ORTHOPAEDICS

Cal-CEMEX®

TECRES

ADVANCING HIGH TECHNOLOGY

“Knowing
that our products
every day improve
the lives of many people.
This is our ambition.
This is our reward.”

Giovanni Faccioli, President.

TECRES

Cutting-edge technologies and constant research to improve the lives of many people. This is the vision of Tecres since 1981, operating in sinergy with surgeons, Universities and Research Institutes in order to invent, realize and provide the market with safe, effective and innovative products.
We are specialized in acrylic resins since 1986 with medical applications in fields such as orthopaedics, spinal surgery and neurosurgery. Our excellence and reliability are recognized in more than 70 Countries around the world.

CAL-CEMEX®

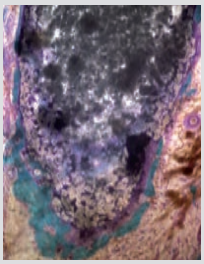
The innovative reinforced bone substitute,
osteoconductive, porous and mechanically superior.
Thanks to the hybrid formula ß-TCP + PMMA,
it combines the advantages of both components.

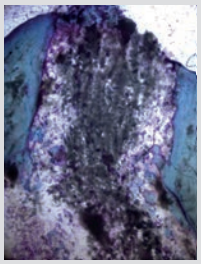
ADVANTAGES OF THE ß-TCP COMPONENT:

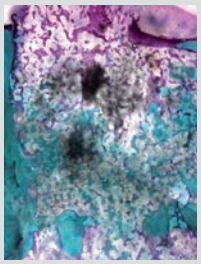
OSTEOCONDUCTIVITY[1]

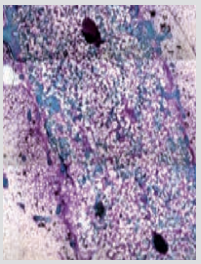
Bone tissue gradually grows inside the biomaterial.[6]
The ß-TCP portion is gradually reabsorbed, leaving space for bone ingrowth.

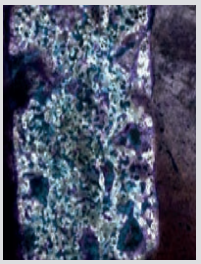
OSTEOID TISSUE BONE TISSUE BONE CEMENT


1st month


3rd month

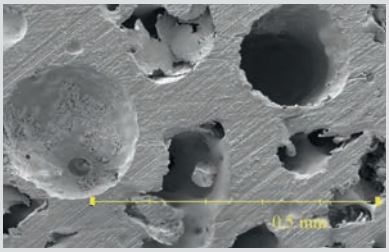

6th month


9th month


12th month

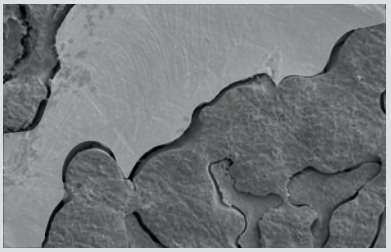
OSTEOCONDUCTIVITY FAVOURED BY POROSITY

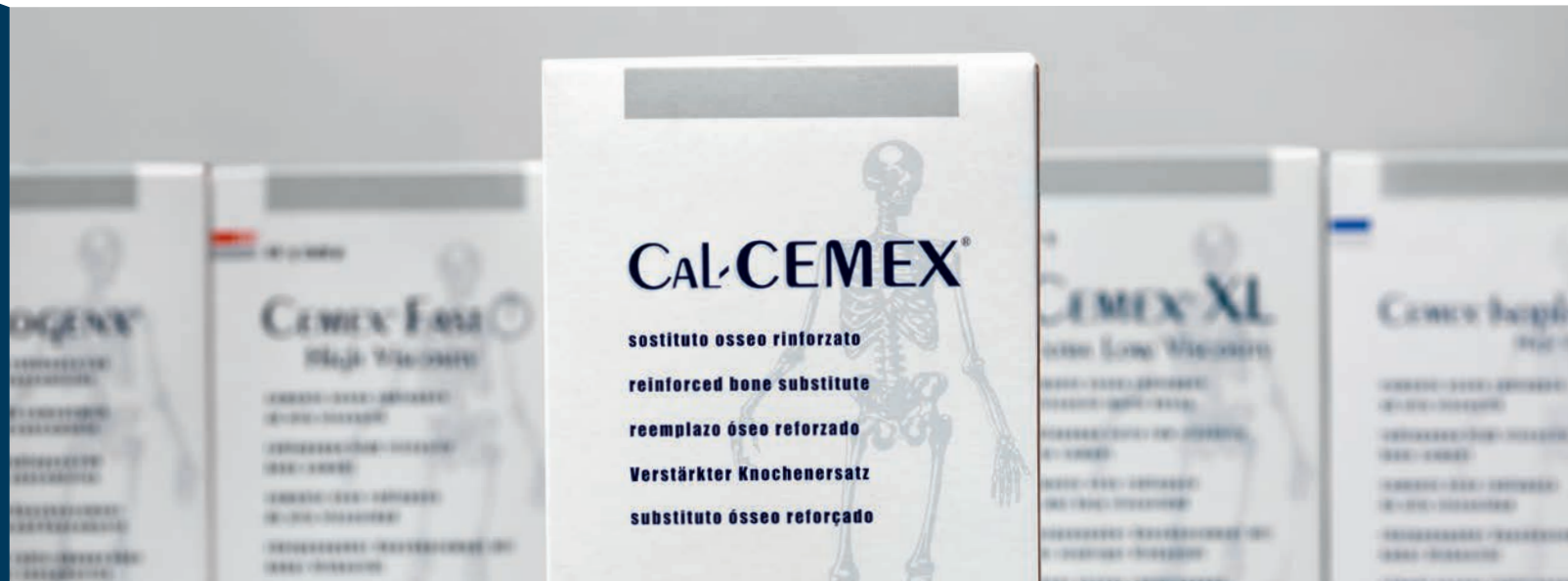
	OPEN POROSITY[2]	MICROPOROSITY[3]	MACROPOROSITY[4]
OBTAINED BY	Special ß-TCP + PMMA formula	Part of the fine powder that constitutes the material	Cavities up to 500 µm, obtained by the programmed dissolution of a pre-set number of ß-TCP granules
FEATURES	Capillarity	Resorbability	Osteoconductivity
EFFECT	The special formula allows fluids to penetrate inside the material, to favour bone ingrowth.	The bone is able to rebuild in a more diffuse manner.	Macropores house the new bone tissue, allowing differentiation into lamellae.



Microporosity and macroporosity


= Newly-formed bone (histological image)


= Bone lamellae (microscopic analysis)



ADVANTAGES OF THE PMMA COMPONENT:

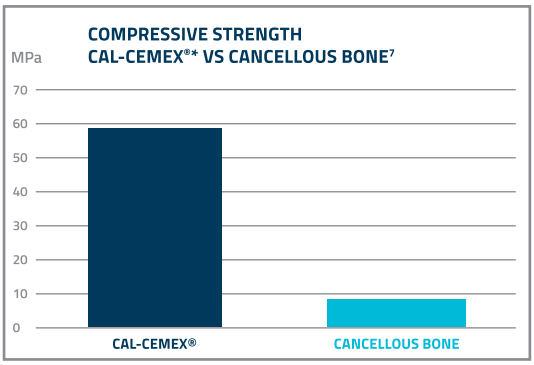
RESISTANCE

It achieves maximum mechanical resistance immediately after polymerization.

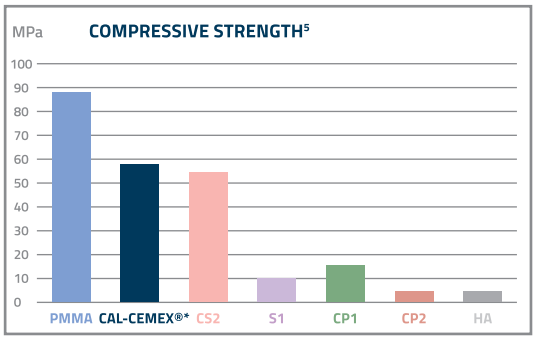
Unaltered resistance over time.

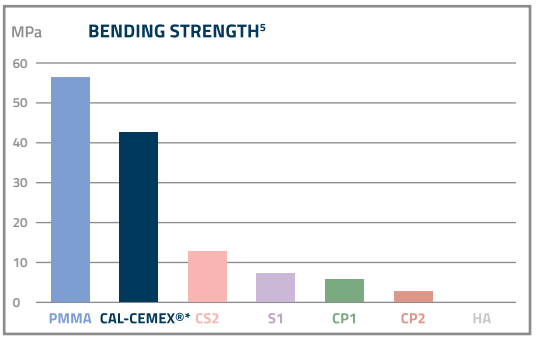
Long-lasting support for bone tissue.

Unchanged volume over time.



SUPERIOR PERFORMANCES





Cal-Cemex® boasts superior mechanical resistance to bone substitutes containing calcium sulphate (CS), calcium phosphate (CP) and hydroxyapatite (HA).

* In-house tests performed according to ISO standard 5833.

Scan the QR code and discover Cal-Cemex® properties

EASY TO USE

Cal-Cemex® can either be applied manually or injected into deeper structures. Working time up to 5 min. and 45 sec. ** It is radiopaque and therefore visible on X-rays.

INDICATIONS

Cal-Cemex® is a bone void filler intended for bony voids or defects that are not intrinsic to the stability of the bony structure.

POSSIBLE USES

Fractures of the distal radius
Fractures of the proximal/distal tibia
Calcaneal fractures
Filling of cavities left by revision procedures
Fractures of the femoral or distal femur
Fractures of the proximal humerus
Acetabular fractures
Filling of cystic lesions

** applied by syringe

XTRUDER®

The device for easy and fast application even of high viscosity resins and bone void fillers.

Xtruder® is the new Tecres device for application of acrylic resins and bone void fillers prepared with the Shakit® mixer.

ADVANTAGES

Easy to fill: Thanks to the scraper ring, all you have to do is insert the Xtruder® syringe into Shakit® and the product will flow into the syringe until it is full (maximum capacity:10 ml).

Easy to apply: The specially designed shape and size of the ergonomic grip allow very easy extrusion of low, medium and even high viscosity resins.

SHAKIT®

The device for easy mixing even of high viscosity resins and bone void fillers.

CHARACTERISTICS

With Shakit® the material can be mixed by shaking or using a spatula (based on the grammage and viscosity of the resin or bone filler)*

Mixing by shaking of high viscosity material is optimised by a hammering ball inside the device.

*Shakit® mixes by shaking up to 20g of low/medium viscosity and up to 10g of high viscosity powder.

ORDERING INFORMATION

CODE	PRODUCT	DETAILS
13A6000	CAL-CEMEX®	10 g
ASA038A	CAL-CEMEX® + SHAKIT®	
ASA038B	CAL-CEMEX® + SHAKIT® + XTRUDER®	
ASA0390	XTRUDER®	
ASA0380	SHAKIT®	

BIBLIOGRAPHY

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