ottobock.

hydronetic Product line.

Information for technicians

hydronetic **technology.** Casting systems with hydronetic pressure under full load.

hydronetic technology is an innovative impression system for transfemoral and transtibial residual limbs that uses hydrostatic pressure to evenly mould the impression material to the residual limb while it cures. Functional impression taking enables the soft tissue situation, bony structures and scar tissue to be accurately mapped under load, ensuring a good fit.

Lengthy manufacturing and fitting processes for the prosthetic socket are eliminated. At the same time, the treatment process with the ***hydronetic line*** is efficient and conserves resources.

The product line includes the ***hydronetic flex***, ***hydronetic compact*** and the innovative ***hydronetic lumeo***. With the ***hydronetic lumeo***, a fibre-reinforced check socket can be fabricated within a short time – without using any plaster.

hydronetic lumeo.
Check socket in a single session.

With ***hydronetic lumeo***, an impression can be taken of the residual limb and a transtibial check socket can be manufactured during a single visit – completely without plaster and with minimal workshop equipment.

Instead of plaster, resin-impregnated, glass fibre-reinforced ***lumeo*** casting socks are used to take the impression. This is moulded under full load with hydrostatic pressure and cures under UV light at the touch of a button. This type of impression maps the soft tissue situation, bony structures and scar tissue under load. The result is a glass fibre-reinforced check socket with a good fit.

The socket can then be thermoplastically re-shaped, sanded and built up in a conventional manner. This means the complete check socket treatment can be carried out during the first patient appointment – efficiently, quickly and practically.

The check socket connects seamlessly to the digital supply chain of Ottobock. Once the check socket has been completed, the ***TransferScan*** can be used to create a digital twin of it and convert it into a definitive socket using 3D printing. This offers the advantage of being able to treat patients without unnecessary waiting times.

Benefits at a glance

Faster treatment
- Thanks to an efficient workflow: (ready-to-deliver) check socket within 90 minutes and one visit

Good fit
- Functional impression taking under full load

High level of process control
- Curing process starts in a controlled manner at the touch of a button

Ideal for on the move
- Empty weight is only 27 kg – suitable for home visits and mobile workshop use.

hydronetic lumeo.
Casting process.

1 Preparing the system

- Fill the system with water and connect to the power supply

2 Adjusting the entry height

- Adapt the device height to the patient
- Adjust the height of the vector tower
- Select the appropriate adaptor cup and relief cushion
- Put in relief cushion
- Protect the system with plaster insulation grease

3 Preparing the residual limb

- Insert the cutting aid
- Protect the liner with stretch film
- Pull resin-impregnated ***lumeo*** casting socks over the residual limb and apply them evenly

4 Taking impressions and curing

- Patient gets into the system
- Water in the membrane encloses residual limb
- Impression of the residual limb under full load
- UV light cures the impression sock at the touch of a button
- Duration: ca. 10 minutes

5 Follow-up and fitting

- Trimming and sanding
- Fit check
- Alignment of the trial prosthesis

ⓘ For further information on the safety instructions, please see the corresponding Ottobock safety data sheet.

lumeo casting socks.

For the ***hydronetic lumeo***, resin-impregnated ***lumeo*** casting socks are used, which are pulled over the patients' residual transtibial limb and at the completion of the fitting process form the fibre-reinforced check socket. These are available in various sizes and ensure comparatively clean working during adaptation and less waste. In addition, the controlled curing time offers more flexibility for taking impressions.

The correct size of ***lumeo*** stockings can be determined by using the test socks or the measured residual limb circumference.

Article number	Size	Circumference (cm)
699P1=1	S	25 – 40
699P1=2	M	30 – 45
699P1=3	L	35 – 55
699P1=4	XL	40 – 65

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Models

	hydronetic flex	***hydronetic compact***	***hydronetic lumeo***
Area of application	Plaster cast	Plaster cast	Direct impression of a glass fibre-reinforced check socket/ Plaster cast
Amputation level	TT and TF	TT	TT
Pressure production	Water supply and compressed air	Manual Pump	Manual Pump
Materials	Plaster	Plaster	***lumeo*** casting sock/Plaster

hydronetic products

Article number	Product
743G17=1	***hydronetic compact***
743G18=1-1 / 743G18=1-4	***hydronetic lumeo***
743G19=1-1 / 743G19=1-4	***hydronetic lumeo*** – Upgrade set
743G16=1	***hydronetic flex*** Pressure tank TT
743G16=2	***hydronetic flex*** Pressure tank TF
743G20=1	***hydronetic flex*** Control unit

Supplies ***hydronetic lumeo***

Article number	Product
699P1=1	***lumeo*** casting socks S
699P1=2	***lumeo*** casting socks M
699P1=3	***lumeo*** casting socks L
699P1=4	***lumeo*** casting socks XL
633F103=1	Plaster insulating grease
616F39=30000x300	Airtight foil
642T6=350X500X0.25	Casting bags
99B25	Nylon stockinette
642F18	Stretch foil
642Y40	Dispenser stretch foil
641H46=S/M/L/XL/XXL	Disposable gloves nitrile black with grip