

# Custom-fabricated SpryStep<sup>®</sup> Knee Orthosis Range

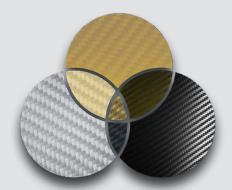
**SpryStep**® Ligament

Ultra light-weight composite construction for reliable strength and performance.

# SpryStep<sup>®</sup> KO

#### Durable, versatile, and lightweight

Available for ligament, OA, and neurological deficits. The SpryStep® KO range combines historical and proven Thuasne® technology with industry-renowned SpryStep® composite technology.



Proprietary Composite Materials

#### SpryStep® Technology

A unique combination of composite materials that allows:

**Resistance:** Carbon fibers to give the stiffness<sup>(1)</sup> and aramid fibers to resist to impact and abrasion<sup>(2)</sup>.

**Lightweight:** One of the lightest custom knee braces on the market.

Low profile: Ultra-low profile and sleek design.

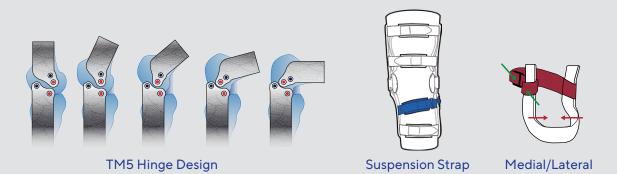
**Truly custom:** Skin-to-shell contact surface without pressure point following anatomical trimlines.

#### Thuasne® Design

**TM5 Hinge:** Provides ligament protection and prevents tibial instabilities<sup>(3)(4)</sup>. Roll-and-Glide movement replicates the natural movement of the knee<sup>(4)</sup>, no piston affect = less migration<sup>(3)</sup>.

**5-bars and single pivot hinges:** Available for heavy duty or major ligament instabilities or laxities instabilities.

**Synergistic Suspension Strap:** Better comfort<sup>(3)</sup> as the brace stays in place on the leg. **Anterior-posterior** (AP) + **medial/lateral** (ML) tightening (front/back and left/right). Asymmetrical attachment on the narrowest aspect of the leg.



(1) A comparison of mechanical properties between different percentage layups of a single-style carbon fibre ankle foot orthosis - Sheehan & Figgins (2) Study on Aramid fibre and comparison with other composite materials - IJIRST 2014(3) Internal marking data.(4) A2S biomechanical study « Biomechanical study of the stride during use of different braces » 2020, study carried out on the Rebel® Standard. (5) Thoumie, Philippe, Marc Marty, Bernard Avouac, Adeline Pallez, Arnaud Vaumousse, Linh Pham Thi Pipet, André Monroche, et al. 2018. "Effect of Unloading Brace Treatment on Pain and Function in Patients with Symptomatic Knee Osteoarthritis: The ROTOR Randomized Clinical Trial." Scientific Reports 8 (1): 10519.

## Ligament Bracing

# **SpryStep**<sup>®</sup> Ligament

#### PDAC Approved L1846, L2755, L2755

**Recommended for:** Conservative treatment of knee ligament injuries and/or ruptures (cruciate and/or lateral ligaments). Joint instability/laxity (including for knee osteoarthritis).

Available with multiple options for shell configuration and length, as well as the choice of 3 levels of stiffness/rigidity, the SpryStep<sup>®</sup> Ligament is the perfect choice for a variety of patients and activity levels.

#### **Features**

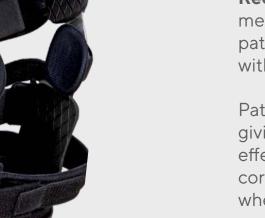
- Thuasne's patented TM5+ Hinge
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell
- Greater shell-to-skin contact for maximum control (Full Shell Design)

#### Options

- ACL or combined instabilities
- 30.5cm 40.7cm (12" 16") shell lengths
- Open or Full shell style design
- Hinge material aluminum or stainless
- Compression/Suspension anti-migration package
- Flexion stop kit (extension stop kit included)

#### **Ordering Method**

• Custom from a digital scan or scan of a cast





**Full Shell** 

**SpryStep<sup>®</sup> Custom KO** 



#### Order Form

# **SpryStep**<sup>®</sup> OA

#### PDAC Approved L1846, L2755, L2755

**Recommended for:** Moderate to severe medial or lateral osteoarthritis as well as patients who have OA in combination with ligament instability

Patented LoadShifter technology giving patients the power to control the effects of OA with the ability to increase corrective force for greater pain relief when they need it the most.

#### Features

- Dual adjustable LoadShifters
- Thuasne's patented TM5+ hinge
- Exclusive Synergistic Suspension Strap
- Rotation control tibial shell
- Greater shell-to-skin contact for maximum control (Full Shell Design)

#### Options

- 30.5cm 40.7cm (12" 16") shell lengths
- Compression/Suspension anti-migration package
- Flexion stop kit (extension stop kit included)

#### **Ordering Method**

• Custom from a digital scan or scan of a cast

### Osteoarthritis Bracing

### Neurological Bracing





Full Shell OA



LoadShifter:

Mechanical adjustable unloading of the affected compartment<sup>(5)</sup> provided by a significant varus and valgus correction of the thigh shell

Order Form

# **SpryStep**<sup>®</sup> Neuro

### PDAC Approved L1846, L2755, L2755

**Recommended for:** Severe instabilities or hyperextension that require a locking or heavy duty hinge orthosis.

Featuring multiple shell configurations, a variety of joint options and different levels of stiffness/ rigidity, the SpryStep<sup>®</sup> Neuro is a comprehensive knee orthosis solution giving patients the confidence they need to lead active lives.

#### **Options**

- Full Shell design: for better suspension and stabilization with tissue control
- Anterior or posterior shells configurations from various lengths
- C/S package: paring of semi-rigid sub-shells joined by anterior and posterior straps to improve brace's suspension (NB: not available on Full-Shell)
- Extension Assist

#### **Ordering Method**

• Custom from a digital scan or scan of a cast



#### Locking hinge options:

Twist cable mechanism or manual Trigger mechanism









The **SpryStep**<sup>®</sup> **KO** provides the ability to customize and design to each individual thanks to digital modelisation based on a completed scan and not just measures. This makes Thuasne USA's SpryStep<sup>®</sup> custom Knee Orthosis range one of the most truly custom knee braces on the market. It results in precise fit and control with proven results for comfort and compliance.



Availability of these products might vary from a given country or region to another, as a result of specific local regulatory approval or clearance requirements for sale in such country or region. Medical devices mentioned in this document are CE class I. Read the product's instructions for use, indications and contraindications carefully. The full list of medical indications, are available in the instructions for use.

Thuasne SAS – SIREN/RCS Nanterre 542 091 186 – capital 1 950 000 euros - 120, rue Marius Aufan 92300 Levallois-Perret (France

Photos: Willis & Williams Design Studios



UK Responsible Person (UKRP): THUASNE UK Ltd - Unit 4 Orchard Business Centre - North Farm Road Tunbridge Wells, TN2 3XF, United Kingdom