

NEW



**CONTAINER MIXER – CMQ
THE NEXT GENERATION**

MIXING TECHNOLOGY

Intelligent

Benefit from Zeppelin's global leadership in mixing technology!

Based on the pioneering HENSCHEL-Mixers® Zeppelin has been setting standards in the mixing technology for decades and has well-proven expertise in the areas of plastics, additives, colors, paints, pigments, toners, food, ceramics, minerals and metal compounds.

We know what is important and we have the skills to process and handle sensitive materials. We offer ground-breaking solutions for any mixing task and procedure as well as for up- and down-stream handling and processing.

The mixing technology of the 21st century is characterized by innovations, inventiveness and solution-oriented engineering. As one of the world leading mixing technology experts we not only provide mixers and mixing solutions but understand the entire manufacturing process.

Perfect first-hand mixing solutions

Container Mixers are versatile mixers providing enormous benefits for many applications (e.g.: color toner, TPU/TPE, technical polymers like Peek and PTFE, any additive premix, masterbatches, powder coatings) thus achieving excellent qualities in homogenizing, dispersing and coloring for bulk materials.

Unlike for stationary installed mixers, the mixing bowl (container) is movable. Filling and discharging can be done remotely from the mixing station.

The new Container Mixer CMQ

Specially designed for coloring applications, mainly Powder Coatings and Color Masterbatch, the CMQ provides highest flexibility and reduces cleaning time to a minimum. Integrated in an automated material handling system, Zeppelin offers a sophisticated process solution. This innovation ensures our customers a competitive edge in the international market.



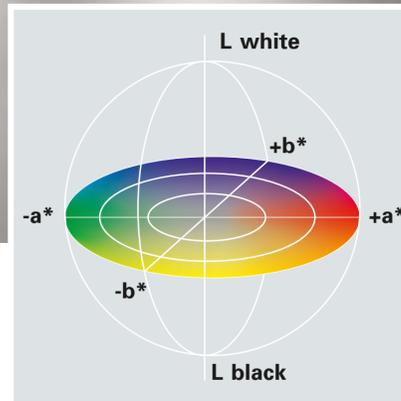
High-performing



Q-Panels



Colormark test specimens



CIELAB Color Space

The three coordinates represent the lightness ($L^* = 0$ yields black and $L^* = 100$ white), the position between red and green ($a^* \leq 0$ green, $a^* \geq 0$ red) and the position between yellow and blue ($b^* \leq 0$ blue and $b^* \geq 0$ yellow) of the color.

Optimized design for best results

The innovative wing profile tool with its unprecedented lifting abilities makes the bottom shell radius and a deflection via that radius unnecessary. The tool is no longer near-ground and the special airfoil shape generates a suction effect that directs the material upwards. The combination of the flat mixing head with the wing profile tool provides high lifting forces, minimal turbulence and low mixing resistance. This ensures a fast and effective homogenization and a very good color strength.

Thanks to the high bottom clearance, no pressure is generated on the surface of the mixing head and any material deposits or build-ups are eliminated. This results in hardly any temperature increase (approx. 1.5 - 2 °C/min), a low power consumption and less wear on the mixing tool.

Watch and experience how efficient our mixers work



Scan or click



FIRST CLASS MIXING – MOST EFFICIENT CLEANING DESIGN

Save up to 80 % cleaning time



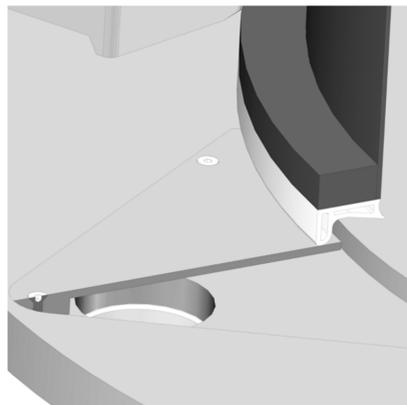
Patented wing profile tool

- Airfoil shaped mixing arms with winglets for lowest mixing resistance
- Optimized mixing with lowest cleaning effort



Fast and easy cleaning

- Flat panel mixing head
- Most minimal cleaning effort
- Unprecedented cleanability
- Allows shortest cleaning times



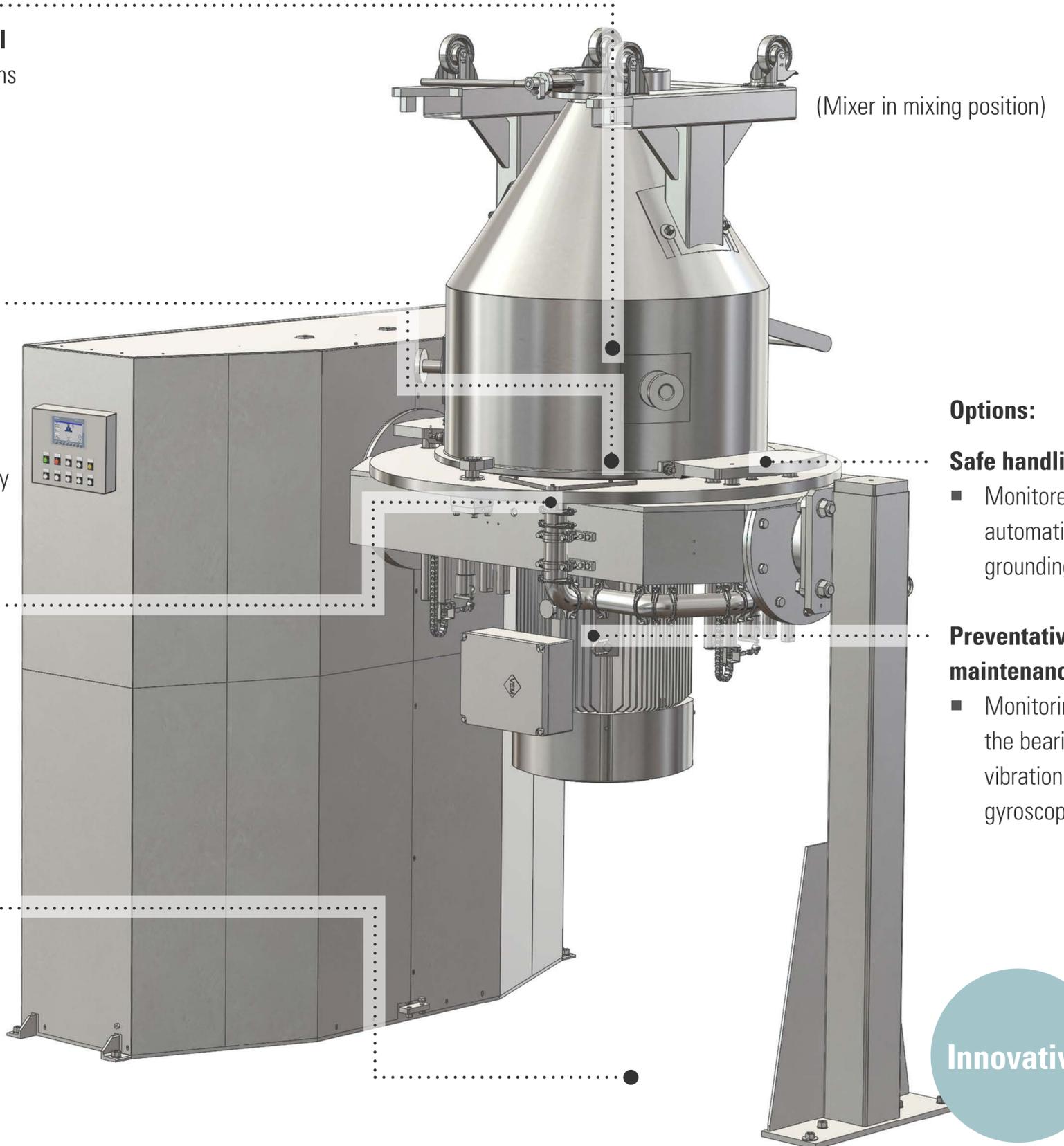
Dust Reduction System

- Container venting integrated in container seal
- Drop in two stages



No guiding installations

- Self centering container
- No obstacles on the floor for cleaning



Options:

Safe handling

- Monitored automatic container grounding

Preventative maintenance

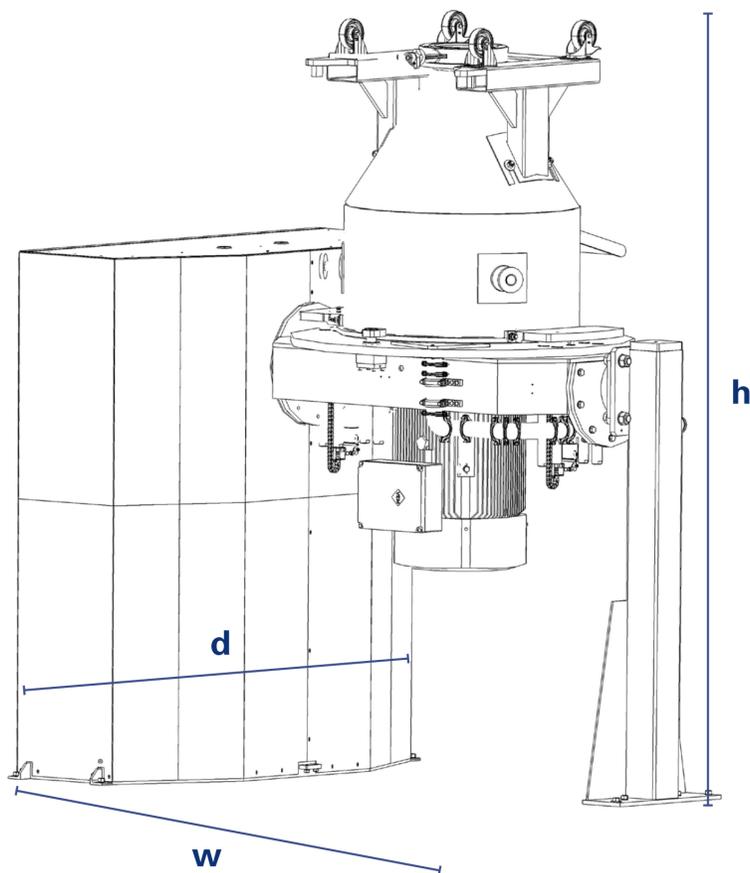
- Monitoring of the bearings via vibration and gyroscopic sensors

Innovative

DESIGNED FOR MAXIMUM EFFICIENCY

ZEPPELIN[®]
WE CREATE SOLUTIONS

Ergonomic



The ergonomic design of our Container Mixers allows for intuitive handling and processing even the biggest volumes. These characteristics additionally offer a significant time saving.

Benefit from both: procedural and economic advantages!

TECHNICAL DATA

Type	Net volume	Drive Power (kW)	Speed (m/s)	Dimensions (height x width x depth) (mm)		Batch weight (pb 0,5kg/l) (kg)	
		Mixing tool	Mixing tool	h (in mixing position)	w		d
CMQ 300	100-240	15 - 22	5-25	2790	2500	2600	50-120
CMQ 1000	350-800	45 - 100	5-25	3900	3000	3600	175-400
CMQ 2000	600-1600	75 - 125	5-25	4600	3600	4000	300-800

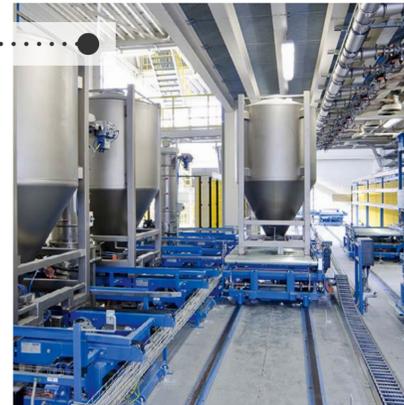
Further machine sizes in preparation.

Modular

CONTAINER SYSTEM AND SURROUNDINGS

Easy transport

- Rail conveyor
- Chain conveyor
- Roller conveyor
- AGV (Automated Guided Vehicle)
- Manual or with mover



Container feeding

- Automated or manual design for a precise loading solution



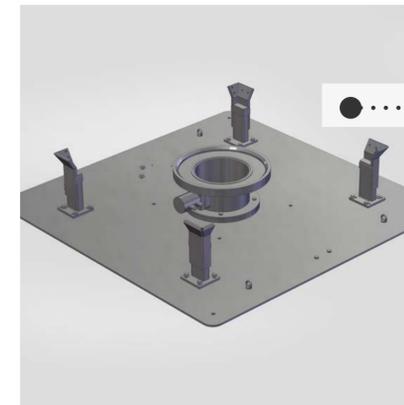
Operator Safety

- Safety fence or light barrier



Different container discharging solutions

- Drive-in
- Load-on



Central aspiration unit

- Efficient venting



Container lid

- Dust-free handling
- Prevents cross contamination



Fully automated container plant

Intuitive



Invitation

We gladly invite you to our Mixing Technology Center in Kassel. Convince yourself of the CMO effectiveness and its outstanding benefits.

All essential mixing processes can be tested in our Technology Center under production conditions.

WE MAKE YOUR BUSINESS EFFICIENT AND MANAGEABLE

Advantages at a glance

- **Most efficient cleaning effort**

Reduces cleaning times up to 80%



- **Consistent color strength**

Low measurable ΔE
(total color difference)

- **Fast and effective homogenization**

Even distribution of all components

- **High dispersion**

Prevention of any pigment agglomeration
Equalizing of particle size

- **Low mixing resistance**

Minimal temperature increase,
approx. 1.5 - 2°C/min

- **Trusted technology**

For reliable function and
long life-time

- **Guaranteed reproducible quality**

For optimum products

- **Reliable batch tracking**

Allows for trouble-free quality
management

- **Low material pressure**

No caking or material build-ups

- **High flexibility**

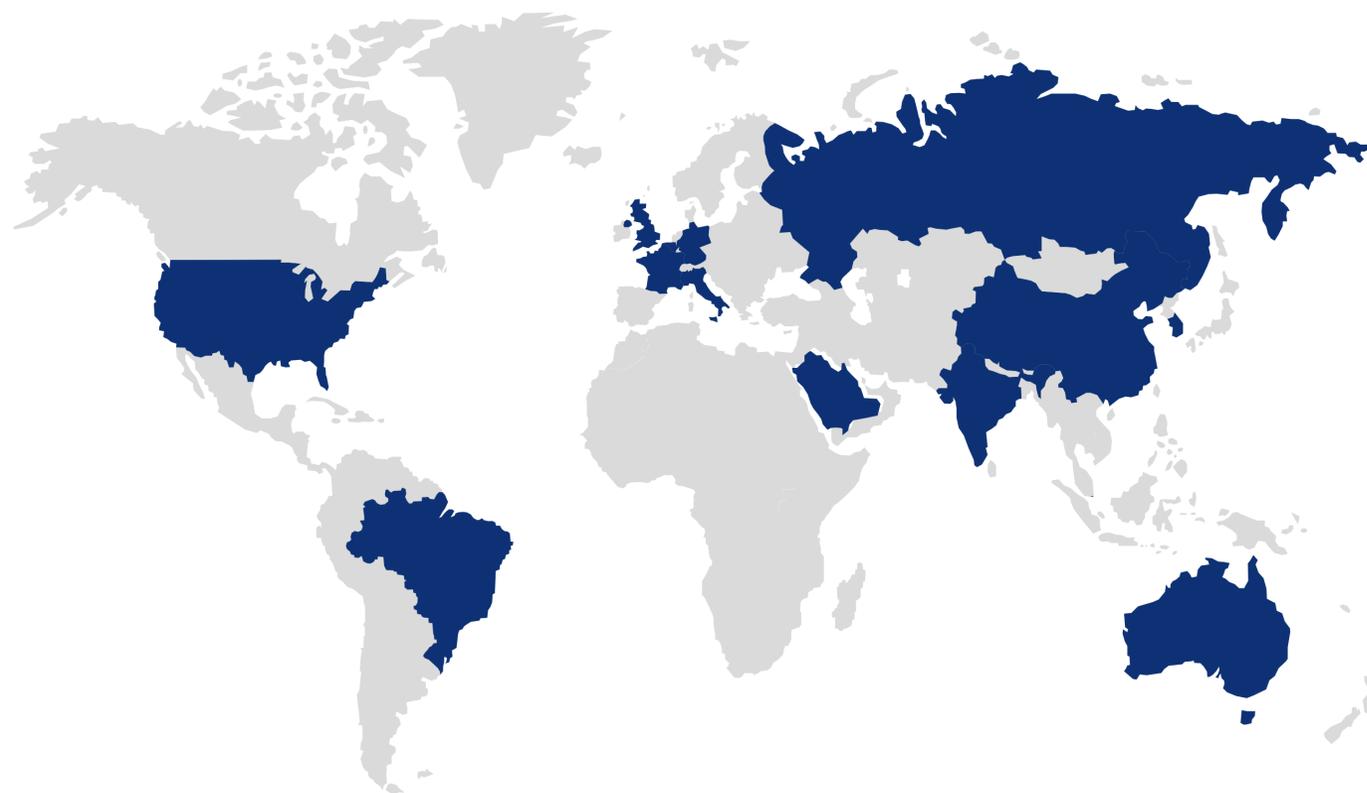
Quick set-up and change-over

- **Intelligent machine frame design**

No edges, deadspots and obstacles
for fast and easy cleaning of the
surroundings



Scan or click



Presented by

Zeppelin Systems GmbH
Mixing Technology
Henschelplatz 1
34127 Kassel GERMANY

Tel.: +49 561 801 – 7070
Fax: +49 561 801 – 5930
mixingtechnology@zeppelin.com

For the complete Zeppelin
Systems range please visit
our website at
www.zeppelin-systems.com

Global presence

- Australia
- Belgium
- Brazil
- China
- France
- Germany
- India
- Italy
- Korea
- Russia
- Saudi Arabia
- Singapore
- United Kingdom
- USA