

VERTEBRAL AUGMENTATION EXCELLENCE

by VEXIM

REDEFINING YOUR CONFIDENCE

vexim
REBALANCING SPINE

MASTERFLOW™ INJECTION SYSTEM

HYDRAULIC PUMP

EFFORTLESS INJECTION
OF HIGH VISCOSITY CEMENT

QUICK-STOP BUTTON

CONTROLLED CEMENT
FLOW WITH ZERO
INERTIA

120 CM FLEXIBLE TUBE

REDUCTION
IN RADIATION
EXPOSURE

GRADUATED SYRINGE

CONTROLLED VOLUME

ONE HAND DELIVERY SYSTEM

EASE OF USE

18 cc RESERVOIR

MULTI-LEVEL CAPABILITY

13 GA CEMENT DELIVERY CANNULA

STREAMLINED ACCESS TO
VERTEBRAL BODY

CLOSED SYSTEM

REDUCED EXPOSURE
TO FUMES

QUICK CEMENT TRANSFER

EASY OF USE

DUAL AXIS MIXING ROD AND VISUAL CONTROL

HOMOGENEOUS MIXING

VERTEBRAL AUGMENTATION EXCELLENCE

Formulating the Intelligent Solution

Clinical excellence

Renowned clinical and biomechanical publications indicate a consensus:

- ✗ **The Ideal Cement Volume:** 15-25% of the vertebral body volume should be filled with cement to restore the biomechanical properties and significantly alleviate the patient's pain^{1,2}.
- ✗ **Accurate Cement Distribution:** Bipedicular and unipedicular approaches provide biomechanical balance as soon as cement crosses the midline. Homogeneous distribution of cement prevents further collapse³.
- ✗ **Optimal Cement Viscosity and Working Time:** High viscosity cement injected during a long working time ensures safety⁴.

Technological Excellence

Controlling the flow of high viscosity cement when delivered through a small diameter cannula is a challenge in vertebral augmentation.

- ✗ **Injection of High Viscosity Cement:** High viscosity cement creates friction within a small diameter cannula. To overcome the pressure, sufficient force is required.
- ✗ **Cement Injection brings Inertia:** Stopping the flow immediately is an engineering challenge that must be overcome.

Surgical excellence

As a surgeon, only the patient matters. To be completely focused on the patient, a streamlined surgical procedure is key.

- ✗ **A Completely Streamlined Surgical Procedure:** Allows for complete focus and enhances clinical outcomes and maximizes operator and patient safety.
- ✗ **Reduction in Radiation Exposure:** Minimally invasive spinal procedures are often associated with high radiation exposure for physicians⁵. The radiation exposure can be reduced if the physicians stand at a minimum of 90 cm from the operating field⁶.



REDEFINING YOUR CONFIDENCE

A unique technology for achieving excellence

Delivery of High Viscosity Cement

The Masterflow™ is a cutting edge system designed for precise control of high viscosity cement.

- ✗ The hydraulic and force reduction mechanisms allows an **effortless thumb operated delivery** of the cement with **low pressure at the tip** of the trocar overcoming the friction throughout small diameter cannula.

Complete Control of the Cement Flow

The delivery of the high viscosity cement is precisely controlled, thanks to a patented system.

- ✗ The **Quick Stop Button** of Masterflow™ immediately stops the cement's flow, **without any inertia**.
- ✗ Cohesion® Bone Cement and Interface® Bone Fixation Composite used with Masterflow™ are formulated to reach an **optimal viscosity** of minimum of 350 Pa.s for controlled interdigitation⁷.
- ✗ **Utmost visibility** is provided during injection.

Complete Procedural Optimisation

With Masterflow™, Vertebral Augmentation has never been so intuitive; from vertebral body access to cement delivery.

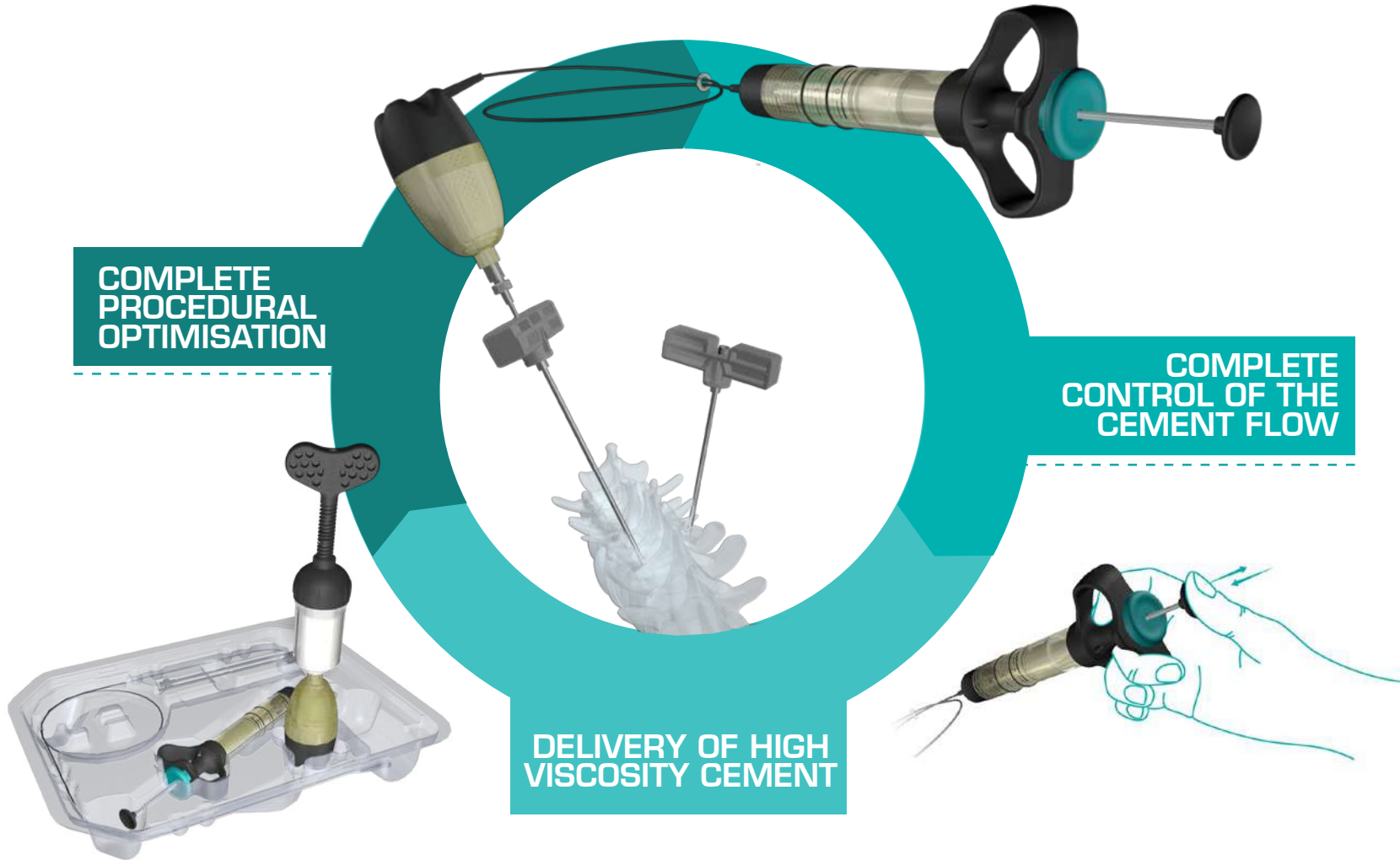
- ✗ **Radiation exposure is drastically reduced** by 90 to 120 cm from the operating field⁶.
- ✗ Cohesion® Bone Cement and Interface® Bone Fixation Composite stable high viscosity during **long working time** facilitates the treatment of complex fractures.
- ✗ The injected **volume** is easily **monitored** by the graduated hand-pump.
- ✗ The 13 GA Cement Delivery Cannula allows a streamlined access to vertebral body, especially for **multi-level procedures**.
- ✗ A full capacity of 18 cm³ cement reservoir is available at once, providing enhanced **flexibility**.
- ✗ The closed mixing system directly connects to the reservoir **streamlining the procedure**.

FULLY INTEGRATED CONTROLLED SYSTEM

COMPLETE
PROCEDURAL
OPTIMISATION

COMPLETE
CONTROL OF THE
CEMENT FLOW

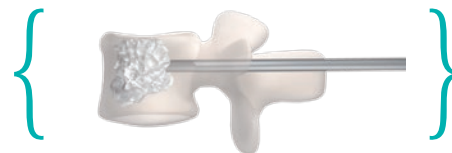
DELIVERY OF HIGH
VISCOSITY CEMENT



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Cohesion[®]
B o n e C e m e n t



Interface[®]
B o n e F i x a t i o n C o m p o s i t e

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