

ottobock.

1C70 *Evanto*. Feel the flow.

Evanto marks a milestone in the evolution of prosthetic feet.

It was designed for active individuals who navigate varied indoor and outdoor environments and place a high value on a natural walking feeling, increased endurance and a high degree of comfort on uneven terrain.

Evanto resolves the contradiction in prosthetic foot design between dynamics, flexibility and compact build height.

***Evanto* means**

...empowering active individuals with a new walking and standing experience, which feels more natural and comfortable, when compared to conventional carbon prosthetic feet.

...supporting O&P professionals with a solution that can be further tailored to the individual user, helping them to achieve the best possible outcome.

It's more than a foot. It's a foundation.



The next step in prosthetic feet.



Waterproof



Multi-axial
flexibility for
adaptation on
uneven terrain



Shock absorption
for user comfort

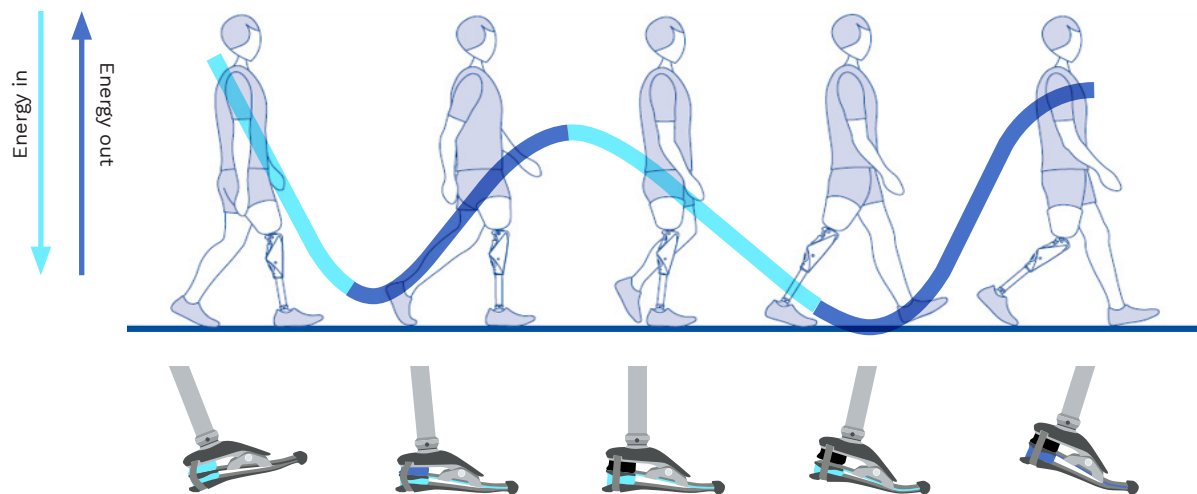
Innovative energy
storage and return for
improved endurance

Results and statements in comparison to state-of-the-art
energy storing and return (ESR) feet.

Energy flow.

Walk with more endurance.

Evanto's innovative design stores a high amount of energy at heel strike and returns it gradually for enhanced forward propulsion.



- The upper and lower wedges store a high amount of energy at heel strike.

- The upper wedge provides energy return up to mid stance.
- The lower wedge continues to store energy.
- The carbon spring is loaded via body weight through the central ankle unit during rollover.

- The belt tightens and creates a leverage effect that provides additional energy to the lower wedge and the carbon spring.

- The lower wedge and the carbon spring return energy for forward progression.



Energy intake

Evanto can store up to **50% more energy** at heel strike through the high-performance wedges. The amount of **shock absorption at heel strike** is unmatched.¹



Energy transfer

Evanto transfers the energy from heel strike through the ankle joint to the carbon spring. The ankle joint provides up to **20° range of motion**.¹



Energy return

Evanto provides **higher forward propulsion** during push-off. Up to **14%** more for transtibial and up to **19%** more for transfemoral prosthesis users.²

¹ Verification results in comparison to state-of-the-art ESR feet.

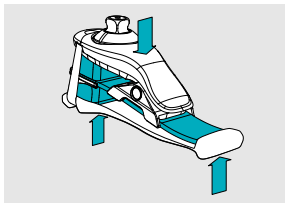
² "Evanto – Development-accompanying patient testing". Results for 6 transtibial and 6 transfemoral amputees.



Go wherever you want.

Evanto provides multi-axial flexibility on a new level. It adapts to uneven terrain and empowers the user with comfort and confidence.

52% higher
shock absorption

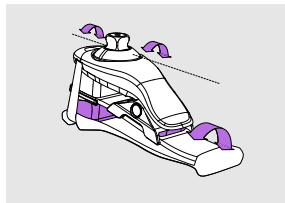


up to 24 mm
shock absorp-
tion at heel
strike



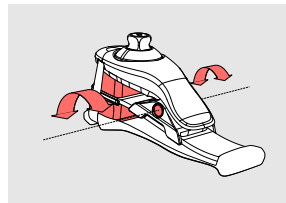
up to 9 mm
shock absorp-
tion at vertical
loads

66% higher
frontal flexibility



up to 10° m-l
flexibility

12% more
sagittal flexibility

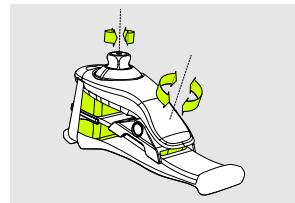


up to 20° of
ankle range of
motion



Fast plantar-
flexion and
adaptation to
ramps

60% more
torsion



up to +/-4° of
torsion

¹ Verification results in comparison to state-of-the-art ESR feet.

Customization.

Customize to individual needs.

Both the heel characteristics and the rollover behavior can be adapted to individual needs.

The high-performance wedges allow energy storage and return as well as shock absorption. They are exchangeable by the prosthetist to adjust the prosthetic foot to the individual needs of the user. The upper wedge can be used to adjust the heel characteristics, while the rollover behavior is adjusted with the lower wedge. The wedges are made of high-performance polymer and enable a high energy return.

Upper wedge
mainly for shock
absorption at heel strike

Lower wedge
mainly for energy return
from mid-stance to
toe-off



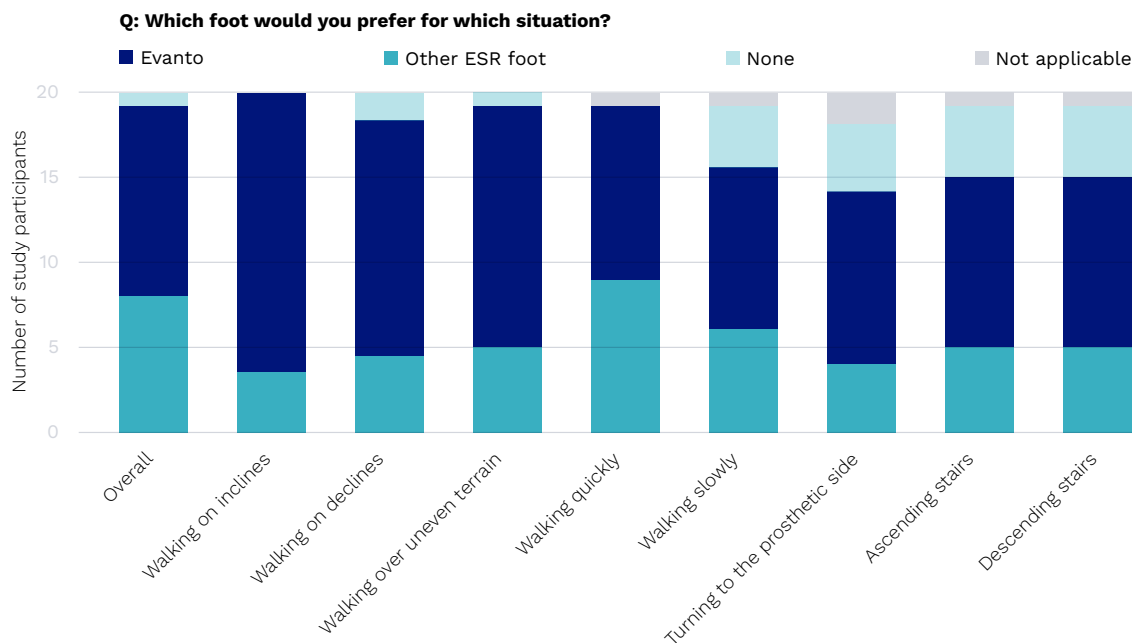
Clinical evidence.

Experience the difference.

The benefits of *Evanto* are field tested and approved by many users as well as in our biomechanical gait lab.

Most preferred foot

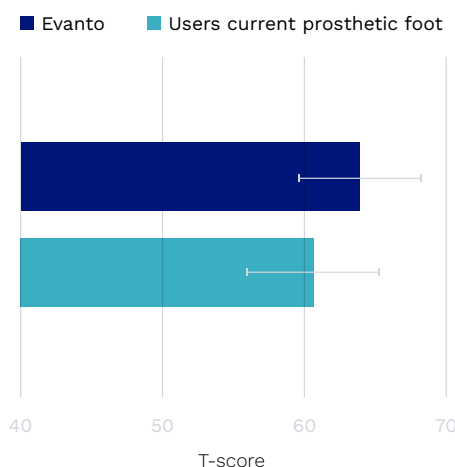
Evanto is the most preferred foot overall and in situations like walking on inclines and declines, over uneven terrain as well as ascending and descending stairs (among others).³



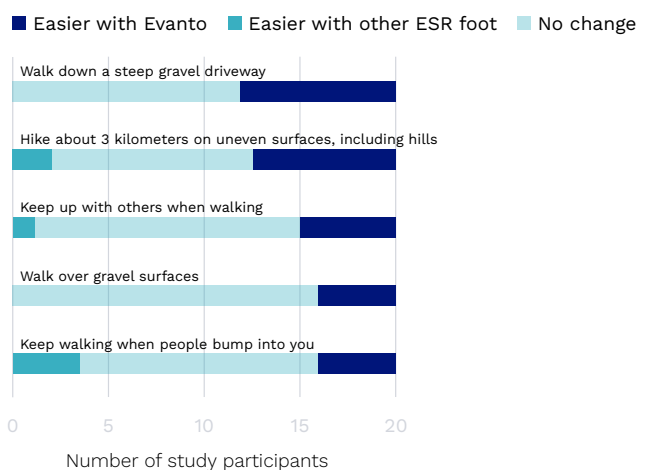
Improved mobility

Evanto performs statistically significantly better ($p < 0.001$) than other state-of-the-art ESR feet in the clinical test for mobility (PLUS-M).³

PLUS-M™ (plus-m.org) score | Mean ± St.Dev.



Activities in which Evanto improved mobility

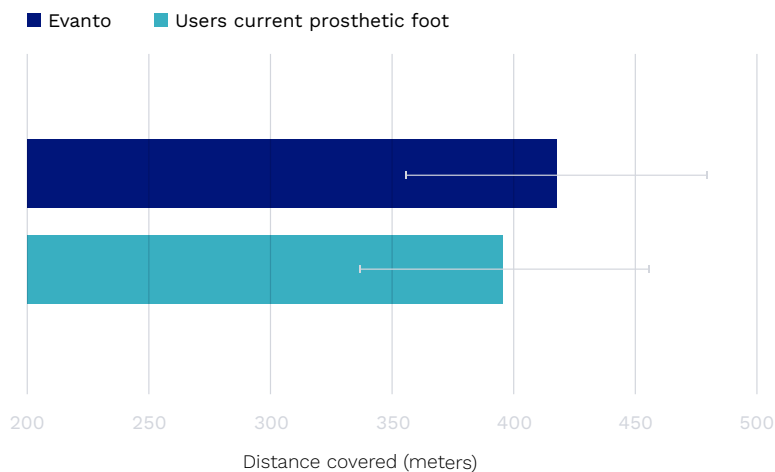


³ "Prospective feasibility study to evaluate performance, patient benefits, and acceptance of a new 1C70 energy storage and return prosthetic foot". Clinical study results for 20 transtibial amputees.

Improved aerobic capacity and endurance

The distance covered in the 6 Minute Walk Test with Evanto is significantly longer ($p < 0.05$) than with the current ESR foot of the study participants.² The 6 Minute Walk Test is a clinical performance-based test used to assess aerobic capacity and endurance.

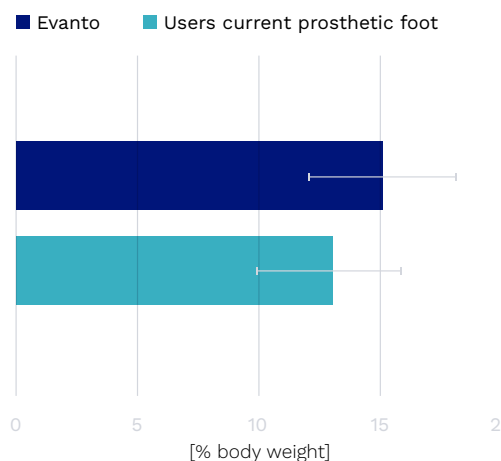
Distance covered in a 6 Minute Walk Test | Mean \pm St.Dev.



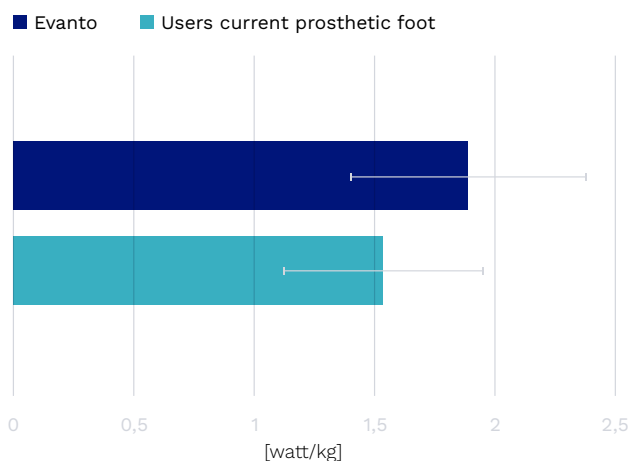
Improved gait

Increased ground reaction force (GRF) component that acts in the direction of progression of walking movement and can increase walking velocity. Higher ankle power which is the amount of mechanical work generated by the ankle joint during push-off.²

Ground Reaction Force (ap component) | Mean \pm St.Dev.



Ankle Power | Mean \pm St.Dev.



² "Evanto – Development-accompanying patient testing". Results for 6 transtibial and 6 transfemoral amputees.

References

1. Verification results in comparison to state-of-the-art ESR feet.
2. "Evanto – Development-accompanying patient testing". Results for 6 transtibial and 6 transfemoral amputees collected after approximately 3 months of Evanto use. Data on file. Publication in preparation.
3. "Prospective feasibility study to evaluate performance, patient benefits, and acceptance of a new 1C70 energy storage and return prosthetic foot". Clinical study results for 20 transtibial amputees. Outcomes collected after 6 to 10 weeks of Evanto use. Data on file. Publication in preparation.