

# SpryStep® SOLUTIONS

Dynamic ankle-foot orthosis (AFO)

IMPROVING MOBILITY WITH EVERY STEP



# SpryStep® RANGE

Defined by elegance, **Thuasne's SpryStep**° range of AFOs for adult and children is positively impacting the way people move. Using a proprietary blend of composite materials, the **SpryStep**° comes in a variety of solutions that are improving mobility and quality of life for patients.

### **EFFICACY**

**Energy return provided** by a specific brace structure and the combination of high-quality composite materials

**Balance restoration** with a specific 3-point force system geometry which enhances foot and ankle motion and knee stabilisation

**Improvement of gait** thanks to strut stiffness and graduated footplate flexibility

# Stabilising Torce Opposing force Opposing force

SpryStep® flex

SpryStep® pediatric

SpryStep®

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### **DURABILITY**

**Durable device** that uses a well-balanced combination of composite materials in a brace structure that maximizes their properties

**Resistant**: 2 million cycles without any compromise of the structural integrity\* (2 million cycles, equivalent to about 2 years of use)

### **USER FRIENDLY**

Comfort: textile inner padding with soft surface

**Pre-assembled product** 

**Easy adjustment**, **fitting and care:** low-profile device to improve compliance

- Anatomically shaped design;
- Low materials thickness
- Washable fabric part

## Individual adaptation thanks to trimmable/customizable areas:

- Adjustment of calf size thanks to removable and trimmable straps
- Trimmable footplate to fit the tip of the foot in length and width

# Desired biomechanical force Stabling a Policy force Opposing Opposing Stabilising force EL OF RIGIDITY

SpryStep® plus

SpryStep® max

<sup>\*</sup> cycle-testing has been performed under ISO 10328 Servo-Pneumatic Test System

# SpryStep® pediatric

Posterior dynamic ankle-foot orthosis (AFO)



### **FEATURES AND BENEFITS**

### CHILD FRIENDLY

### Comfort:

Anatomically shaped design with a small contact area with patient anatomy Cushioned textile inner padding

Pre-assembled product

Easy adjustment with scissors only when fitting

Individual adaptation thanks to 3 trimmable areas to optimize fit and comfort: footplate (toe and medial side of footplate) and calf cuff can easily be adjusted

### EASE OF USE & ADAPTABILITY

Easy accommodation in footwear Improved compliance and acceptance

Low-profile device Low materials thickness

Hygiene

Wipe clean structure with quick drying Washable fabric part

### PROVEN DURABILITY

**Great resistance:** 2 million cycle tested by an independent facility\* (2 years of use for an average person, 5000 steps a day)

**Use of mix of composite:** glass fiber and aramid fiber

**Spare part kit available** for soft parts replacement for accidents or damage

\* cycle-testing has been performed under ISO 10328 Servo-Pneumatic Test System

### INDICATIONS -

These indications are biomechanical deficits of neurological, traumatic or muscular origin:

- Mild knee hyperextension / flexion Mild ankle and foot triplanar instability



### CONTRAINDICATIONS

- Moderate to severe spasticity of the foot and ankle
- Open ulcers of the foot, ankle or lower leg
- Moderate to severe edema
- Moderate to severe foot deformities
- Moderate to severe ankle and knee instabilities
- Moderate to severe fixed ankle varus or valgus conditions
- Non-correctable triplanar instability
- Plantarflexion contracture
- Patients over 60 kg
- Do not use the product if the diagnosis has not been confirmed.
- Do not apply the product in direct contact with broken skin.
- Do not use in the event of known allergy to any of the components.



### **TARGETED PATIENTS**

SpryStep® pediatric patients are children presenting with gait deficit(s) or a physical impairment which affect the lower limb and predominantly the ankle and the foot with associated mild/moderate involvement at the knee.

The majority of our patients are suffering from congenital or after birth conditions and are expected to use their walking orthosis daily.

SpryStep® pediatric is specially designed for young patients from 18 months up to shoe size (EUR) = 33 at which stage they can be transitioned into the adult version of SpryStep® family.\*





### FITTING INSTRUCTIONS



Place **SpryStep**\* **pediatric** into the shoe: Keep the original inlay out of the shoe, if removable



Place original inlay over the top of the **SpryStep® pediatric** foot plate If there is no original removable inlay then disregard this step



Fitting the **SpryStep® pediatric**With the shoe laces loose, slide the foot inside the shoe
You may use a shoe horn if required



Check the fit
Ensure the heel sits flat on the sole
and that the shoe heel is not distorted



### **TIPS AND TRICKS**

The tips and tricks listed below are provided to help you in the fitting of the SpryStep® pediatric and provide advice and guidance to the patient's parents.

### SHOE'S CHOICE AND SELECTION

- A pair of closed shoes with a pitch (heel height to forefoot difference) of <15mm, with strong and deep heel counters and either fastening with lace or self-fastening system are recommended.</li>
- The shoe should conform and fit around the AFO so that the AFO is secure with no relative movement between the foot and AFO and/or the AFO and footwear.
- A padded collar around the top of the shoe opening, as in trainers or athletic shoes, may experience some deformation whilst the shoe is new, but this will reduce as the padding of the shoe compresses and reshapes under the AFO strut/footplate joint.

### **SHOE DISTORTION**

- SpryStep® pediatric works best when the combination of the AFO and the shoe is optimal.
- The patient should not need to increase their shoe size to accommodate the SpryStep® pediatric.

### STRAPS FITTING (FIRST TIME)

- We advise the calf strap is fastened once then release then fasten again this check will apply sufficient tension and ensures the strap holds in place.
- When the calf strap is fastened on the patient, you should be able to put a finger between the strap and the leg to avoid constrictions. Conversely to check the strap is not too loose.
- Straps can be marked or stitched to indicated the prescribed tension to ensure consistency of donning for the parent and child.

### SpryStep® 'S AFO FIRST WEAR

- We recommend gently breaking in a new AFO: our advice is to wear the AFO for an hour of activity on day one. Then 2 hours for the second day and then 3 hours for the third. Continue in this fashion until you / the patient / the parents are sure that the brace is safe and comfortable to wear all day long.
- After ensuring the AFO is not causing any discomfort or skin irritation, it is suitable for regular wear / prescribed wear.

### **SKIN INSPECTION**

- We advise that the parents inspect the skin of the child after every use of the SpryStep® pediatric.
- Red marks can appear and are not detrimental if they disappear within 45 minutes. If not, and especially if over boney prominences, advise the patient or his parents to consult a healthcare practitioner.

### **SOCK WEAR**

- Socks (cotton or bamboo) are recommended to be used while wearing the SpryStep® pediatric. Ensure that the socks stay in place and do not roll down or twist, negatively affecting the fit of the AFO against the patient's anatomy. We don't recommend the use of ribbed socks as they can cause high pressure areas.

### **RIGID FOOTPLATE**

- The SpryStep® pediatric needs to sit as deep as possible in the shoe, under the insole or inlay if possible.
- We recommend the patient's original inlay (of the shoe) be placed on top of the SpryStep® pediatric's sole for more comfort during the wear, but only if the fit of the shoe is NOT compromised.
- If there is no original inlay, then a simple, soft and thin insole can be added. It is important that this insole does not make the fit too tight.

# SpryStep® pediatric



Reference: U017 52 **2 models: right and left** 

Size chart			Trimming value chart			
Size	Shoe size (EUR)	Foot length (cm)	Footplate length (cm)		Calf cuff height (heel to top, cm)	
			ORIGINAL FOOTPLATE LENGTH	MINIMUM LENGTH AFTER TRIMMING*	ORIGINAL CALF CUFF HEIGHT	MINIMUM HEIGHT AFTER TRIMMING**
XS	17 - 22	9,5 - 14,5	14,5	9,5	18	16
S	22 - 26	11-16	16	11	21	19
М	26 - 28	12,5 - 17,5	17,5	12,5	24	22
L	28 - 31	14-19	19	14	27	25
XL	31 - 33	15,5 - 20,5	20,5	15,5	30	28

 $Calf \ cuff \ height = 6 \ cm \ (the \ top \ and \ lateral \ edges \ of \ the \ calf \ cuff \ can \ be \ trimmed \ by \ up \ to \ 2 \ cm)$ 

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<sup>\*</sup> Do not cut the footplate below the minimum value.

<sup>\*\*</sup> The calf cuff can not be trimmed beyond the minimum value.