

# VERTEBRAL AUGMENTATION EXCELLENCE

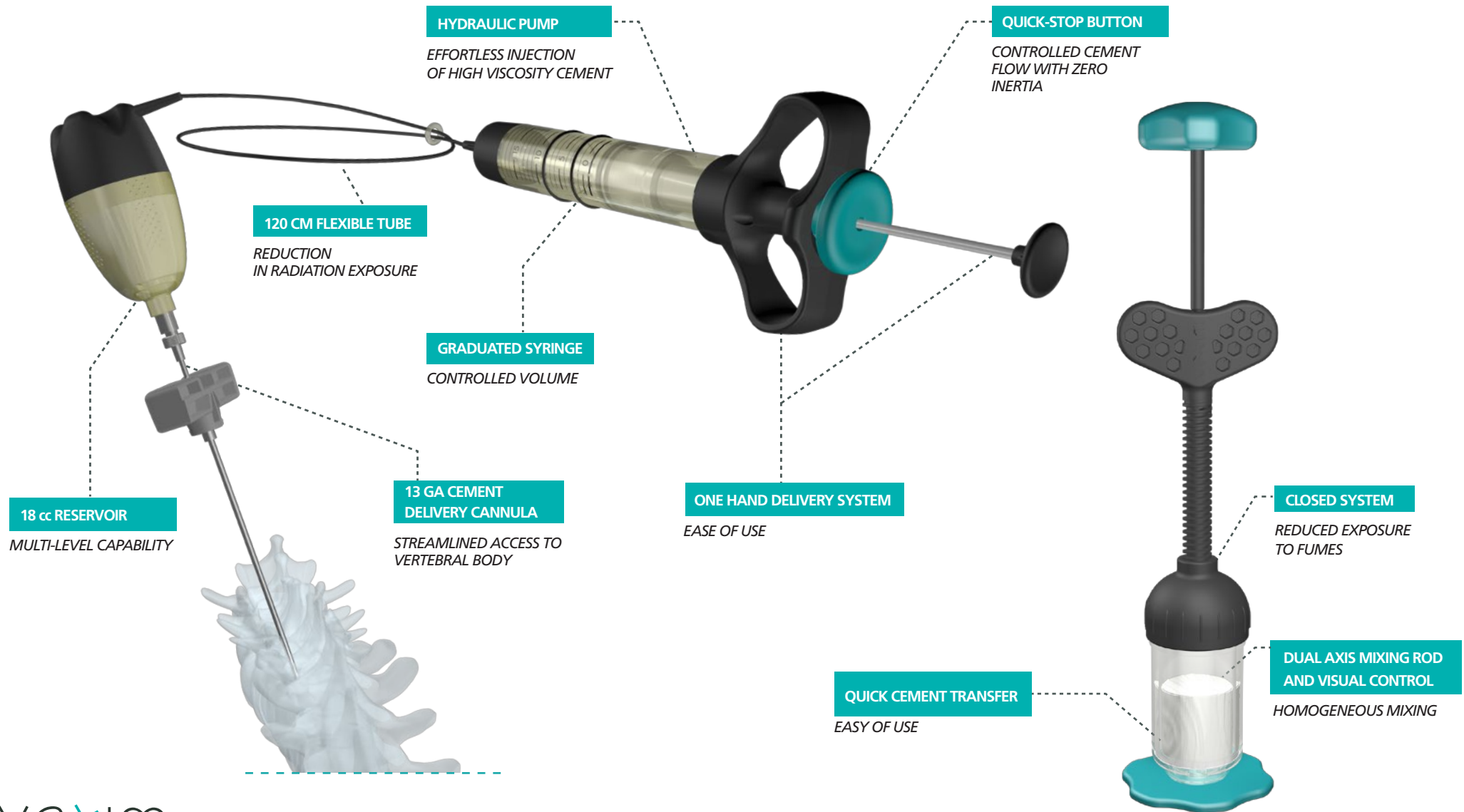
by VEXIM



REDEFINING YOUR CONFIDENCE

vexim  
REBALANCING SPINE

# MASTERFLOW™ INJECTION SYSTEM



# 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<sup>1,2</sup>.
- ✕ **Accurate Cement Distribution:** Bipedicular and unipedicular approaches provide biomechanical balance as soon as cement crosses the midline. Homogeneous distribution of cement prevents further collapse<sup>3</sup>.
- ✕ **Optimal Cement Viscosity and Working Time:** High viscosity cement injected during a long working time ensures safety<sup>4</sup>.

### 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 physicians<sup>5</sup>. The radiation exposure can be reduced if the physicians stand at a minimum of 90 cm from the operating field<sup>6</sup>.

# 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.

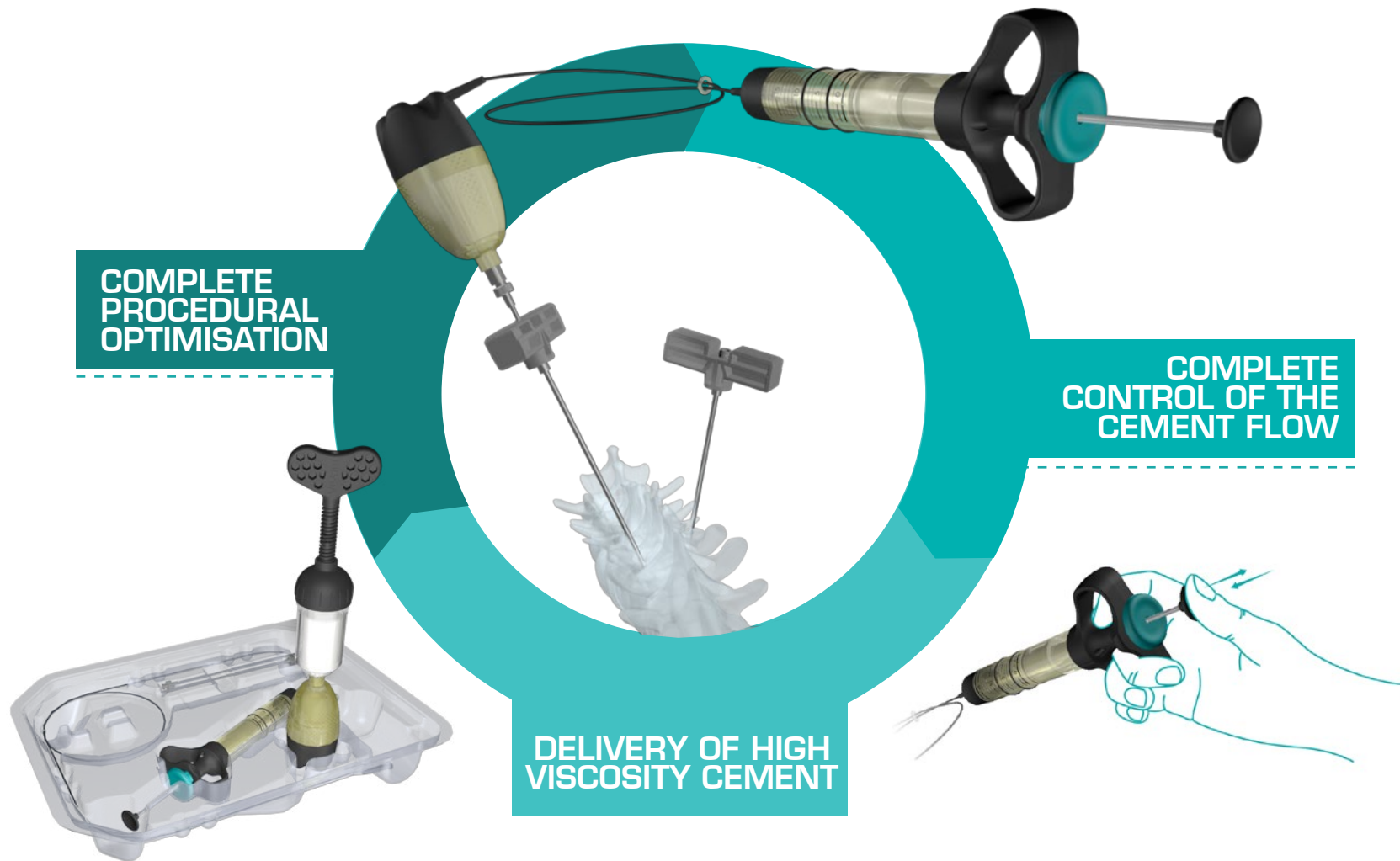
- ✕ The **Quick Stop Button** of Masterflow™ immediately stops the cement's flow, **without any inertia**.
- ✕ Cohesion® Bone Cement and Interface® Bone Fixation Composite used with Masterflow™ are formulated to reach an **optimal viscosity** of minimum of 350 Pa.s for controlled interdigitation<sup>7</sup>.
- ✕ **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 field<sup>6</sup>.
- ✕ 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 cm<sup>3</sup> 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



## REFERENCES

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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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