

Triton – Family of Products

Your Life. Your Adventure.



Quality for life



Triton – Family of Products

Leading an unrestricted everyday and professional life, being active in leisure time and sports. Taking on challenges, but also just spending time with family and friends. All this stands for quality of life.

Triton – Learning from Nature

Ottobock released the 1C30 Trias back in 2006: a prosthetic foot with a unique design based on nature as the model.

The Human Foot

In the human foot, the flexible forefoot structure is connected to the supporting heel via the plantar fascia (aponeurosis). The interplay between the different muscles and tendons thus controls the movement of the foot. At heel strike, during rollover or upon push-off with the toes, there is a smooth flow of force throughout the entire foot system.

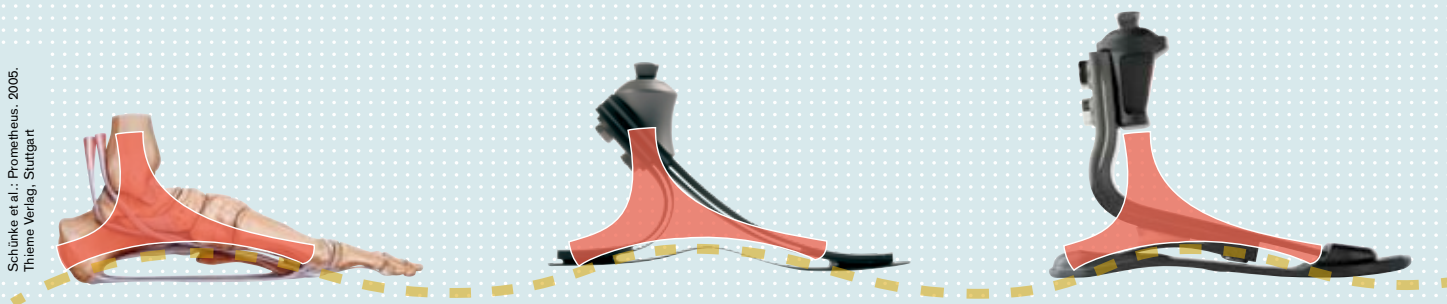
Trias

The anatomy of the natural foot is reflected in the curved, triangular form of the Trias. For the Triton feet, the concept of the Trias was taken to the next stage of evolution and honed to meet the requirements of highly active amputees.

Triton

Like the Trias, the prosthetic feet in the Triton family of products are also comprised of three interconnected spring elements. The carbon forefoot spring and a two-part carbon heel spring form the load-bearing structure. The high-performance polymer base spring in turn connects these elements to form an integrated system and provide for a particularly smooth rollover.

Schünke et al.: Prometheus, 2005.
Thieme Verlag, Stuttgart



Quality of life involves independence and mobility – the ability to decide on your own goals and how to reach them. Our goal at Ottobock is to create outstanding, functional products for people with all types of mobility needs.

The Triton family of products offers a selection of feet to meet these demands perfectly. Mobility on a high level. For a self-determined life.

Technology for Mobility

When developing the Triton prosthetic feet, our engineers made mobility their priority. They worked together with amputees to create a comprehensive family of products that meet the various demands of an active lifestyle.

Thanks to the innovative design, the Triton feet are suited for a broad range of applications. They offer excellent functionality even under high load.



The spring deflection of the Triton ensures effective shock absorption upon heel strike.

Moderate shortening of the heel lever supports the user, allowing greater control and safety while flexing the knee. How the foot behaves in this phase of walking can be adapted to suit the individual user with the supplied heel wedges.



The benefits of the Triton's interlinked triangular spring system are particularly evident during rollover. The forefoot and the heel are made of a light, flexible carbon fibre composite and connected by a base spring made of high-performance polyester to form a complete system. The majority of energy stored during heel strike is gradually released in the course of the stance phase. This makes easy rollover possible for the user. The Triton shows a largely neutral reaction when the patient shifts weight from one foot to the other while standing. This special feature of the Triton means that the user is relaxed and stable when standing.



The base spring of the Triton has a specially formed

and split forefoot section. Due to this unique feature, the effective foot length reaches up to the big toe. This feature allows the user to move confidently into the swing phase and permits a highly variable step length – depending entirely on the situation and speed. At the same time, the split forefoot section provides the required control on uneven terrain and for quick changes of direction – for example during sports activities.



The functional ring of the Triton Vertical Shock and the Triton Harmony ensures increased torsion capability for the foot system. For the user this results in a reduction of shear forces between residual limb and socket, which offers noticeable relief especially in demanding activities such as sports or physical work.



The Triton Vertical Shock and the Triton Harmony offer additional spring deflection thanks to the functional ring. Together with the spring deflection of the triangular carbon spring system, this effectively reduces vertical forces such as those that arise during sports activities and eases the load on the residual limb.



Harmony P3 technology permits the fabrication of a socket system with higher negative pressure. This helps stabilise the residual limb volume. Adhesion between the residual limb and the prosthesis is improved. The resulting enhanced proprioception results in an additional plus in safety in any situation.

► For further information and a detailed comparison of the Triton feet with other feet from the Ottobock portfolio, please refer to the function matrix for prosthetic feet (646F307).



1C60 Triton

1 Adapter

Pyramid adapter made of lightweight aluminium

2 Carbon Forefoot Spring

The split forefoot spring allows the foot to adapt to uneven surfaces. It offers energy return, stability and control at rollover and toe-off

3 Base Spring

The split base spring made of high-performance polyester has a separate big toe and connects the forefoot and the heel spring to form a complete system

4 Carbon Attachment Spring

The attachment spring made of carbon fibre material gives the foot the required stability

5 Carbon Heel Spring

The heel spring dampens the impact at heel strike and stores the energy for a smooth rollover

6 Replaceable Heel Wedge

The optional heel wedges provide a simple method for adapting the Triton to the individual needs of the patient



1C61 Triton Vertical Shock

- Adapter**
Pyramid adapter made of titanium
- 2-in-1 Functional Ring**
Elastomer ring for vertical shock absorption and torsion movements
- Housing**
Triton Vertical Shock housing made of lightweight aluminium

1C62 Triton Harmony

- Adapter**
Pyramid adapter made of titanium
- 3-in-1 Functional Ring**
Elastomer ring for vertical shock absorption and torsion movements. Inlet and outlet valve to generate vacuum
- Housing**
Triton Harmony housing made of lightweight aluminium

Triton Family of Products

The prosthetic feet in the Triton family of products are based on the interactive triangular spring system. Three interconnected spring elements ensure highly harmonious rollover characteristics.

Thanks to their outstanding dynamics and flexibility, all Triton feet are suitable for a broad range of applications from everyday use to recreational sports.

- Harmonious rollover characteristics thanks to an interactive spring system comprising 3 interconnected spring elements
- Outstanding dynamics combined with energy storage and return
- Noticeable plantar flexion at heel strike
- Split forefoot for more safety, stability and control on uneven surfaces
- Especially long load-bearing foot length due to moulded forefoot
- Adaptation of heel stiffness to individual user needs through use of included heel wedges
- Especially durable footshell with separate big toe. Choice of slim version with 15 mm heel height or normal version with 10 mm heel height

1C63 Triton Low Profile



Adapter
Pyramid adapter made of titanium

Triangular technology
with especially low structural height

1C64 Triton Heavy Duty



Adapter
Pyramid adapter made of titanium

Robust and waterproof,
for particularly challenging conditions

Advantages

Triton – Family of Products



1C60 Triton

The versatile carbon prosthetic foot – perfect for meeting the needs of active users

- All advantages of the Triton family of products
- Suitable for users up to 150 kg in MG 3 and 125 kg in MG 4



reddot design award
winner 2011



1C61 Triton
Vertical Shock

Increased shock absorption and torsion capability – for perceptible residual limb relief and improved stability with high activity

- Extended shock absorption thanks to increased axial deflection of spring (+ 8 mm)
- Additional torsion capability ($\pm 9^\circ$) for better adaptation in uneven terrain
- Reduced impacts and torsion forces between the residual limb and socket
- Compact design





1C62 Triton Harmony

The highly functional and compact prosthetic foot system with integrated Harmony vacuum technology

- Stronger connection between residual limb and prosthesis for increased safety
- Reduced volume fluctuations
- Improved proprioception
- Extended spring axial deflection (+ 8 mm)
- Torsion capability ($\pm 9^\circ$)
- Reduced impacts and torsion forces between the residual limb and socket
- Compact design



1C63 Triton Low Profile

Triangular technology – for especially low structural height

- For users with limited clearance
- Particularly robust thanks to the use of a titanium adapter
- Water-resistant
- Suitable for users up to 150 kg in MG 3 and in MG 4



1C64 Triton Heavy Duty

For particularly challenging conditions – at work or play

- Same dynamic response and flexibility as the 1C60 Triton
- Particularly robust thanks to the use of a titanium adapter
- Water-resistant
- Suitable for users up to 150 kg in MG 3 and in MG 4

Technical Data

Triton – Family of Products

Indication and area of application

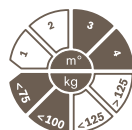
The Triton feet are designed for moderately to highly active patients with transtibial amputations, knee disarticulations, transfemoral amputations or hip disarticulations. According to MOBIS, the Otto Bock mobility system, they are recommended for patients with mobility grade (MG) 3 and 4 – unlimited outdoor walkers and unlimited outdoor walkers with especially high requirements. The maximum permissible patient weight is 150 kg.



Technical Data	1C60 Triton	1C61 Triton Vertical Shock	1C62 Triton Harmony	1C63 Triton Low Profile	1C64 Triton Heavy Duty
Suitable for	MOBIS 3–4				
Max. body weight	150 kg (MOBIS 3), 125 kg (MOBIS 4)			150 kg (MOBIS 3 and MOBIS 4)	
Sizes	21 cm to 30 cm				
Footshell	Slim shape for 15 mm heel height (sizes 21 cm–27 cm) Normal shape for 10 mm heel height (sizes 24 cm–30 cm)				
Customisation	Individual adaptation of heel function and rollover characteristics with two included heel wedges				
Weight without footshell (in size 26 cm)	approx. 460 g	approx. 760 g	approx. 760 g	approx. 415 g	approx. 535 g
Weight with normal footshell (in size 26 cm)	approx. 680 g	approx. 980 g	approx. 980 g	approx. 635 g	approx. 755 g
System height (in size 26 cm)	131 mm	177 mm	177 mm	45 mm	131 mm
Structural height (in size 26 cm)	149 mm	195 mm	195 mm	63 mm	149 mm
Recommended knee components MG 3	3R60, 3R46, 3R55, 3R95, 3R80, C-Leg, Genium				
Recommended knee components MG 4	3R46, 3R55, 3R95, 3R80, C-Leg, Genium				
Miscellaneous		<ul style="list-style-type: none"> +8 mm spring axial deflection ± 9° rotation possible 	<ul style="list-style-type: none"> +8 mm spring axial deflection ± 9° rotation possible 	Water-resistant	Water-resistant

MOBIS

1C60, 1C61, 1C62



Up to 100 kg
Size 21–24 cm



Up to 125 kg
Size 25–30 cm



Up to 150 kg
Size 25–30 cm

1C63, 1C64



Up to 100 kg
Size 21–24 cm



Up to 150 kg
Size 25–30 cm

Order Information

Delivery of a Triton prosthetic foot includes the 2C6 Footshell, a transparent (soft) heel wedge and a black (firm) heel wedge. The footshell is available in a slim version (S) with 15 mm heel height and a normal version (N) with 10 mm heel height. Both footshells can be supplied in beige (4) or light brown (15).

1C60 Triton, 1C63 Triton Low Profile, 1C64 Triton Heavy Duty*

Body weight	Sizes									
	21 cm	22 cm	23 cm	24 cm	25 cm	26 cm	27 cm	28 cm	29 cm	30 cm
up to 55 kg	1	1	1	1	1	1	-	-	-	-
56 – 75 kg	2	2	2	2	2	2	2	2	2	2
76 – 100 kg	3	3	3	3	3	3	3	3	3	3
101 – 125 kg	-	-	-	-	4	4	4	4	4	4
126 – 150 kg	-	-	-	-	5	5	5	5	5**	5**

* For the 1C64 Triton Heavy Duty, the delivery time may be extended by approx. 2 weeks.

** When combining this configuration of the 1C63 Triton Low Profile with the Genium, please contact Ottobock Customer Service.



Order example: 1C60, 1C63, 1C64

Article no.	=	Side	Size	-	Stiffness	-	P /	Colour	Shape
1C60	=	R	27	-	3	-	P /	4	N

1C61 Triton Vertical Shock & 1C62 Triton Harmony (Spring Stiffness – Functional Ring Stiffness)

Body weight	Sizes									
	21 cm	22 cm	23 cm	24 cm	25 cm	26 cm	27 cm	28 cm	29 cm	30 cm
40–47 kg	1-0 special order – please contact Customer Service						-	-	-	-
48–55 kg	1-1	1-1	1-1	1-1	1-1	1-1	-	-	-	-
56–65 kg	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2	2-2
66–75 kg	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3	2-3
76–87 kg	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4
88–100 kg	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
101–112 kg	-	-	-	-	4-6	4-6	4-6	4-6	4-6	4-6
113–125 kg	-	-	-	-	4-7	4-7	4-7	4-7	4-7	4-7
126–137 kg	-	-	-	-	5-8	5-8	5-8	5-8	5-8	5-8
138–150 kg	-	-	-	-	5-9	5-9	5-9	5-9	5-9	5-9



Order example: 1C61, 1C62

Article no.	=	Side	Size	-	Spring stiffness	-	Functional ring stiffness	-	P /	Colour	Shape
1C61	=	R	27	-	2	-	3	-	P /	4	N

- Slim footshell available
- Both footshells available
- Normal footshell available

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