



# **Clinical Evaluation Summary**

CES SEA F03

# **Trulife - Kinetic Feet**

Warranty period - 2 Years (6 Months Foot shell)

Weight Limit - 166kg

This summary has been compiled from the results of a number of returned Clinical Evaluation forms, completed by both prosthetists and patients, and shown in an abbreviated form overleaf. It is an attempt to give an overview of the product based on our experience to date and needs to be read in conjunction with the product literature supplied by the manufacturer.

# **Evaluation Summary**

Supplied in three versions, these feet have a great range of dorsiflexion and planterflexion from the main bumper, with some inversion, eversion and slight rotation from the flexible pivot bushes. The main bumper has five durometer options for all three versions, with one of two keel options for the Light and one of five for the Edge being automatically chosen, dependant on the patient's weight. The keel and ankle are integral with the footshell, with plugs to allow access for the removal of the pivot and bumper, using a special tooling kit (not essential). Since the original evaluations of the Kinetic, the ankle has been redesigned to increase the durability.

**The Kinetic** has a female pyramid receiver and is supplied complete with a shin tube with bonded male pyramid. This makes it easier to adjust the alignment, but still allows a build height of just 70mm.

**The Kinetic Light** is not supplied with a shin tube, since it has a more conventional male pyramid adaptor. This arrangement makes for a more conventional way of aligning the foot, but only increases the build height by about 3mm. Both feet are fairly lightweight, yet they seem to allow gentle, rapid planterflexion and an easy, smooth transition to toe off, ideal for patients of low to moderate activity.

The Kinetic Edge is very similar to the Kinetic Light, but has a removable footshell\*, with an increased roll over to the forefoot and a moderate activity level.

Contraindication

importance than compliance

Patients above moderate activity or 166kg

Where energy storage and return would be of greater

Where lightness is more necessary than function

#### Indications

Patients of low to moderate activity Any patient requiring, or benefiting from

- easy, rapid and compliant planterflexion
- a fairly lightweight functional foot
- exchangeable ankle bumpers, either to adjust the foot function, or for ease of maintenance
- a relatively low build height
- a good cosmetic foot shell\*(see Edge)

# **Evaluation Patients**

Patient Details

Patient 1	Transfemoral	75kg	65 year old male	Retired	Sigam E
Patient 2	Transtibial	85kg	36 year old male	Dentist	Sigam F
Patient 3	Transtibial	67kg	55 year old male	Unemployed	Sigam E
Patient 4	Transtibial	126kg	36 year old male	Unemployed	Sigam D
Patient 5	Transtibial	139kg	27 year old female	Hairdresser	Sigam E
Patient 6	Transtibial	70kg	55 year old female	Retired	Sigam D

#### **Evaluation Result**



### **Current Prescription**

Patient 1	Seal-In liner socket. Endolite ESK and Esprit foot		
Dationt 2	Supresendular/Supresentation DTR with correct and side steels Variflay fast		
Patient Z	Supracondynal/Suprapatena PTB with corset and side steels varmex root		
Patient 3	Iceross to a laminate socket with Icelock 600 shuttlelock and Endolite DR2 foot		
Patient 4	PTB socket with Contex Gel sleeve and CPI Trés foot		
Patient 5	Supracondylar PTB, Dermo Pro Flex sleeve and Kinetic Light foot		
Patient 6	PTB socket with OB sleeve and CPI Trés foot		

### **Prosthetist's Comments**

**Patient 1** – Prosthetist stated that he had some initial concerns relating to his experiences with the Cadence foot (Also produced by Trulife and similar in appearance). It was noted that the posterior tendon contributed to a far smoother forward progression during stance phase and that it also contributed in preventing "drop off" in the forefoot by reducing the forward deflection of the upper element of the "s" shaped pylon. Donning and doffing of the foot shell was stated to be difficult and the Prosthetist outlined some difficulty in selecting the correct heel wedge (required to ensure neutral alignment in the chosen footwear) and then donning the foot shell over the glued wedge. It was noted that the patient had considerable experience with a range of prosthetic feet and that this foot had performed exceptionally well.

**Patient 2** - The Prosthetist highlighted that the foot functioned well with smooth forward progression. He encouraged the patient to evaluate the foot performance on a gradient and noted that when descending slopes the foot plantar flexed rapidly, in preparation for the next step.

Patient 3 - The Prosthetist noted that the foot had provided good planter flexion motion and compliance and recommended that this foot would be suitable for impact activities at work and leisure.

**Patient 4** – The Prosthetist noted that this patient had trialled a number of prosthetic feet but had been able to find a "flaw or undesired property" in each. He reported that the foot appeared smooth with a controlled heel strike and a plantar flexion action comparable to the contra-lateral limb. The Prosthetist also noted that the foot worked well "in tandem with a Mauch unit".

**Patient 5** – The Prosthetist reported that this patient had been an amputee for a little over two years but could "walk on anything". The patient also had a history of oil leakages from hydraulic units suggesting a high level of activity and impact. The Prosthetist reported that although this gentleman already had a good gait that there was a marked improvement at heel strike and toe off. The Prosthetist reported that he had not seen the patient for over 5 months and that this was the longest period over which the patient had not required any further appointments.

**Patient 6** – With his current prescription under review, it was decided to trial the NOP5 knee and, since he is still a relatively young and active man, who likes to play golf and travels a good deal, to upgrade the foot accordingly by supplying the Catalyst 9. The prosthetist found that there was a knack to donning the foot shell, but that it was tricky initially, especially when trying to determine which heel wedge was most appropriate for the footwear, prior to gluing on the wedge. Once this had been achieved, setting up the foot proved very simple indeed and clearly enhanced the function of the knee unit

#### **Patient's Comments**

**Patient 1** – The patient found that this foot functioned exceptionally well and that he did not experience a "dead spot" at mid stance. Upon two subsequent reviews the patient stated that he had been very impressed with the performance of the foot throughout all of his regular daily activities which included cycling, gym work and dog walking. He requested that he be allowed to keep the foot upon completion of the evaluation.

**Patient 2** – Patient noted that had previously had to descend slopes by side stepping, but that he could now descend step over step. The patient also noted that he was able to wear his prosthesis for a longer period throughout the day. He also noted that he had previously experienced discomfort and reddening over the patella tendon and that this had reduced.

**Patient 3** – The patient stated that with his previous prescription he had "no compliance on uneven ground and poor balance on cambers" and that it was good "when walking". He also added that he had been able to complete an 18 mile charity walk due to its good compliance. On the final review the patient noted that "less thought was required" during walking and that the foot had allowed him to "get on with his life without having to pre-plan journeys".

**Patient 4** – The patient felt that the action was smooth and that the foot felt "nice and springy at the end of stance". The patient also commented that "the foot helped activate the knee into swing phase."

**Patient 5** – The patient felt that the foot was more stable on the ground and was surprised at the amount of movement that the foot afforded. He also appreciated the cosmetic appearance of the foot shell.

**Patient 6** - The patient was very impressed with the new prescription as a whole, but found it difficult to separate out which of the benefits he was experiencing was due to the knee and which to the foot. The ease of transition into the swing phase was clearly helped by the foot function and the soft heel strike and rapid planterflexion also helped maintain the stability of the knee in the stance phase, especially when ascending or descending slopes.

For almost 100 years, we have broken boundaries in healthcare to create fundamental, positive turning points that enhance lives. Contact us today on customerservice@steepergroup.com to find out more about our products and services.