

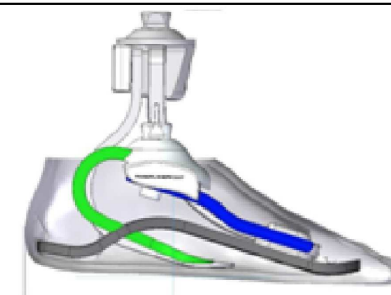


ROADFLEXION®

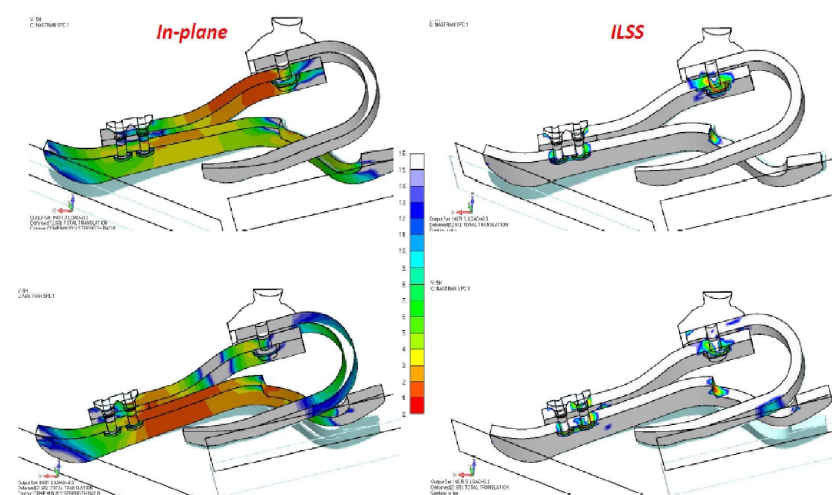
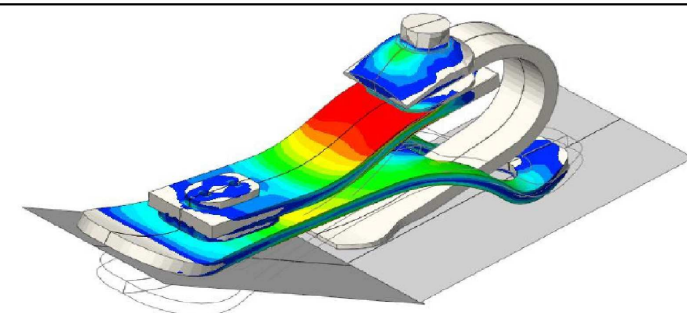


SKILLS

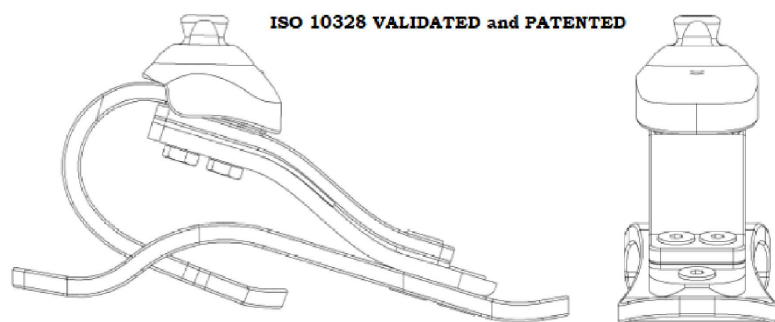
Roadflexion foot is an highly dynamic foot for young and/or very active people, with a mobility level 3 (K-level). Roadflexion has 3 point on the heard and guarantee one continuum roll over that has any other foot on the market. Its 3 laminated structure allow a foot's response during all stance phase: in every moment at least 2 laminates work together to support the amputee user in his/her daily activities. In the other feet available on market there are downtime during which the foot doesn't work, such as the final phase of the stance. The Roadflexion foot has 60% as efficiency (ratio between energy stored and realeased as one spring)



This prosthetic foot is composed by 3 main laminates: one *inferior laminate*, which define the calcaneus and the forefoot; one *posterior laminate*, which define the heel and functions like soleus-Achilles' tendon apparatus; one *superior laminates*, which define the instep and functions like anterior tibialis muscle. A pyramid adapter closer to the ankle help the pylon attachment. The *inferior laminate* starts its work during Initial Contact: the durability and elasticity must allow load acceptance and storage with a shock absorption function to guarantee comfort to the user, but at the same time stability. Its functions stops during the final phase of Toe-off, when the forefoot gives the final propulsion. The *posterior laminate* functions like Achilles tendon and soleus, which work in eccentric contraction during second rolling, to steady the foot on the sagittal plane; when the foot reach the contact with the ground, during mid-stance, the posterior laminate starts loading and it release propulsion, allow the transition from Mid-stance to final stance phase. The two *superior laminates* function like the anterior tibialis muscle permitting a gradual foot roll-over until forefoot contact to the ground managing the transit from Initial Contact to the Mid-stance phase. Through their loading, they guarantee dorsiflexion during Mid-Stance phase and plantar-flexion during final propulsive phase



ISO 10328 VALIDATED and PATENTED



WEIGHT 550-700 g, LENGHT 190-240 mm, HEIGHT 110-112 mm



This foot comply with **ISO 10328** standard. It performed the following tests: ultimate strength test (A60, 2415 N), and cycle test (2.000.000 cycles, 1330 N).

TESTING

FUNCTIONALITY and GAIT ANALYSIS

