGE™ TECHNOLOGY



OSTEOPOROSIS SPINAL ORTHOSIS

The DeRoyal® OSO

(Osteoporosis Spinal Orthosis) was designed as an extension orthosis most often used in cases of osteoporosis involved vertebral compression fractures. However, the low-profile design and NHT make it extremely versatile across multiple indications that require sagittal control. The OSO was designed to fit close to the body and give the patient the support they need without interfering with their daily activities. The DeRoyal OSO was designed with compliance in mind.

More Comfort

More Support

More Results



PRODUCT INFORMATION				
SIZE	WAIST	SHORT < 5'7"	REGULAR 5'5" - 6'1"	TALL > 6'
SMALL	26"-34"	OPB3333-S	OPB3333-R	OPB3333-T
MEDIUM	34"-41"	OPB3433-S	OPB3433-R	OPB3433-T
LARGE	41"-48"	OPB3533-S	OPB3533-R	OPB3533-T



Noble Hinge™ Technology contours to patient anatomy without sacrificing rigid support

FEATURES & BENEFITS

- A Patent pending Noble Hinge™ Technology** for patient specific fit, rigid support and progressive adjustment.
- B Patented dual dynamic closures** allow infinite adjustment and maximum compression.
- C Additional flexible posterior panel** extends from the sacrococcygeal junction to the scapular spine, providing additional support and comfort.
- D Padded shoulder straps** can be easily adjusted by the patient for better comfort and compliance in one of two configurations.
- E Constructed of a hook receivable material** with soft, breathable liner that provides a cooler, lighter fit.



INDICATIONS

- Osteoporosis
- Acute and Chronic Pain due to Osteoporosis
- Hyperkyphosis
- Compression Fractures
- Pain relieved by Thoracic Extension
- Spinal Stenosis
- Post-operative Support
- Vertebral Collapse

DeRoyal® MAXAlign®+

Providing
MAXimum
protection, comfort
and adjustability



FEATURES & BENEFITS

- A Patent pending Noble Hinge™ Technology** for patient specific fit, rigid support and progressive adjustment.
- B Laminate material** is lightweight, provides a soft inner liner and can be customized to achieve an intimate fit.
- C Four panel design** helps control pelvic rotation and lumbar flexion – the most destructive motions in the lower spine.
- D Lateral supports** help control lateral bending and axial rotation.
- E Adjustable sternal pad** with Noble Hinge™ Technology and quick height adjustment.
- F Posterior opening** allows for post-surgical spine relief.

Design is significantly lighter in weight compared to other offerings, increasing patient comfort and compliance

INDICATIONS

- Post-operative Thoracic/Lumbar Fusion
- Laminectomy or Discectomy
- Compression Fractures
- Degenerative Disc Disease
- Osteoporosis
- Facet Syndrome

Designed to address the needs of most T6-L5 pathologies

SIZING INFORMATION

		TAPERED		NON-TAPERED		
		NEUTRAL	PENDULOUS	NEUTRAL	PENDULOUS	
SMALL	Xyphoid	28"-32"	29"-33"	Xyphoid	36"-40"	37"-41"
	Waist	25"-30"	29"-34"	Waist	31"-36"	35"-40"
	Trochanter	34"-38"	35"-39"	Trochanter	36"-40"	37"-41"
MEDIUM	Xyphoid	32"-36"	34"-38"	Xyphoid	40"-44"	41"-46"
	Waist	29"-34"	33"-38"	Waist	35"-40"	39"-44"
	Trochanter	38"-42"	39"-43"	Trochanter	40"-44"	41"-45"
LARGE	Xyphoid	35"-39"	37"-41"	Xyphoid	43"-47"	45"-49"
	Waist	33"-38"	37"-43"	Waist	38"-44"	43"-49"
	Trochanter	42"-46"	43"-48"	Trochanter	42"-46"	44"-48"
X-LARGE	Xyphoid	39"-43"	41"-45"	Xyphoid	47"-51"	49"-53"
	Waist	37"-43"	42"-48"	Waist	42"-48"	47"-53"
	Trochanter	45"-49"	47"-52"	Trochanter	45"-49"	47"-51"

THORACIC LUMBAR SACRAL ORTHOSIS

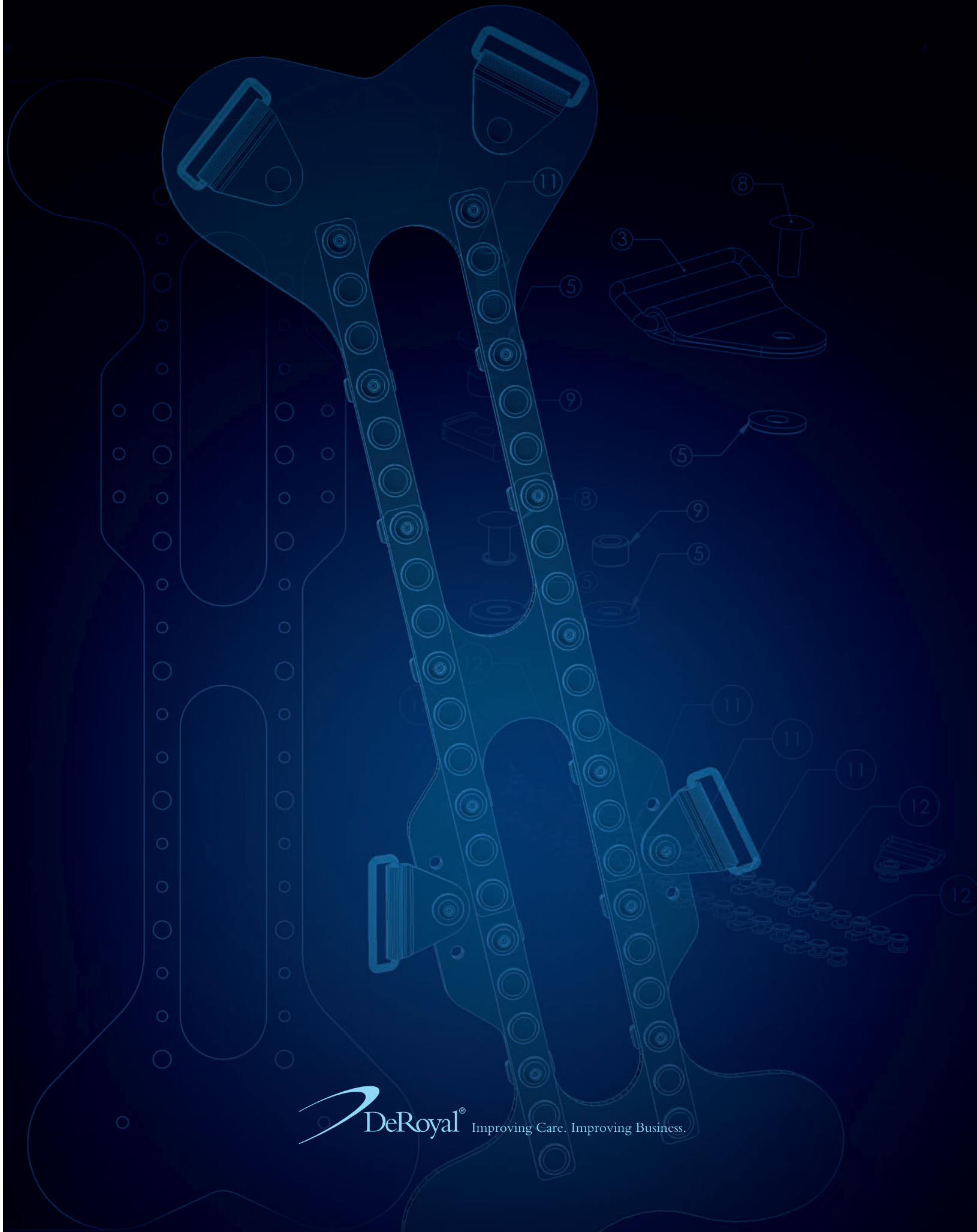
Superior Adjustability.

Using both NHT and innovative materials, the MAXAlign®+ TLSO delivers patient specific support that is both comfortable and effective. The four panel design coupled with the laminate material allows easy adjustment for the customized fit you desire for your patients.



PRODUCT INFORMATION

SIZE	TAPERED	PENDULOUS TAPERED	NON-TAPERED	PENDULOUS NON-TAPERED
SMALL	MT2333	MTP2333	MT1333	MTP1333
MEDIUM	MT2433	MTP2433	MT1433	MTP1433
LARGE	MT2533	MTP2533	MT1533	MTP1533
X-LARGE	MT2633	MTP2633	MT1633	MTP1633




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