# allard



## kiddle 1907

We have extended our pediatric line of orthoses with a new model, the KiddieFLOW™. This is in response to requests from clinicians for an orthosis with more flexibility in the foot plate and will provide an additional option to our current line of Kiddie products. These devices will bridge the gap between insoles/ SMOs and our current pediatric AFOs. It allows for better control of foot positioning in late swing, which in turn aids stability in stance. It also gives dorsiflexion assistance in the swing phase, while allowing for more range of motion in stance phase.

For combinations of increased A/P and M/L control, KiddieFLOW, in addition to, our current Kiddie AFOs can also be combined with insoles or SMOs.

The task of choosing the right orthosis combination for your patient should always be based on established evaluation tools, such as; gait analysis, ROM testing, Manual Muscle Testing or other recognized measures. Our charts and the theories outlined here can also support you in the selection of the most appropriate device for your patient.

A study\* published in 2019 in the Journal of Paediatric Rehabilitation Medicine showed improvement in swing phase and initial contact and midstance for patients presenting with unilateral spastic Cerebral Palsy wearing KiddieGAIT® compared to them wearing shoes alone, and barefoot.

\*Efficacy of prefebricated carbon-composite AFO for children with unilateral spastic Cerebral palsy exhibiting a drop foot pattern" Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach 12 (2019) 171–180 171

- By analysing what gait deviations may be present, you will have a more comprehensive analysis for the appropriate orthosis combination selection. This will provide the best clinical outomes for your patient.
- ✓ M/L control, as needed for excessive pronation or supination, can be achieved with insoles or SMOs.
- ✓ As the need for A/P control increases, a progressively stiffer orthosis is usually also needed. Our KiddieFLOW, -GAIT and -ROCKER orthoses, in combination with insoles or SMOs, provide adequate compensation for most patients.
- ✓ It is necessary to perform a repeated evaluation that includes a gait analysis while the patient is wearing the chosen orthoses combination to ascertain improvement in function.
- ✓ For the most severe cases, that include an increasing degree of spasticity and more complex gait deviations, a more rigid orthosis should be considered.

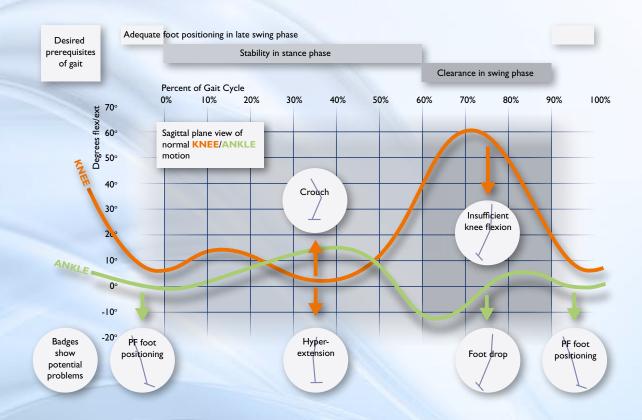






The gait cycle is most often presented in a sagittal plane view, showing the knee and ankle kinematics. However, including the last 10% of the swing phase before initial contact allows us to see more clearly the importance of foot positioning in late swing phase.

- In stance, knee flexion (crouch) or hyperextension affects stability.
- In swing, impaired knee flexion and/or ankle dorsiflexion affects adequate clearance.



Dr. Jacqueline Perry described four prerequisites of normal gait in her seminal work<sup>1</sup>: stability in stance phase, clearance during swing phase, appropriate foot positioning during terminal swing for the next gait cycle, and adequate step length.

Dr. James R Gage et al<sup>2</sup> added energy conservation as the fifth prerequisite of normal gait.

These are the signs to look for in observational gait analysis.

- I. Perry J (ed): Gait Analysis: Normal and Pathological Function. Thorofare, NJ: SLACK, Inc, 1992.
- 2. Gage JR, DeLuca PA, Renshaw TS: Gait analysis: Principles and applications with emphasis on its use in cerebral palsy. J Bone Joint Surg Am 1995; 77:1607-1623.





#### **INTENDED USE**

KiddieFLOW $^{\text{TM}}$  is intended to support the foot/ankle complex in a more functional posture while allowing more normal ROM during the developmental years.

#### **INDICATIONS**

KiddieFLOW™ is designed to support footdrop, gait deviations secondary to proprioceptive deficit (either unstable or low-tone gait) or toe-walking with no midfoot collapse. Potential conditions include Cerebral Palsy and Muscular Dystrophy.

#### **CONTRAINDICATIONS**

KiddieFLOW™ should not be used when patients present with:

- Limited ROM towards dorsiflexion (need at least 5° dorsiflexion past neutral)
- Very rigid foot structure
- · Quadriceps spasticity
- Excessive postural Genu Valgum or Genu Varum
- Fixed/ non correctable postural Pes Valgus or Pes Varus
- · Crouch gait

In addition to the information above, we refer to the printed Allard AFO Professional Instructions and Patient/User Instruction" added in the bag with the product.

### KiddieFLOW<sup>™</sup> complete with straps

Item No. Without D-ring	Item No. With D-ring	Size	Left/Right	Footplate Length	Height
28891 1011	28892 1011	Small	Left	160 mm	220 mm
28891 1012	28892 1012	Medium	Left	180 mm	257 mm
28891 1013	28892 1013	Large	Left	200 mm	295 mm
28891 1014	28892 1014	X-Large	Left	210 mm	315 mm
28891 2011	28892 2011	Small	Right	160 mm	220 mm
28891 2012	28892 2012	Medium	Right	180 mm	257 mm
28891 2013	28892 2013	Large	Right	200 mm	295 mm
28891 2014	28892 2014	X-Large	Right	210 mm	315 mm

SoftKIT<sup>™</sup> (28378) and ComfortKIT<sup>™</sup> (28418) fits also for KiddieFLOW<sup>™</sup>

#### KiddieFLOW™ Trial Brace/Gait Assessment kit

Item No. Without D-ring	Item No. With D-ring	Size	Left/Right	Footplate Length	Height	
28894 1011	28895 1011	Small	Vänster	160 mm	220 mm	
28894 1012	28895 1012	Medium	Vänster	180 mm	257 mm	
28894 1013	28895 1013	Large	Vänster	200 mm	295 mm	
28894 1014	28895 1014	X-Large	Vänster	210 mm	315 mm	
28894 2011	28895 2011	Small	Höger	160 mm	220 mm	
28894 2012	28895 2012	Medium	Höger	180 mm	257 mm	
28894 2013	28895 2013	Large	Höger	200 mm	295 mm	
28894 2014	28895 2014	X-Large	Höger	210 mm	315 mm	
28896 0000	28897 0000	Vä/Hö, Small - Large				

**Support for Better Life!** 



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