

CEMEX[®] SYSTEM EVO

The Cemex[®]
System
Evolution



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ADVANCING HIGH TECHNOLOGY

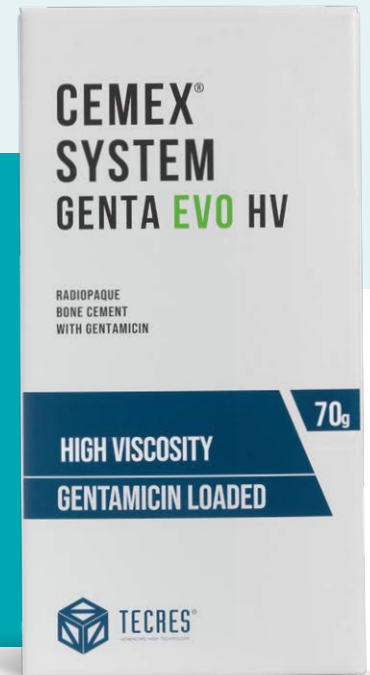


THE CEMEX® SYSTEM EVOLUTION

Cemex® System EVO is the result of over 30 years of expertise in advanced closed cementation systems. Designed to meet the needs of modern surgeons, Cemex® System EVO offers both Medium and High Viscosity bone cement options with a seamless, user-friendly active mixing process. Its intuitive application, aided by a precision applicator gun and pre-cutted cannula, ensures ease and control every step of the way. Plus, the stable green color enhances visibility for greater surgical precision.

Evolution of excellence: what's new in Cemex® System EVO

- Available in Medium or High Viscosity
- Active mixing system
- Pre-cutted cannula
- Green color
- Possibility to connect with vacuum



CEMEX® SYSTEM EVO

Cemex® System Evo is a closed, syringe-like system device for the preparation, mixing and application of the bone cements.

Thanks to the system structure itself, the cement components are isolated from outside contamination or influences, allowing the surgeon to prepare and apply the cement without coming into contact with it.

Each device package contains:

- A **closed, syringe-like system**, with separate compartments for the powder and liquid components;
- A **pre-cutted cannula** for the extrusion of the bone cement. This can be used to facilitate the extrusion directly in situ;
- A **pusher-rod** to assist the extrusion of any residual bone cement from the cannula;
- A **vacuum tube** (the device can be connected to a vacuum source or it can be used without vacuum during mixing step).



+ Advantages of the Gentamicin loaded version

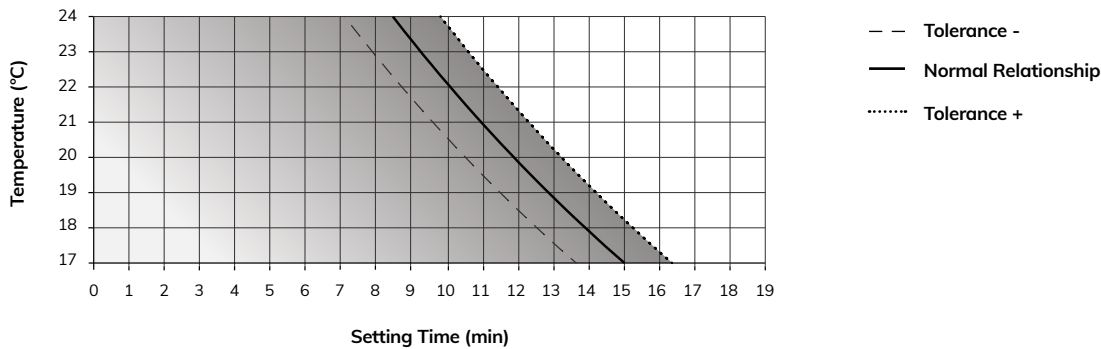
- Broad spectrum of action¹
- Bacterial adhesion prevention²
- Local AB release^{2, 3, 4, 5, 6}
- Long-term fixation of revision prosthesis following a septic process^{7, 8, 9, 10, 11, 12}

Preparation Steps

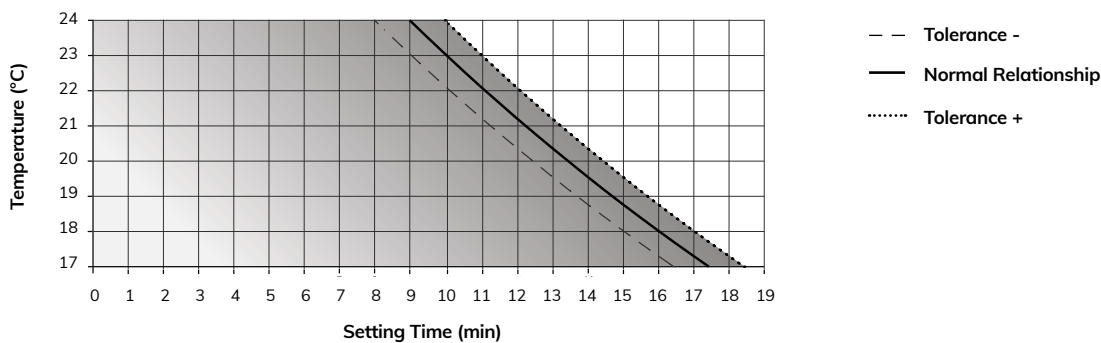
- 1** The Cemex® System EVO can be connected to the vacuum.
- 2** Tap the powder chamber in order to lose the powder before start the mixing process.
- 3** With the system standing upright on the base, strike the top button. When you see liquid monomer flowing, pump the release button several times to transfer all the liquid monomer into the powder chamber.
- 4** OPTIONAL. Attach the vacuum tube to the device and switch on the vacuum pump for 10-30 seconds.
- 5** Rotate the mixing rod counter-clockwise to unlock the rod and begin mixing by pulling and pushing the mixing rod for 1 minute. Start mixing upright and after few seconds turn the device upside down and complete the mixing.
- 6** Remove the mixing rod by pulling the mixing rod to full extension and rotating the rod counter-clockwise until it is removed.
- 7** Attach the breakaway nozzle by screwing onto the end of system where the mixing rod was removed.
- 8** Remove air from the mixing chamber by holding the system vertically with the nozzle upright and pushing the ampoule chamber in to the mixing chamber until air has been expelled and cement moves in the nozzle.
- 9** Load the whole system into the Cemex® System EVO Gun for extrusion.

Time-Temperature Charts

CEMEX® SYSTEM GENTA EVO HV (High Viscosity) - Setting Time Temperature Chart



CEMEX® SYSTEM GENTA EVO MV (Medium Viscosity) - Setting Time Temperature Chart



Ref	Product
13A2440	CEMEX® SYSTEM GENTA EVO HV
13A2450	CEMEX® SYSTEM GENTA EVO MV
ASA0430	CEMEX® SYSTEM EVO GUN

Reference

- Kucers a, Bennet N. **The use of antibiotics – 4th Ed. 1987, Butterworth-Heinemann Ltd**
- Bertazzoni Minelli E et al. **Different microbial biofilm formation on PMMA bone cement loaded with gentamicin and vancomycin. ANAEROBE 17 (2011) 380-383**
- Squire MW et al. **Premixed Antibiotic Bone Cement. An In Vitro Comparison of Antimicrobial Efficacy. The Journal of Arthroplasty Vol. 23 No.6, Suppl. 1, 2008.**
- Mayer J et al. **Vacuum-mixing significantly changes AB elution characteristics of commercially available ALBC. J Bone Joint Sug Am. 2011; 93 :2049-56**
- Bertazzoni Minelli E et al. **Release of antibiotics from PMMA cement. J Chemoter 2002 Oct; 14(5):492-500.**
- Bertazzoni Minelli E et al. **Antimicrobial activity of G and V combination in joint fluids after A-loaded cement spacer implantation. J Chemoter. 2015 Feb;27(1):17-24**
- NAR. Norwegian Arthroplasty Register. Survival rate – Hip Arthroplasty, Cemex Genta.bone Cement. November 2017**
- NAR. Norwegian Arthroplasty Register. Survival rate – Knee Arthroplasty, Cemex Genta.bone Cement. November 2017**
- SHAR. Swedish Hip Arthroplasty Register – Cemex Genta survival rate Report March 2020**
- RIPO. Register of the Orthopedic Prosthetic Implants – Epidemiological and survival analysis of Tecres cements in hemiarthroplasty – Report 2024**
- RIPO. Register of the Orthopedic Prosthetic Implants – Epidemiological and survival analysis of Tecres cements in total hip arthroplasty – Report 2024**
- RIPO. Register of the Orthopedic Prosthetic Implants – Epidemiological and survival analysis of Tecres cements in total knee arthroplasty – Report 2024**

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