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Frame and container preforms made of carbon – efficient reinforcement for prosthetic sockets

Preforms represent a new generation in transfemoral socket fabrication.

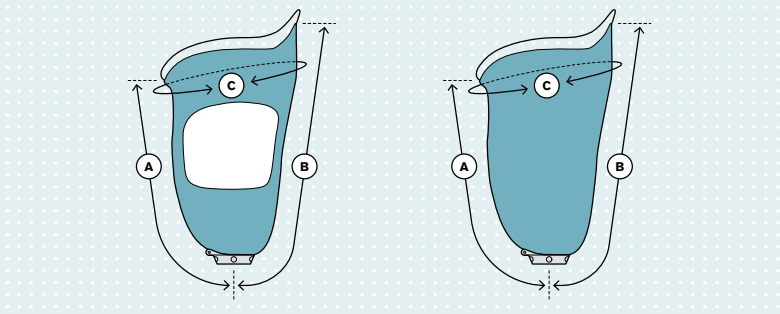
Highly rigid frame and container sockets can be produced with little effort by using prefabricated carbon elements.

In this context, prefabricated means that:
- Due to a special manufacturing process, the carbon fibres are oriented according to the load, corresponding to the forces that occur in the socket. High stiffness is guaranteed as a result. At the same time, the carbon fibres permit a low socket weight by minimising the use of material.

- The carbon set consists of three separate pieces that can be applied directly to the isolated plaster model using spray adhesive (636K40). This application saves time as there is no need to cut carbon fibre mesh supplied in rolls or sheets, including double-sided tape.

Since the layer structure of the prefabricated pieces is pre-determined, mistakes during reinforcement that could for example affect the stability of the socket are avoided. Using preforms also reduces waste that is produced when reinforcement materials are cut to size.

Benefits at a glance
- Clean and easy processing
- Pre-determined layer structure
- Simplified fabrication and less time to fabricate a socket
- Waste of expensive reinforcement materials is minimised
- Simplified quantity control in comparison to rolled and sheet goods



Reference number	Description	Measurements (mm)		
		A	B	C
5Z16=280X700X150	Frame preform	280	370	700
5Z16=350X700X150	Frame preform	350	500	700
5Z17=280X700X150	Container preform	280	370	700
5Z17=350X700X150	Container preform	350	500	700

Article number	5Z16 Frame preform 5Z17 Container preform
Package contents	Three preforms for fabricating a prosthetic socket
Order by	1 pc.
Recommended components	4R41, 4R42, 4R42=1, 4R43, 4R89, 4R114, 4R111=T, 4R111=N, 4R116, 4R116=T, 4R117, 4R117=T, 4R119=NT, 4R119=T, 4R119, 4R119=N, 4WR95=1, 4WR95=2

≤ 150 kg

Processing instructions
- Apply the M/L section with the short side oriented medially. Round the edges when shortening to the correct length.
- Wrap around the radial section: position the reinforcement triangle medially in the perineum with the point towards the end of the residual limb. The radial section can be used for left-hand (carbon on the outside) and right-hand (carbon on the inside) sockets. Perform the first casting with the M/L section and the radial section.
- Attach the anchor and position the faces of the star so they are centred over the anchor arms. Perform the second casting with the anchor and star.

The carbon preforms can be processed with all Ottobock resins.

Further information available at:
pe.ottobock.com/en/5z16-5z17.html