

# PATENTED CONE MIXER

Reliable basis for fully automated and reproducible 3D printing

**The patented mixing system of the Kniele cone mixer KKM is very well suited for the production of high quality UHPC concrete. It is equipped with a pinch valve, a post-silo with agitator and a pump that continuously conveys the concrete to the print head. Kniele mixing systems are a reliable basis for fully automated and reproducible 3D printing.**

## Cone Mixer KKM 100/150

The Kniele cone mixers type KKM mixes very intensively and homogeneously. Quality concretes of all types such as self-compacting concretes, lightweight concretes; refractory, liquid adhesives, etc. can be produced within a very short time. The proven mixing technology ensures intensive and

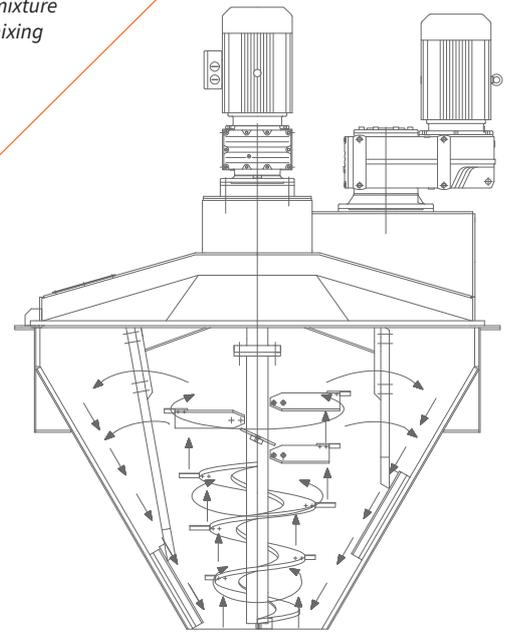
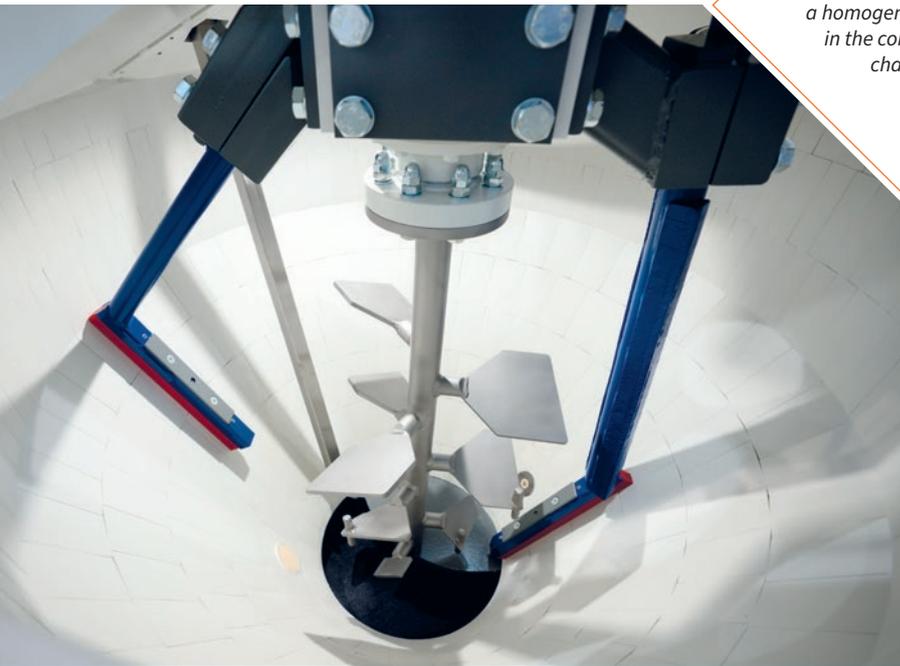


■ The Kniele cone mixers type KKM mixes very intensively and homogeneously



■ Designed as a mobile mixing plant, the Kniele conical mixer KKM 100/150 can be also installed in a deep-sea container.

Two counter-current agitators produce a homogeneous mixture in the conical mixing chamber.



3D animation  
video



homogeneous mixing with a constantly high mixing quality. The mixer is conveniently filled from above - either manually or automatically. A mixer scale allows an additional control of the concrete batches.

The conical design of the Kniele Cone Mixer offers even more advantages:

- Even small quantities can be mixed without loss of quality
- Quick and complete emptying
- Quick and easy cleaning

Kniele mixing systems are CE-compliant and built according to the EU machinery directives. According to industry standards, the field-proven standard drives guarantee a long service life.

#### Complete system

Kniele also offer their mixing systems as mobile, integrated complete systems. Like this, the Kniele Cone Mixer KKM 100/150 can be used wherever it is needed – also for temporary applications. The entire system, including control technology and precise water metering, can be installed in a ten-foot deep-sea container, for example. In this case, the conical mixer is equipped with a pinch valve at its outlet; this ensures a controlled transfer to the post-silo. The post-silo has an agitator to keep the produced concrete moving. From the post-silo, the concrete then passes through the hose line to the pressure head of the robot. An eccentric screw pump conveys the concrete, which ensures a continuous supply of concrete to the print head.

#### Extension options

Several accessory devices are available for the plant.

Typical extensions:

- A separate feeding system
- One or several big bag stations
- Bag feed hoppers with screw dosing system

The Kniele mixing system guarantees an uncomplicated feeding. Kniele mixing systems and accessories can provide considerable advantages in terms of quality, reliability and profitability.

[www.kniele.de](http://www.kniele.de)



Kniele offers an overall concept for fully automated and reproducible 3D printing.