

Zymo-Teck® process: the secret of the quality of grafts and membranes

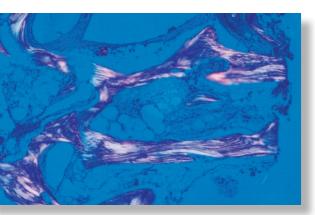


Bioteck®, a leader in the production of tissue substitutes of natural origin, has developed the exclusive deantigenation **Zymo-Teck**® process. The **Zymo-Teck**® process, unlike other processes based on high temperature treatments or using chemical solvents, uses enzymes, natural proteins able to precisely and selectively remove the various unwanted substances, making the tissues completely bio-compatible and devoid of treatment residues. **Zymo-Teck**® also preserves useful molecules, such as collagen in its natural structure and, operating at controlled temperatures, does not alter the structural characteristics of the tissues.

The stringent in-line quality controls implemented by **Bioteck®** at all stages of processing guarantee the highest quality of grafts: to obtain the best surgical outcome.

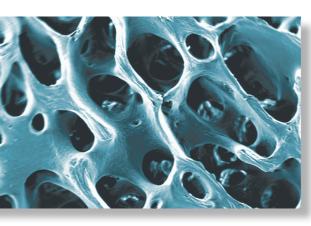
Improve your knowledge about the **Zymo-Teck**® process by selecting the QR-Code on the right.

Preserved bone collagen



Grafting bone collagen into the defect creates a precise biological condition: osteoblasts, the cells responsible for the formation of new bone tissue, produce collagen fibers that are then saturated by calcium minerals. It's the same three-dimensional structure of collagen that allows the nucleation of crystals of bone apatite, through a physical phenomenon called epitaxy. In addition, the type I bone collagen stimulates, both at cellular and subcellular level, an extremely high number of processes involved in bone regeneration. The presence of bone collagen in **OX®** is also demonstrated in polarised light: collagen fibres, having a regular texture, presents a refractivity characteristic that makes it look lighter.

Total remodeling



OSTEOXENON® is reworked and reabsorbed through the action of osteoclasts. This happens with entirely physiologic kinetics: as well as the patient's bone it is fully remodeled within 8-12 months, as it happens for **OSTEOXENON®**: after this period it is completely replaced by the patient's bone. This is possible because **OX®**, unlike other materials, is recognized as the optimum substrate by osteoclasts that reabsorb it physiologically; only in this case, in fact, the regenerative process may end with the complete replacement of the graft. If the material is remodeled and is reabsorbed physiologically there can be no loss of volume. If the material is reabsorbed too quickly (e.g. calcium phosphate) or too slowly (e.g. synthetic hydroxyapatites) the volume of new endogenous bone is not equal to the grafted volume. **OSTEOXENON®**, however, by remodeling itself through osteoclastic activity, it keeps the grafted volume.

BIOTECK°

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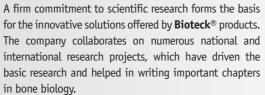
Production and R&D Center:

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Bioteck® is an Italian company producing bone substitutes and protective membranes that are successfully used in orthopaedics, neurosurgery, oral and maxillofacial surgery.

Founded in 1995, the company continues to grow constantly and now operates in more than 50 countries

ound the world.



The in-depth knowledge acquired by **Bioteck®** through its research ensures the absolute quality of its products, which are subjected to strict environmental and quality controls, thereby guaranteeing a product meeting the highest quality and safety standards.

Bioteck® applies a policy of total transparency, opening up the doors of its Production and R&D Center for the monitoring of its innovative process and the intense scientific research carried out by its staff.







bioteck.com



In over twenty years of scientific research and clinical practice, **Bioteck**® has made an important contribution to the clinical/scientific knowledge in the field of tissue biology.

The **Bioteck Academy** is the meeting place of all the excellences that continuously contribute to the development of this knowledge and **Bioteck**® products.

The Academy has developed a culture of sharing scientific knowledge aimed at the **dissemination of best techniques and practices in the various areas of regenerative surgery** and is open to all professionals who decide to participate in this activity by sharing their surgical experience.

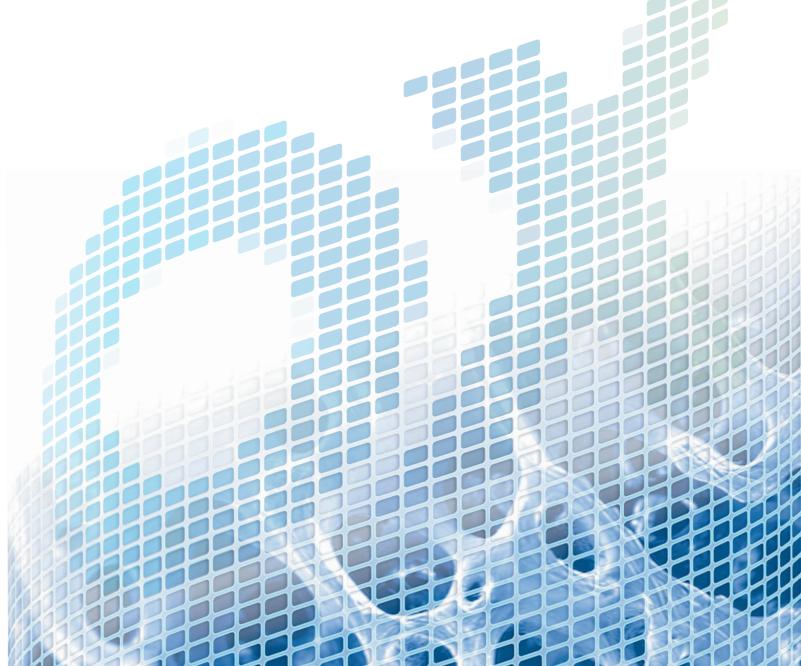
More information on the activities of the Academy can be found at: www.bioteckacademy.com .

bioteckacademy.com



Complete line of collagenated bone substitutes and membranes

ENZYMATIC DEANTIGENATION
PRESERVED BONE COLLAGEN
TOTAL REMODELING
CLINICAL SUCCESS







GRANULES IN VIAL

OX40 Cortical	$0.5 g \approx 1 cc$	(0.5 – 1 mm)

OX35 Cancellous- cortical mix $0.25 g \approx 0.5 cc$ (0.5 - 1 mm)

OX31 Cancellous- cortical mix $0.5 \text{ g} \approx 1 \text{ cc}$ (0.5 – 1 mm)

OX32 Cancellous- cortical mix $1 g \approx 2 cc$ (0.5 – 1 mm)



BLOCKS

 OX51 Cancellous block
 1pc
 10 x 10 x 10 mm

 OX52 Cancellous block
 1pc
 10 x 10 x 20 mm



FLEX

OX01 Flexible cancellous sheet1pc25 x 25 x 3 mmOX02 Flexible cortical sheet1pc25 x 25 x 2 - 2.5 mm



COLLAGEN MEMBRANE

BCG-XC30 Collagen membrane 1pc 30 x 25 x 0.2 mm



GRANULES IN SYRINGE

OX21 Cancellous- cortical mix 2 syringes 0.25 ml

OX22 Cancellous- cortical mix 2 syringes 0.50 ml



CORTICAL MEMBRANE

OX03 Cortical membrane 1pc 25 x 25 x 0.2 mm



	Granules in vial			Granules in syringe Flex Sheets			Blocks	Membranes			
= suggested = alternative/optional	Cancellous Granules 0.5-1.0 mm	0X31 0X32 0X35 0X41 Cancellous Cortical Granules 0.5-1.0 mm	OX33 OX34 OX36 OX39 Cancellous Granules 2-3 mm 2-4 mm	0X40 Slow resorption Cortical Granules 0.5-1.0 mm	OX21 OX22 Cancellous Cortical Granules 0.5-1.0 mm	OXO1 Cancellous Flex 25x25x3 mm	OXO2 Cortical Flex 25x25x3 mm	OX51 OX52 Cancellous OX05R Cancellous Cortical	BCG-XC30 Collagen Membrane 30x25x0.2 mm	OXO3 Cortical Membrane 25x25x0.2 mm	
Periodontal defect (very small, difficult access)											
Periodontal defect - Infrabony defects (1-3 walls) - Furcation defects (class I or II)											
Peri-implant defect (up to 3 exposed threads)											
Peri-implant defect (more than 3 exposed threads)								• • • • • • • • • • • • • • • • • • • •			
Post-extractive socket (preservation)											
Sinus lift (Misch, traditional)			As an altemative to 0X31/32						Also for membrane tear if < 5 mm		
Sinus lift (variation according Tulasne or membrane tear, if > 5 mm)			As an altemative to 0X31/32			As an alternative to 0X-31/32					
Sinus lift (Summers)		As an alternative to 0X21/22									
Horizontal ridge augmentation* (onlay)	To fill gaps, if present	To fill gaps, if present			To fill gaps, if present	As an altemative to 0X-51/52/					
Horizontal ridge augmentation (split crest)											
Vertical ridge augmentation and contemporary implant placement (block technique)	To fill gaps, if present	To fill gaps, if present			To fill gaps, if present						
Vertical ridge augmentation and contemporary implant placement (Ludovichetti approach)											
Vertical ridge augmentation* (onlay, two steps)	To fill gaps, if present	To fill gaps, if present			To fill gaps, if present						
Vertical ridge augmentation (inlay)	To fill gaps, if present	To fill gaps, if present			To fill gaps, if present						
Volumetric preservation (for esthetics)											

^{*} Or a combination of horizontal and vertical augmentation