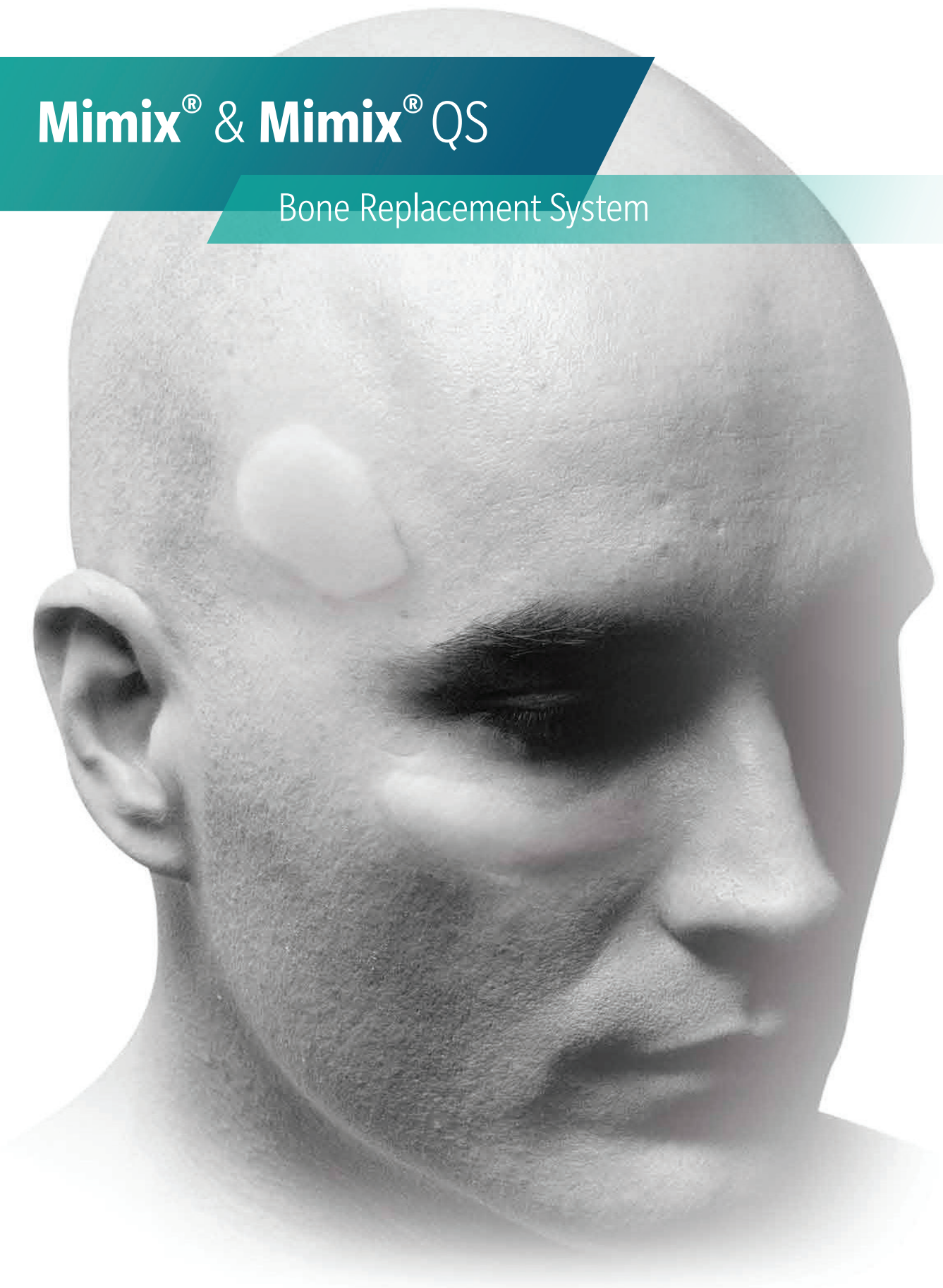


# Mimix<sup>®</sup> & Mimix<sup>®</sup> QS

Bone Replacement System



CMF



**ZIMMER BIOMET**  
Your progress. Our promise.™



## Innovative Solutions For Cranial Defects Repair

Mimix and Mimix QS are hydroxyapatite (HA) based mixtures of tetracalcium and an alpha (α)-tricalcium phosphate material ideal for the repair of cranial defects. Both share the same proven quality, but Mimix QS sets in less time, providing the surgeon with quicker closure.

The optimal handling properties of both Mimix and Mimix QS include fast, easy mixing and implantation in a moist field. The indications for both are for the repair of neurosurgical burr holes, craniotomy cuts and restoration and augmentation of bony contour in the craniofacial skeleton. All Mimix material is easily moldable, biocompatible and designed to maintain consistent volume and size once the product has set. In general, the longer working time of Mimix allows for better contouring of large defects (25cm<sup>2</sup> size) while the shorter setting time of Mimix QS allows for quicker closure.

## Mimix & Mimix QS Features

- Exhibits biocompatibility
- More radiopaque than natural cranial bone and will not undergo any change in volume or size
- Mixed in an open bowl and sets in a typical surgical environment
- Sets at an isothermal temperature that will not damage surrounding tissue
- Easily shaped and molded for augmentation of small cranial defects as well as for onlay applications
- Can be placed directly on the dura

## Mimix® & Mimix® QS Properties

	MIMIX®	MIMIX® QS
Rapid Mixing	30 - 45 sec	30 - 45 sec at 30 sec wait
Working Time	2 - 4 min	1 - 2 min
Setting Time	3 - 4 min	1 - 2 min
Hardening Time	4 - 6 min at 37° C	4 - 6 min at 37° C
Compression Strength	3,300 PSI at 37° C	3,250 PSI at 37° C
Sizes	5, 10, 25 grams	5, 10 grams

Notes: Times are approximate and determined by simulated clinical use.

## Mimix® Mixing Instructions

It is important to note that Mimix material should not be mixed with hands because the working time can be reduced significantly. Also, for optimal use, the Mimix powder should not be mixed with any liquids other than the dilute citric acid provided.

1. After opening the sterile packaging, take the vial of Mimix powder and pour it into the disposable bowl.
2. Next, take the vial of dilute citric acid, which is appropriately sized for the powder it is packaged with, and pour all the liquid into the same mixing bowl.
3. Using the mixing spatula, blend the powder and liquid together until they form a dough-like paste.
3. When the correct consistency has been achieved, begin applying Mimix material from the mixing bowl directly onto the defect site.





## Mimix® Handling Instructions

### Spatula Dip Test

After the Mimix material has been mixed, insert the spatula into the paste and retract. When the spatula end leaves an impression in the material without the material filling in, it is ready to be applied to the field. If the indentation fills in too quickly, or the material is too runny, continue mixing, then try the dip test again. If the material is too firm to indent with the spatula, you have mixed it beyond the working time and must start over.

Another alternative is to place the mixed Mimix material on the side of the bowl and tilt the bowl sideways. If the material slides easily down the side, it is too runny. If the material stays in place, it is the desired consistency.



## Mimix® QS Mixing Instructions

1. Open the sterile blister pouch and remove the Mimix QS bottles. Control hemostasis at the surgical site.
2. Open the bottle tops and empty the contents into the mixing bowl, taking care not to spill any liquid or powder. Ensure that all contents of bottles have been extracted.
3. Rapidly mix materials together for 30 seconds. Wait another 30 seconds and then apply the Mimix QS material to the defect. Complete all contouring within the one-to-two minute working time.
4. Mimix QS is an HA material that must be allowed to cure. While the material is setting, it must not be disturbed, because it could crack if manipulated. Allow the material to completely set before closing and do not attempt to drill directly into the implant, as this may cause the implant to shatter.



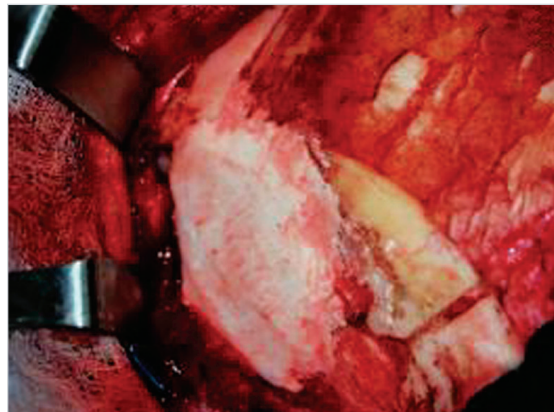
Note: For quality purposes, no more than 10 grams of Mimix QS should be mixed together at one time, or handling properties could be significantly altered.

## Cranial Augmentation Repair



### Pre-Operative

50-year-old male with left temporal unilateral hollowing due to muscle atrophy and flap settling.



### Intra-Operative

Titanium plate was removed and cranium was augmented with the Mimix material.



### Post-Operative: 1year

Front view



### Post-Operative: 1year

Side view

## Mimix® Ordering Information

Each package of the Mimix formulation includes one pre-measured vial of powder, one pre-measured vial of dilute citric acid, disposable mixing container, a mixing spatula and four patient labels. Please contact your Zimmer Biomet distributor or our Customer Service Department to place your order. Mimix Bone Replacement System is available in three convenient sizes and includes everything you need for mixing.

ITEM#	DESCRIPTION	VOLUME
02-2005	5 gram package	3.45 cc
02-2010	10 gram package	6.9 cc
02-2025	25 gram package	17.25 cc

## Mimix® QS Ordering Information

Mimix QS is available in two convenient sizes and includes everything needed for mixing.

ITEM#	DESCRIPTION	VOLUME
02-1105	5 gram package	3.45 cc
02-1110	10 gram package	6.9 cc



# ZIMMER BIOMET

Your progress. Our promise.™

For more information on Mimix® or Mimix® QS, please contact us at:

**BIOMET MICROFIXATION GLOBAL HEADQUARTERS**

1520 Tradeport Drive • Jacksonville, FL 32218-2480

Tel 904.741.4400 • Toll-Free 800.874.7711 • Fax 904.741.4500 • Order Fax 904.741.3059

[www.zimmerbiomet.com](http://www.zimmerbiomet.com)

**EUROPE**

Toermalijnring 600 • 3316 LC Dordrecht • The Netherlands

Tel +31 78 629 29 10 • Fax +31 78 629 29 12

All content herein is protected by copyright, trademarks and other intellectual property rights owned by or licensed to Zimmer Biomet, Inc. or its affiliates unless otherwise indicated, and must not be redistributed, duplicated or disclosed, in whole or in part, without the express written consent of Zimmer Biomet. This material is intended for healthcare professionals and the Zimmer Biomet sales force. Distribution to any other recipient is prohibited. Zimmer Biomet does not practice medicine. Because this information does not purport to constitute any diagnostic or therapeutic statement with regard to any individual medical case, each patient must be examined and advised individually, and this information does not replace the need for such examination and/or advice in whole or in part. Each physician should exercise his or her own independent judgment in the diagnosis and treatment of an individual patient. Check for country product clearances and reference product-specific instructions for use. For complete product information, including indications, contraindications, warnings, precautions and potential adverse effects, see the package insert or [www.zimmerbiomet.com](http://www.zimmerbiomet.com).