

ottobock.

**NHS Multi-grip Hand Policy.**  
Multi-grip Hands.





# NHS England multi-grip hand policy.

NHS England reviewed the evidence supporting the use of multi-grip, myoelectric controlled prosthetic hands for adults and children with upper limb amputation, or, congenital limb difference. This evidence found the use of such devices to be beneficial, resulting in the approval of funding for people who meet the specified criteria. This represents a huge change in the prosthetic industry and provides significant opportunities for those living with upper limb amputation or limb difference.

Ottobock's multi-grip prosthetic hands transform the lives and abilities of amputees around the world, allowing them to perform simple tasks such as tying shoe laces, as well as giving back control over their lives and improving self-esteem. The new NHS England multi-grip prosthetic hand policy, introduced in August 2022, will now allow more amputees and those with congenital limb difference to experience these life changing devices.

Following an assessment, trial and approval process, prosthetists can now routinely prescribe these life changing products to any patients that fit the listed criteria. You can read the policy in full on the Ottobock website.

As a result of this policy, we are now able to offer our kits to all NHS centres across England, Scotland and Wales.



# bebionic.

## The perfect companion for everyday life.

### All the grips you need.

- 14 usable grip patterns and hand positions
- Supports wide range of ADLs
- Passively positioned thumb allows access to different grip patterns

### Durability and easy use.

- Fingertip palps are thicker and more durable
- Clevis links have been redesigned to protect against finger damage
- New, smoother coating on the gaitor means a significant reduction in friction which helps with dressing

### Function all day long.

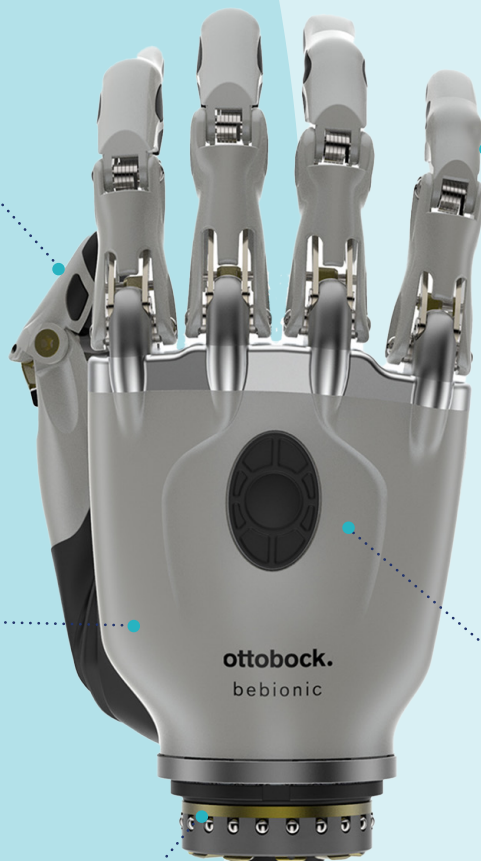
- Updates to the bebionic hand have doubled the stand-by time which reduces battery consumption

### Modern, sleek and natural.

- Can be used with or without a glove
- 2 colour choices - Matte Black or Polar White
- Sleek anatomical finger design with high quality surface coating
- Aluminium knuckles with tendon shaping
- Touchscreen compatibility on small hand
- Passively moving, spring loaded fingers flex away

### 3 wrist options.

- EQD - Electronic Quick Disconnect allows switching of terminal devices quickly and easily
- Short Wrist - For users with longer residual limbs
- Flexion Wrist - Allows lockable wrist flexion positions to help reduce compensatory shoulder movements
- Active wrist rotation can be incorporated to allow powered and proportional rotation (pro and supination) with input signals



# bebionic.

## 14 different grips.



### **Tripod Grip.**

Most commonly used grip for day-to-day tasks to carry larger objects with spherical or cylindrical shapes.



### **Pinch Grip.**

To pick up a wide range of small objects e.g. car keys, coins or lids.



### **Precision Open Grip.**

Quick, reliable method for picking up small objects. Fingers stay extended to keep the palm free.



### **Precision Closed Grip.**

Quick, reliable method for picking up small objects. Fingers fold away to block the palm.



### **Active Index.**

Effectively supports the use of devices with trigger mechanisms e.g. hand held sprays.



### **Power Grip.**

Adaptable grip for shaking someone's hand or using utensils for eating.



### **Hook Grip.**

The Hook Grip means you can safely carry briefcases or shopping bags.



### **Mouse Grip.**

Allowing the hand to hold and operate a computer mouse - can click, double click and drag and drop.



### **Key Grip.**

To hold thin flat objects such as plates or credit cards.



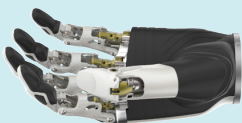
### **Column Grip.**

Can be used for operating levers and firmly pressing buttons e.g. in a lift, coffee machine or other devices.



### **Relaxed Grip.**

This grip is recommended when the hand is not actively used as it gives the hand a very natural appearance.



### **Open Palm.**

Effective way for carrying bowls or plates naturally in the palm, when the thumb is in lateral position.



### **Finger Adduction.**

Fingers adduct when they are flexed - great for holding thin objects between the flexed fingers.



### **Finger Point.**

Finger point is an extended index finger for pressing small buttons or typing on a keyboard.



# bebionic. Gloves.

Made of carefully layered, state-of-the-art silicone and reinforced with an integrated mesh liner, bebionic gloves are soft, easy to clean, and easily donned or doffed. These optional cosmetic gloves are highly crafted, including hand painted nails and a micropigmentation colouring process.

Available in 8 natural skin tone colours plus a jet-black option, bebionic Skin Silicone gloves add natural beauty and protection to the finished prosthesis.

- **Reduced layers for increased elasticity and perfect fit**
- **Easy donning and doffing**
- **Available in 8 different skin tones or jet black**
- **Easy to clean by the patient with just warm water and PH-neutral soap**
- **Natural design and appearance**
- **UV-resistant and thermally stable**



# Myo Plus.

## Pattern recognition made easy.

Myo Plus is a pattern recognition system that was developed to make using both a myoelectric hand and/or electric wrist rotator natural and intuitive for the user.

Designed for trans-radial users in combination with bebionic, Greifer and VariPlus/SensorHand Speed hands, Myo Plus pattern recognition uses 8 electrodes placed around the residual limb which map the natural muscle contractions of the user. Uniting artificial intelligence with the intuitive EMG signals of the user, Myo Plus adapts to their natural movements instead of requiring the user to adapt to the system. Offering direct, convenient control of the prosthesis without requiring any switching mechanisms, and the ability to fine-tune adjustments via an app, the Myo Plus system was designed with both the user and prosthetist in mind.

### Myo Plus pattern recognition.

The Myo Plus TR control unit measures and interprets muscle activity in the residual limb. It recognises movement patterns and assigns them to prosthesis movements.

### Myo Plus app.

The central interface acts like a “window into the prosthesis”. All settings can be accessed, controlled and configured individually, meaning you can provide your patient with a device which is individual to them.

### Grips tailored to the patient.

Myo Plus learns the user’s individual movement patterns and in addition to basic calibration, the user can add additional grip patterns to the bebionic hand via the Myo Plus app.

### Modern prosthetics.

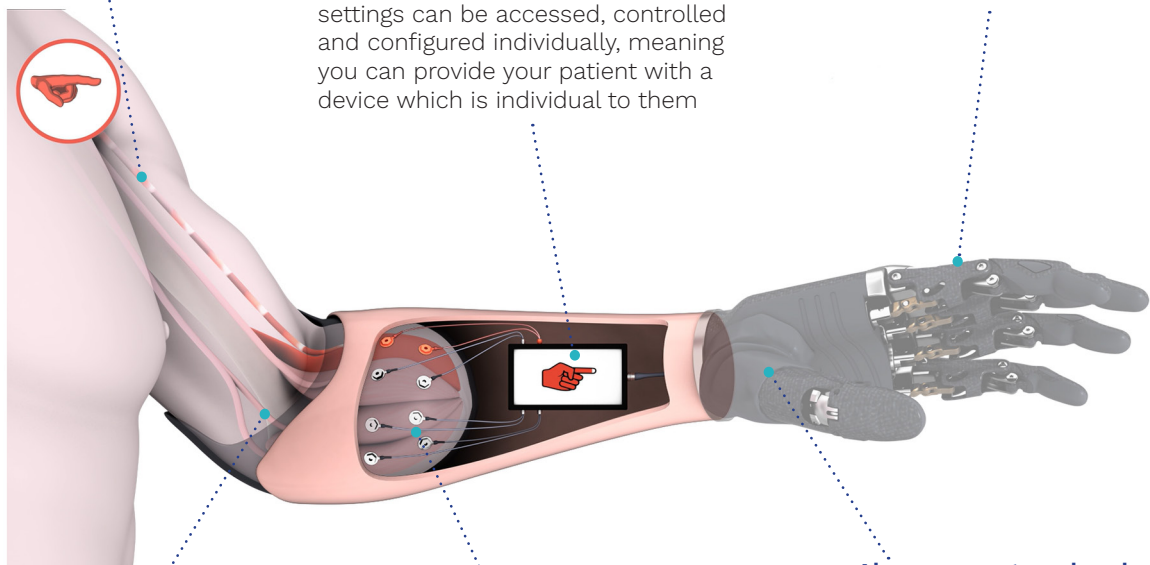
Myo Plus pattern recognition can recognise thought commands and translate them into movements. This means that amputees no longer have to study control functions. Instead, the control device learns to interpret commands correctly.

### Myo Cuff.

The Myo Cuff evaluates existing movement patterns and determines their quality without the need for a test socket. The cuff is combined with up to 8 electrodes which record muscle signals, taking more than 9000 measurements per second.

### Always one step ahead.

The Myo Plus ensures easy, intuitive and smooth prosthesis control - without the complicated and time-consuming process of switching between different grips.



# Michelangelo.

The perfect mix of precision control and outstanding aesthetics.

## Powered thumb.

- Anatomically correct powered thumb
- Switches position with signal from the users

## Automatic neutral position.

- A unique feature where the hand automatically returns to neutral position when there is no signal input
- Consistently knowing where the start position is, helps to reduce concentration for the user and improves intuitive control

## Natural design.

- The most cosmetically appealing multi-grip hand on the market
- Anatomically correct oval wrist shape
- When not in use, the hand automatically returns to neutral position
- Both hard and soft materials are used in the hand cover to replicate a natural feel
- In-built flexion wrist allows a natural, anatomical appearance
- The largest hand opening width on the market - allows the user to grip large objects easily

## Hand types.

- Michelangelo Transcarpal hand specifically for those with transcarpal level amputation/limb difference
- Regular hand for transradial and above levels of amputation/limb difference

## AxonRotation.

- By adding the AxonRotation wrist, the user has proportional, electronic wrist rotation

## Relaxed, flexion wrist joint.

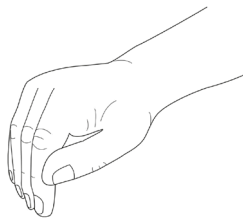
- Unique feature that helps to reduce unnecessary compensatory movements in the proximal joints
- Range of motion: 75 flexion, 45 extension
- In flexible mode, the wrist moves when pressure is applied, simulating the movement characteristics of a natural wrist joint
- The wrist can be locked in 9 different positions within the range
- By pressing the 2 release buttons, the user can quickly and easily switch the hand for the AxonHook





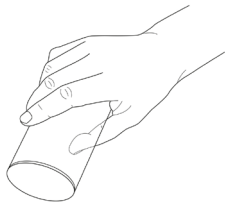
# Michelangelo.

## 7 different grips.



### **Lateral Pinch.**

The thumb moves lateral to the index fingers so that the user can grip flat items from the side.



### **Lateral Power Grip.**

Thumb moves sideways to index finger. This allows the user to grasp objects of medium size from the side.



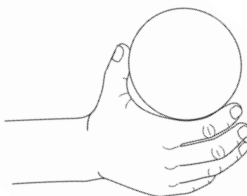
### **Finger Abduction/Adduction.**

Finger adduction takes place when closing the hand. This allows the user to grasp a flat item between the fingers (<2mm). Abduction takes place automatically when opening the hand.



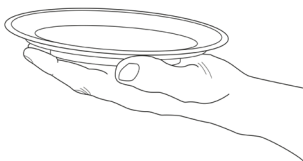
### **Tripod Pinch.**

The thumb, middle finger and index finger form a three-point support - so the user can hold small objects securely.



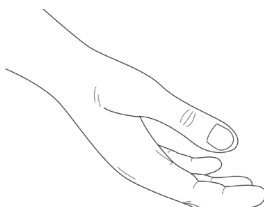
### **Opposition Power Grip.**

The greater opening width allows the user to hold objects with a large diameter.



### **Open Palm.**

In the open palm position, the thumb is at a wide palmar placement: the user achieves a flat hand position.



### **Neutral Position.**

Natural, physiological appearance in the rest position.

# Michelangelo gloves.

A total of four ranges of premium AxonSkin prosthetic gloves with varying characteristics are available for the Michelangelo hand. The user can therefore choose between different prosthetic gloves - tailored to their individual needs and preferences and optimised for their lifestyle. AxonSkin gloves offer the right solution for every requirement.



## AxonSkin Natural.

- Robust and highly durable PVC
- Special finish provides resistance to soiling and easy cleaning
- Hand-drawn knuckles, veins and fingernails

## AxonSkin Visual & AxonSkin Black.

- Robust and highly durable PVC material
- Translucent AxonSkin Visual allows the hand design to be seen through the glove
- Jet black AxonSkin Black provides a bold and modern look
- Fingertips and palm surface provide added grip
- Long length allows elbow joint covering



## AxonSkin Silicone.



- Low maintenance multi-layered silicone material
- Easy to clean with just soap and water
- Special friction-reducing coating allows for easier donning/doffing of clothing
- Hand-drawn knuckles, veins and fingernails







# Technical features at a glance.

## bebionic



## Michelangelo



<b>Hand Type</b>	EQD Short wrist Flexion wrist	Standard Transcarpal
<b>Thumb</b>	Manual	Powered
<b>Wrist Shape</b>	Round	Oval
<b>Wrist Rotation</b>	MyoRotronic and Electric Wrist Rotator	AxonRotation
<b>Wrist Flexion</b>	Flexion wrist hand - 5 locking positions +/- 40°	Freely moving range +/- 75- 40° with 8 locking positions
<b>Colours</b>	Small: white or black Medium: black only	Must be used with a glove
<b>Size</b>	7 1/4 (small) 7 3/4 (medium)	7 3/4 (medium)
<b>Weight</b>	Small - 433g Medium - 616g	Medium - 510g
<b>Opening Width</b>	10cm	12cm
<b>Grip Patterns/ Hand Positions</b>	14 grip patterns	3 grip patterns 7 total hand positions Adaptive index and middle finger
<b>Grip Force</b>	Tripod/Opposition - 36N Key Grip - 26N	Opposition - 70N Lateral - 60N Neutral Mode - 15N

## bebionic



## Michelangelo



### Grip Switching

2 EMG switching options, button, or manual thumb position

5 EMG switching options

### Glove

Silicone glove optional. Available in 9 colours inc. jet black

Glove required. Silicone or PVC available in 9 colours including translucent and jet black

### Battery Life

757B35=4  
2350 mAh

757B501  
1150 mAh

### Myo Plus Compatibility

Yes

No

### Myoelectric Hook Compatibility

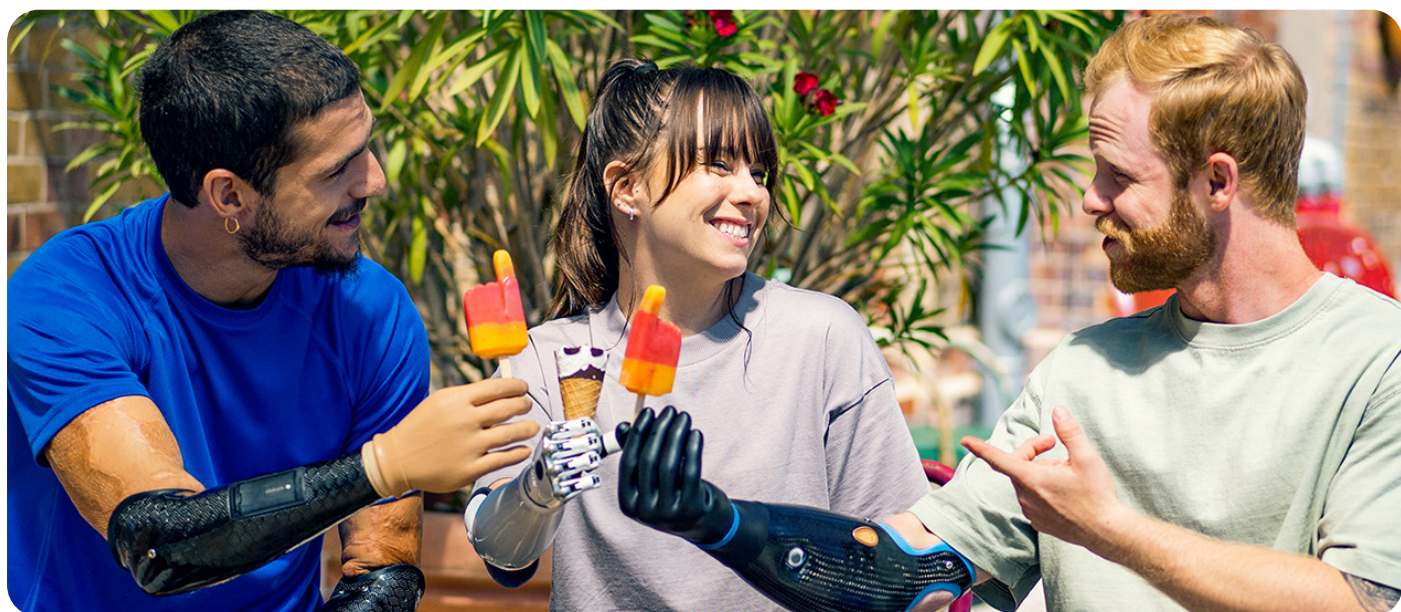
Greifer

AxonHook

### Adjustment Software

bebionic - bebalance+  
Myo Plus - Myo Plus App

AxonSoft









# Upper limb made easy.

## One part number for everything you need.

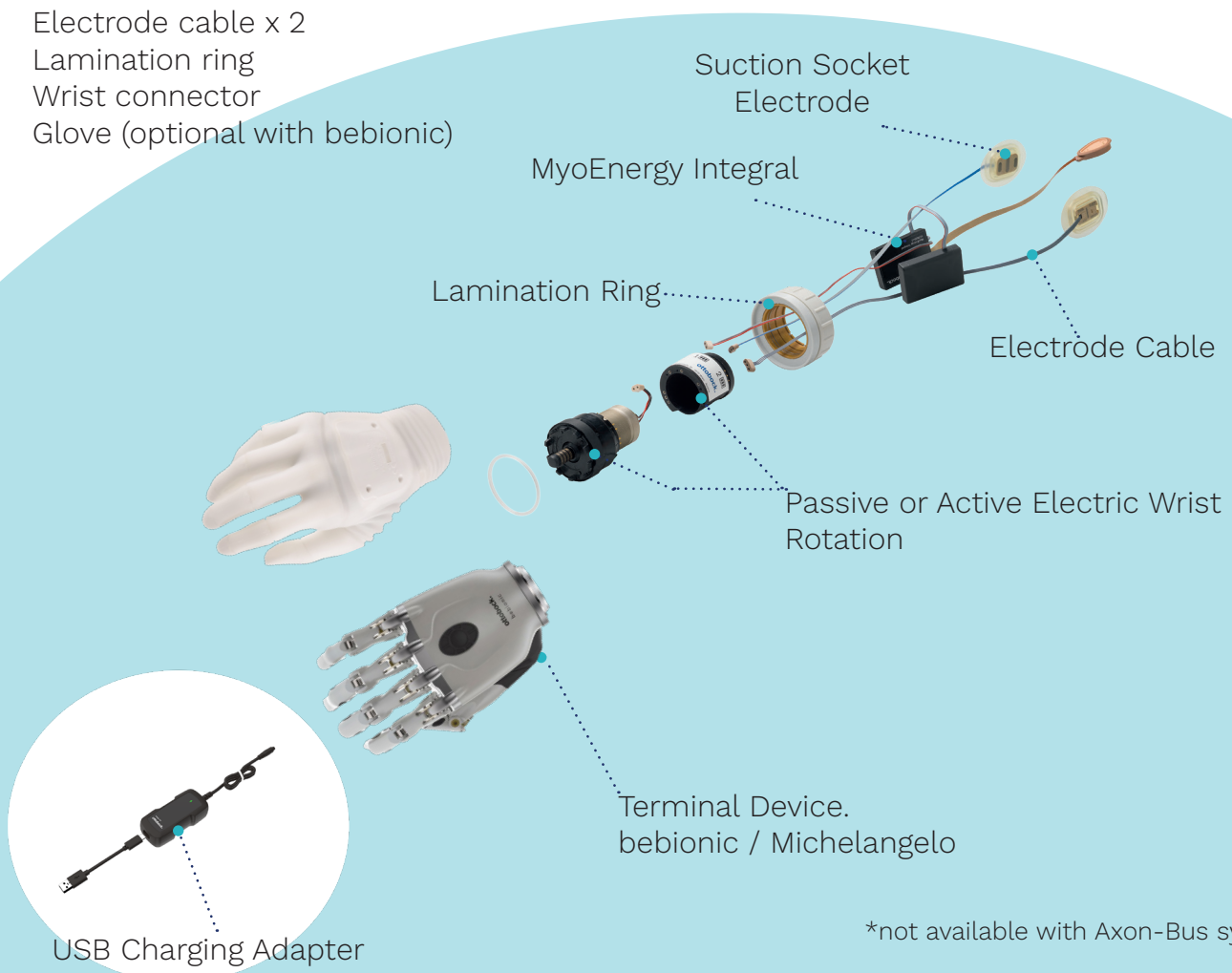
We know that the ordering process for upper limb components can often feel complex and detailed. That's why we have created a new way to simplify the process when ordering bebionic or Michelangelo; one part number for everything you need.

### What's included in our kits?

Each kit will come with all the relevant accessories to accompany your chosen hand to make your fitting complete.

#### Each kit includes:

- Hand
- 3 year warranty
- Passive or active electric wrist rotation
- Integral batteries and charger
- USB charging adapter\*
- Suction socket electrode x 2
- Electrode cable x 2
- Lamination ring
- Wrist connector
- Glove (optional with bebionic)






\*not available with Axon-Bus system

# Packages made simple.

## Part number configurators.

### bebionic

Hand Type	Wrist Rotation	Control	Part Number Without Glove	Part Number With Glove
 <p>EQD</p>	Passive Rotation	Electrodes	BBEQD1	BBEQD1G
		Myo Plus Pattern Recognition	BBEQD3	BBEQD3G
	Active Electric Rotation	Electrodes	BBEQD2	BBEQD2G
		Myo Plus Pattern Recognition	BBEQD4	BBEQD4G
 <p>Short Wrist</p>	Passive Rotation	Electrodes	BBSW1	BBSW1G
		Myo Plus Pattern Recognition	BBSW2	BBSW2G
 <p>Flexion Wrist</p>	Passive Rotation	Electrodes	BBFW1	BBFW1G
		Myo Plus Pattern Recognition	BBFW3	BBFW3G
	Active Electric Rotation	Electrodes	BBFW2	BBFW2G
		Myo Plus Pattern Recognition	BBFW4	BBFW4G

# Michelangelo

Hand Type

Wrist Rotation

Control

Part Number  
With Glove



Standard  
Michelangelo

Passive  
Rotation

Electrodes

MA1G

Active  
Electric  
Rotation

Electrodes

MA2G



Michelangelo  
Transcarpal

Passive  
Rotation

Electrodes

MATC1G





# Warranty & care packages.

## We've got you covered.

All of our multi-grip kits include a 3 year manufacturer's warranty package for the hand. We know that sometimes accidents happen, this is why we also include accidental mechanical damage protection, giving you and your patients peace-of-mind if they accidentally break a finger, for example. With the bebionic hand, you can even replace broken fingers yourselves, at your own clinic, with a few quick and easy steps. Simply order the free of charge replacement fingers and follow our simple instructions.

In addition, to ensure that your patients always have a safe and fully functional hand, as part of the warranty package they will receive 2 x free of charge, mandatory services. Of course, we'll ship a free of charge loaner unit to use whilst we have the hand in our service centre.

We know that travelling away from home for business or holidays can be a stressful time for patients. However, our Global Emergency Support concept can help to take that worry away and allow your patients to relax and enjoy their time. With just a few steps, we will locate and recommend the closest certified Prosthetist(s) to wherever your patient is in the world. Following that, your patient can make contact with them to arrange an appointment, and we will ship a loaner unit to their clinic for the exchange. Don't worry if your patient happens to have moved on to a different location, or has returned home before the repairs are finalised, we'll return their repaired unit to wherever they wish!

	bebionic	Michelangelo
3 year manufacturer's warranty	✓	✓
Accidental mechanical damage cover	✓	✓
Global emergency support	✓	✓
Free loaner unit during servicing and repairs	✓	✓
Free mandatory 24 month service	✓	✓
Free mandatory 48 month service	✓	✓
Free finger replacement* *See next page for details	✓	X

# Fingers you can now change in your clinic.

We realise the importance of getting any issues resolved quickly and minimising the time your patient is without their hand. We took that feedback into consideration when redesigning the new bebionic, and are pleased to say that

swapping the interchangeable fingers, can now be done by Prosthetists or Technicians in your clinic in just a few minutes. Alternatively, if your clinic doesn't have the facilities to carry out the work, you can send the bebionic back to us as normal for the work to be done. Fingers will be replaced free of charge during the warranty period.



## Changing fingers in your clinic.



Once your patient has contacted your clinic to notify you of a finger breakage, send us a purchase order into [BockUK@ottobock.com](mailto:BockUK@ottobock.com)



We will then arrange for the replacement finger(s) to be sent to you free of charge.



Your trained clinicians can then carry out the simple steps to replace the finger(s).



Search “bebionic Facelift - Interchangeable Fingers” on YouTube for a full tutorial.

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