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Manufacturer of equipment for pharmaceutical, chemical and food industries

COMPACT MIXER

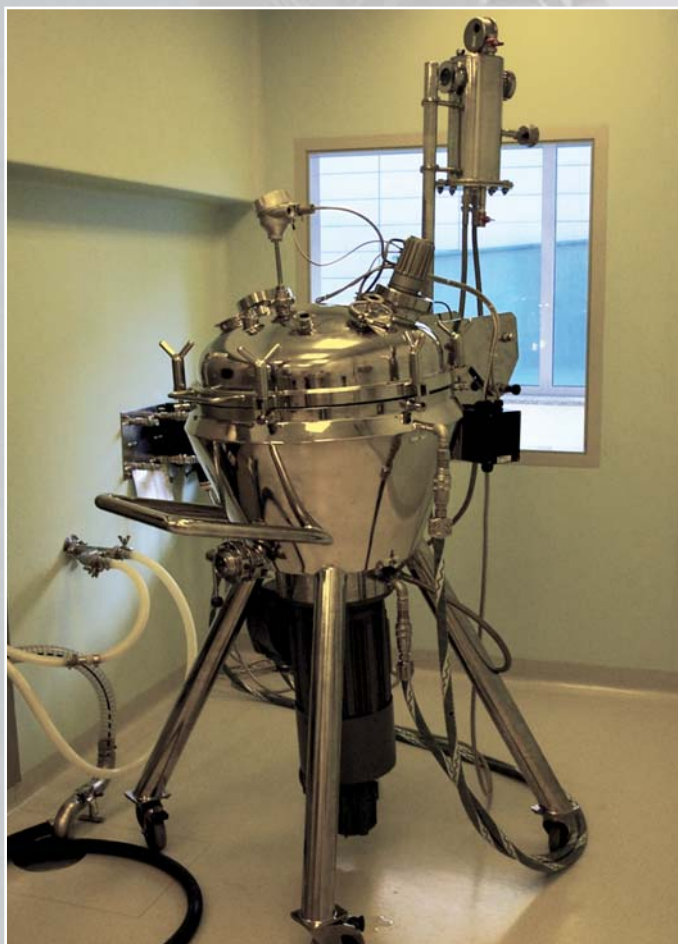
A compact homogenizing mixer is used for the same purposes as a homogenizing mixer, i.e. to mix ingredients of different densities, extreme viscosities, in an atmosphere of inert gas or in vacuum, at a freely chosen temperature. A compact homogenizing mixer may be applied whenever the volume of the substances mixed is not large, e.g. up to 300L, and there is no need to equip the device with all the control elements. The most important feature of the device is its simple design and, most importantly, its far lower price.

A compact mixer will satisfy most of the requirements that homogenizing mixers are supposed to meet, at significantly lower expense.

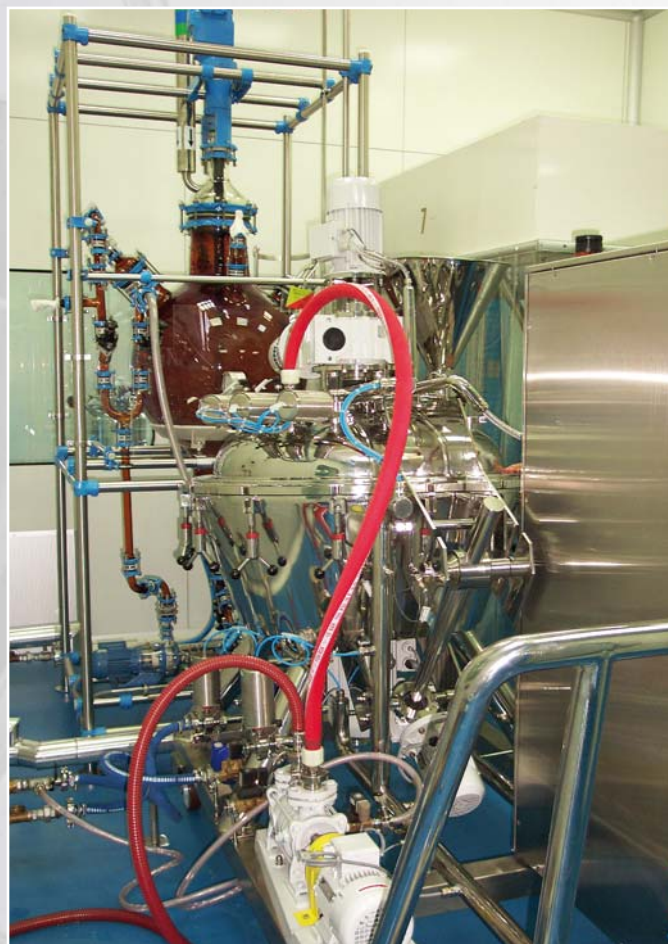
The device may be constructed to have the shape of a cylinder or a truncated cone, with the upper lid lifted vertically or swung open. A compact mixer may be fitted with a homogenizing agitator, a gate agitator with scrapers and a multi-paddle agitator, or a combination of those. The device may be configured to order, so that it meets the customer's every requirement.



A conical mixer with a homogenizing agitator and a gate agitator, equipped with an electric heating system



A mobile conical mixer with a homogenizing agitator made to Ex standards



A mobile conical mixer with a homogenizing agitator, a gate agitator and a turbine, equipped with a powder vacuum intake system

The list below includes the components which are simplified in comparison to a homogenizing mixer:

- Elimination of the heat exchanger – heating is done in the jacket directly with steam – possible wherever there is no risk of the product burning.
- The heating and cooling jacket made as a single section, without a division into the head and the cylindrical part – an unjustified expense with a vessel of such a small capacity.
- The gate agitator with Teflon scrapers operating at one speed, or if necessary – at two speeds, without an inverter; elimination of the other coaxial agitator (small capacity); simpler and cheaper drive.
- A rake agitator located at the bottom works as a homogenizer, with adjustable rotation speed, without an external cycle and a pump – powders may be dozed through a stub pipe in the bottom into the liquid below its surface using a vacuum pump, or through the charging hopper at the top.
- Modified shape – with such a small capacity, we suggest a modification of the cylindrical part of the vessel – the lid is still opened automatically, but it is hinged and operated by a mechanical drive – there is no hydraulic lifting system which would be far more expensive and complex. The upper lid may be opened irrespective of the position of the gate agitator.
- Substitution of the band closing the upper head with a bolted joint with eye bolts – with such a small capacity and low pressures, screwing a few bolts home by hand is not much of an obstacle, even if the homogenizer is operated by a woman.
- The device is controlled with thermo-regulators and switches – elimination of an expensive programmer and its software.



A conical mixer with a propeller agitator (made to Ex zone standards)



A homogenizing agitator at the bottom of a vessel and a gate agitator



An open lid of a conical mixer with a gate and paddle agitator