

# XTERN<sup>®</sup>

*Think outside the shoe<sup>®</sup>*





## A game changer solution for people afflicted by foot drop

This ankle foot orthosis (AFO), will allow running, walking and even mountain hiking as long and as far as you want without any discomforts.

Tested in many conditions such as marathons, triathlons, endurance activities and adventures in the wild Canadian backcountry, it's unique patented design acts as an exoskeleton to the impaired limb, keeps the foot at 90 degrees and provides the user with unparalleled levels of function without discomfort or rubbing.

## A completely external dorsiflexion assist

The XTERN is the only dynamic AFO totally affixed outside the shoe to maximize comfort, prevent skin breakdown and rubbing injuries to the foot. Its flexibility helps keep maximal ankle range of motion and calf muscle strength.

XTERN allows plantarflexion as well as dynamic dorsiflexion, making it easier to move, drive, run, etc... and much more comfortable.



# From shoe to shoe

The XTERN is easily transferrable to any shoe or boot, trainers and running shoes.



# Advantages



## Lightweight, sleek design

Made of highly durable thermoplastic that makes it feel weightless



## No skin contact

Exoskeleton design fits onto the outside of the shoe without touching the foot or the ankles



## Amazing energy return

Patented design makes it easy to position yourself as well as invert or evert the foot if required



## Adaptable

Easily conforms to uneven ground and slopes



## Versatile

Goes from shoe to shoe in 5 seconds. Fits majority of shoes



## Symmetrical design

Fits both the left and right feet

## Best warranty on the market

Try the XTERN for 2 months, and if you are not 100% fully satisfied, return it for a full refund.

2 years warranty against defects for all plastic parts.

# Improvements for professionals

- ✓ Assessment tools or demo kits available in 4 sizes for professionals to assess customers with foot drop quickly and efficiently
- ✓ Easily assembled in 10 to 15 minutes
- ✓ Durable black junction blocks made of solid plastic for a more discreet look and improved resistance against scratches
- ✓ Simplified assembly instructions
- ✓ Improved assembly joint to withstand even higher stresses
- ✓ Engraved parts numbers on every component for easy identification and re-order
- ✓ Additional heel section sizes for better grip
- ✓ Easily adjustable length and height for pediatric size only (2 front bars are included to maximize brace lengthening. Pediatric size only)
- ✓ Detailed sizing chart allows for the best fit on all customers



## Clinical indications

- ✓ Drop foot
- ✓ Dorsiflexion weakness
- ✓ Peroneal nerve injury
- ✓ Idiopathic Toe-walking
- ✓ Charcot Marie Tooth (CMT)
- ✓ Stroke (CVA)
- ✓ Multiple Sclerosis (MS)
- ✓ Cerebral Palsy (CP)
- ✓ Hemiplegia
- ✓ Guillain-Barre Syndrome (GBS)
- ✓ Motor neuropathy
- ✓ Motor Neurone Disease (MND)



# Available accessories

\* Only available in black

## Extension Stopper Kit

The Extension Stopper makes the Xtern more rigid and stops at 90 degrees.

Clinical indications :

- ✓ Foot slap
- ✓ Slight knee hyperextension
- ✓ More lift required
- ✓ Spasticity

## Ankle Stabilisation Strap

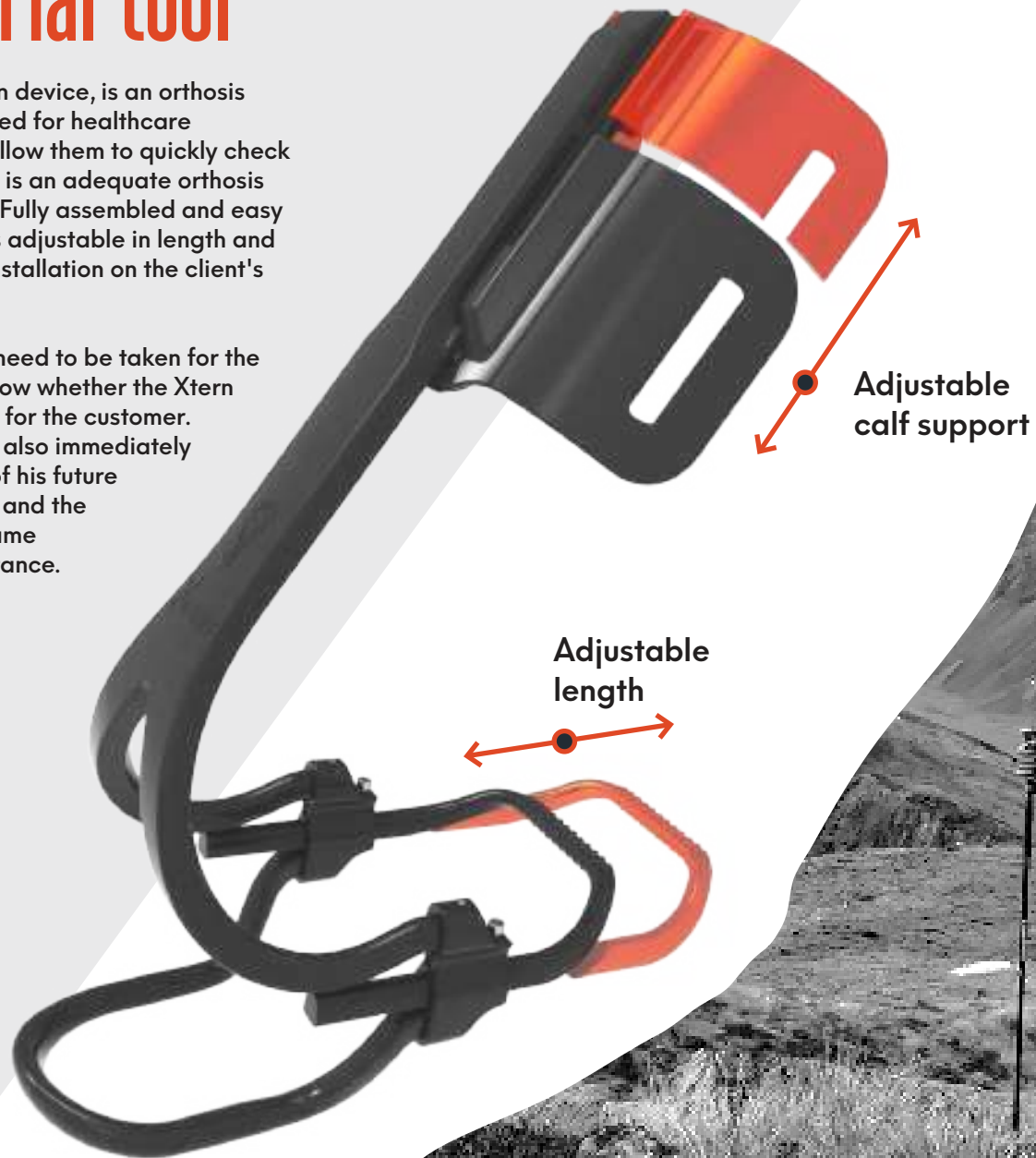
Clinical Indications :

- ✓ Mild and Moderate Ankle Instability
- ✓ Ankle Inversion
- ✓ Ankle Eversion

# AT-X trial tool

The AT-X, or try on device, is an orthosis exclusively reserved for healthcare professionals to allow them to quickly check whether the Xtern is an adequate orthosis for their patients. Fully assembled and easy to use, the AT-X is adjustable in length and height for quick installation on the client's shoe.

Only a few steps need to be taken for the professional to know whether the Xtern is the right choice for the customer. The customer can also immediately feel the benefits of his future Xtern as the AT-X and the Xtern share the same dorsiflexion assistance.



Adjustable  
calf support

Adjustable  
length





## Sizing chart

We recommend the qualified health care provider assess the patient with an AT-X assessment tool. Select best size from patient foot width.

## Clinical limitations

- ✗ Inappropriate footwear
- ✗ Gross fixed deformities of foot and ankle
- ✗ Severe spasticity
- ✗ Quadriceps weakness
- ✗ Severe proximal weakness
- ✗ Crouch gait

US SHOE SIZE			XTERN KIT SIZE SELECTION			
MEN	WOMEN	KIDS	PRODUCT: 100100-SA-L	PRODUCT: 100100-SA-M	PRODUCT: 100100-SA-S	PRODUCT: 100100-SA-P
			LARGE	MEDIUM	SMALL	PEDIATRIC
15.5			●			
15			●			
14.5			●			
14			●			
13.5			●			
13			●			
12.5			●			
12			●			
11.5			●			
11			●			
10.5	11.5		●	●		
10	11			●		
9.5	10.5			●		
9	10			●		
8.5	9.5			●		
8	9	8 Y		●	●	
7.5	8.5	7.5 Y		●	●	
7	8	7 Y			●	
6.5	7.5	6.5 Y			●	
6	7	6 Y			●	
5.5	6.5	5.5 Y			●	
5	6	5 Y			●	
4.5	5.5	4.5 Y			●	
4	5	4 Y			●	
3.5	4.5	3.5 Y			●	
3	4	3 Y			●	●
2.5	3.5	2.5 Y			●	●
		2 Y				●
		1.5 Y				●
		1 Y				●
		13 C				●
		12.5 C				●
		12 C				●
		11 C				●
		10.5 C				●
		10 C				●
		9.5 C				●

\* HCPCS Code L1951 (PDAC VALIDATED) : Ankle foot orthosis, spiral, (institute of rehabilitative medicine type). Plastic or other material, prefabricated, includes fitting and adjustment.

\* Suggested L codes. The responsibility for accurate coding lies with the patient care facility that selects the product, fits the patient, and bills for the service

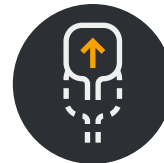
# Pediatric version available

The only one on the market  
to grow with the child

## Clinical Indications

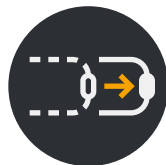
- ✓ Drop foot
- ✓ Idiopathic Toe-walking
- ✓ Peroneal Nerve Injury
- ✓ Cerebral Palsy (CP)
- ✓ Dorsiflexion Weakness
- ✓ Hemiplegia





## Adjustable calf support

Can be raised 20 mm



## Adjustable front bar

Comes with 2 front bars.  
Expands 2 shoe sizes larger  
(20mm length adjustment)



# A tool for everyone

Connect with other  
Xtern users!

Facebook Turbomed  
Foot Drop Club





# Meet the TurboMed team



## Stéphane Savard

Stéphane Savard has been an entrepreneur and businessman for almost 30 years. Following his studies in prosthetic orthoses, he became a shareholder in the family business designing, manufacturing, adjusting and repairing all orthoses available on the market, both in the laboratory and in hospitals. He also worked closely with health professionals to satisfy customers requiring orthotics and/or technical aids.

Taking over the presidency and management of the family-owned Orthèses Prothèses Savard business known today as Savard

Ortho Confort, Stéphane oversaw significant changes that made the company the leader of its field. In 2006, following a \$ 7M investment, he achieved one of his dreams of building the largest “all-in-one” center for orthotics, prosthetics, and technical assistance in North America, doubling Savard Ortho Confort’s income, workforce and branches in the process.

Stéphane enrolled in the Beauce School of Entrepreneurship in 2012 to perfect his leadership skills, and received the Marcel Dutil Honorary Prize towards the end of his term. He then sold Savard Ortho Confort to the Jean Coutu Group in 2013 and ensured the transition until the end of 2014.

Stéphane has been working full time for TurboMed Orthotics since January 2015, and owns all shares alongside two members of his family.



## François Côté

François Côté has been a mechanical engineering and naval architecture designer for Groupe Océan for over 20 years. He's worked in research and development on the design and construction of new fleet tugs, and has been involved in the engineering of several bold and far-reaching projects such as Groupe Océan shipyard's new haulage system at L'Île-aux-Coudres.

François studied in various fields before finding his way to industrial design and mechanical industrial design. After obtaining a Diploma of Professional Studies (DEP) in

Architecture and Structure Design in 1987, he was immediately hired by Architectes Hudon & Julien and then by Almex in 1990 as draftsman-designer. He then accepted a position with Groupe Océan in 1994. This choice will naturally guide him to the trade he is currently practicing. In his role, he mastered softwares including Autocad, Mechanical Desktop 3D, Rhino3D, and Excel as well as other key modern engineering tools.

A sportsman at heart since childhood, François played hockey and baseball before shining in mountain biking

and trials biking, an extreme sport involving climbing obstacles like logs, rocks, cars, or pyramids without ever touching the ground. He became Provincial Trials Bike Champion In 1988 and 1989 at the age of 21. In 1997, he then became an avid runner.

In 2001, Francois suffered a serious snowmobile accident, breaking his 2 legs and 2 knees. This left him with various disabilities, including a full foot drop to the left leg. This accident affected his personal and sporting life, but didn't extinguish his desire to push his limits.



## Contact us



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