

INTRODUCTION



The Dynamic Response Ankle Foot Orthosis (DRAFO) is a completely new approach to orthotic intervention in treating children and adults with varying neuromuscular and orthopedic pathologies.

Teamed with new assessment and alignment techniques, this new design changes how gait has been traditionally assessed.

The DRAFO design was conceptualized as a total contact/total control orthosis that provides relief and flexibility over bony prominences while delivering rigid control.

Design Characteristics

The DRAFO is a three-part system:

The first part is the biomechanical assessment and casting process that is required for a successful outcome.

The second is the device and how it intimately controls the alignment of the foot.

The third is the alignment of the interaction of the device and shoe to the floor. This part is what optimizes standing stability and ambulation.

We form and stabilize the foundation (foot/ankle) and then align the lower leg to the floor.

KEYS TO THE DRAFO

Optimal Starting Point



Stable Alignment

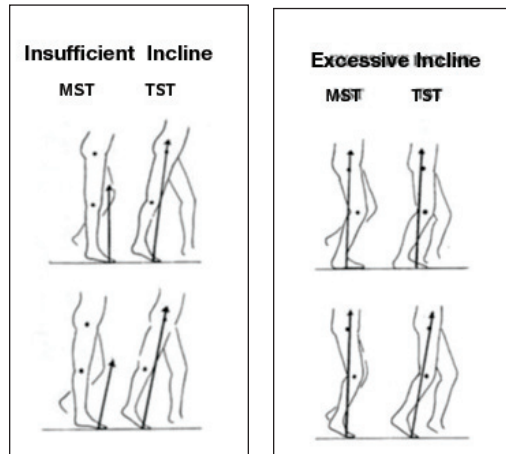


Unstable Alignment



Patient Assessment

During an initial assessment it is important to evaluate how the patient presents. This provides key insights to proper casting, device selection, and final fitting.



INSUFFICIENT SHANK



DRAFO HP

Provides maximum control for the leg and ankle foot structure. Soft heel facilitates proprioception (ability to feel foot) and replaces the function of ankle movement at the beginning of walking, slowing the leg down and allowing the body to keep up. The toe section is flexible and, based on the foot structure, can be trimmed to affect the reaction of how the foot interacts with the ground.



DRAFO Lite

Idealistically designed to help when the hip is weak which causes the knees to go backwards. Forceful forward motion of the leg is required. Toe section the same as the HP.



DRAFO MP

Functions the same as the HP but does not influence the knee.

EXCESSIVE SHANK INCLINE



DRAFO Transformer

Provides maximum control for the leg and ankle foot structure. Soft heel facilitates proprioception (ability to feel foot) and replaces the function of ankle movement at the beginning of walking, slowing the leg down and allowing the body to keep up. The toe section is RIGID and, based on the foot structure, can be trimmed to affect the reaction of how the foot interacts with the ground. Designed to extend the knee.



DRAFO Transformer Static Adjustable

Designed to function the same as the transformer but has the ability to change ankle alignment. Used when range of motion at the ankle will change or it is variable and very difficult to assess true end range.

Bracemasters International, LLC

www.bracemasters.com

THE DRAFO[®] difference



The DRAFO program began by serving the needs of cerebral palsy children with spastic tone or hyper mobility of the joints. One of the important DRAFO features is the ability to stabilize

and hold the lower extremity in an anatomically neutral alignment with little or no pressure problems. The key to the success of the DRAFO is the alignment process which is able to biomechanically align and stabilize the foot to facilitate the most normal gait possible.

The casting process utilized in this design requires that the patient be fit with a position that is anatomically correct, not forced; if the alignment of the DRAFO is greater than their functional range, the orthotic device will not perform properly.

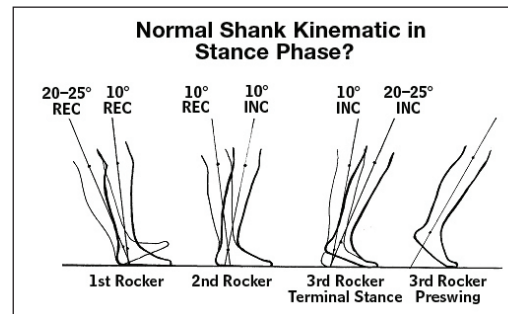


bracemasters
INTERNATIONAL, LLC

DRAFO SYSTEM

The DRAFO System mimics gait biomechanics of normal human locomotion.

- The 3 foot rockers are incorporated into the orthosis
- 2nd rocker achieved by Tibial Alignment
- Stabilizes and maintains desired alignment without requiring excessive pressure
- Plantar aspect functions like a prosthetic foot



The DRAFO is the first lower extremity orthosis that was designed around scientifically validated process for alignment and fine tuning. This process was brought to the field by Elaine Owen, a physical Therapist from Strathclyde University Scotland UK.

Your local DRAFO Specialist is:



FOR PHYSICIANS AND
PHYSICAL THERAPISTS



bracemasters
INTERNATIONAL, LLC

888.790.6880

www.bracemasters.com

5075 Emmer Drive | New Berlin WI 53151