

Gyraton[®] mixer type GM

Function: The helical mixing tool rotates clockwise and conveys the mixed materials upward. At the same time, the mixing tool is directed orbitally along the cylinder wall and collects all volume parts without dead space.

Usability: Mixing of all types of dry, moist or suspended bulk materials that are free-flowing. Optionally, liquid additions can also be incorporated. The sizes are freely selectable from 10 m³ to about 70m³. Good mixing results are already achieved at 10% filling level. Mixing is particularly gentle with low energy input.

Achievable mixing qualities: sufficient homogenization

Filling, discharging: Feeding takes place from above through one or more standard nozzles. The mixed goods are discharged at the bottom through a standard flange with the bottom flap open. The discharge can also take place simultaneously through two, three or more discharge nozzles in order to fill several big bags or containers at the same time, for example.

Special features:

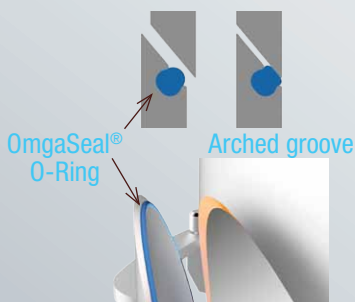
- Particularly hygienic, mixing tool only mounted and driven on top
- Space-saving, compact
- Safe and fast discharge
- Easy to walk in or clean by means of large inspection door: wet (automatic), dry manual by vacuum cleaner
- Optionally pressure-tight or vacuum-tight, in any case gas-tight
- The mixing process is particularly gentle with minimum energy input.
- Depending on the length of the mixing time, which can be specified by the customer, the rotational frequency of the mixing tool and the orbital motion are adjusted.
- Energy consumption is correspondingly low.
- Optionally, the mixing chamber and the entire mixing tool can be temperature-controlled. The mixing system can be used as a paste bunker or vacuum mixer.



Gyraton[®] mixer with 70m³ useful capacity. The mixing chamber can be conveniently walked into.

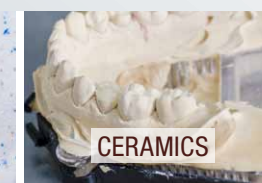


Dispensing can be accelerated if several discharge devices are installed.



Hygienic inspection door, free of dead space, designed by CleverCut[®].

GM-1-7003-2022 EN



Design

Six linear drives form a hexapod. It is mounted on the head plate / frame of the mixer and carries the gear unit, motor and mixing tool. The hexapod is controlled in such a way that the gear unit and mixing tool revolve around the pivot point. The rotation of the mixing tool occurs regardless of the circular motion. The shaft seal is elastically designed. The mixing chamber floor is a spherical segment to which the lower mixing tool arm is adapted accordingly. The collection of all mixing goods takes place without dead space.

The discharge valves are installed in the bottom of the mixing chamber. They operate without dead space and allow the mixed goods to be discharged downwards to a high degree.

Optionally, big bag filling or pneumatic conveying systems can be installed.

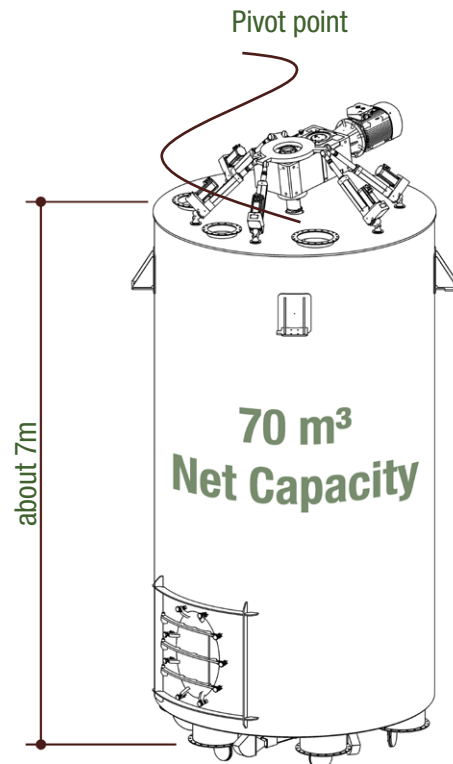
Test trials and Piloting

amixon® places particular emphasis on demonstrations in our own test center. amixon® supports your product development with trials and demonstrations of your mixing processes. amixon® can offer more than 30 test machines in its in-house pilot plants.

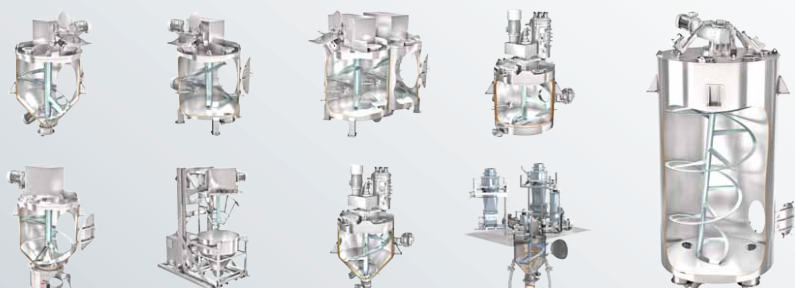
For tests and trials, such a Gyraton® mixer is also available. The usable volume is 3 m³. From the measurement data amixon® obtains during the mixing trial, we can calculate very accurate design data for larger Gyraton® mixers.

For the test, we recommend that you supply suitable mixing materials. Those should be the goods you want to homogenize later. If these should be different products, please select so-called „problem products“ as test material:

- Inhomogeneous composition
- High bulk densities
- Differing particle sizes
- Different bulk densities
- Poor flow properties
- Accumulating and poor dosing behavior
- Dusty or possibly moist or wet
- Tending to solidify and form lumps



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amixon® manufactures high precision mixers, vacuum mix-dryers, synthesis reactors and granulators with maximum fabrication depth. All components of the amixon®-mixers are made in Germany. The production of the machines takes place exclusively in the amixon®-factory in Paderborn, Germany.

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