



vacuum homogenizer / mixer

Model: VMG S 300 I

Vacuum homogenizer VMG S 300 I is designed for processing and manufacturing a wide range of liquid, pasty and viscous products with different requirements for their production conditions and similar products including products with high viscosity.

The plant provides the highest level of homogenization of the mixture and intensive mixing for a short time and with minimal energy consumption.

Suitable products for use:

- **Milk** - yogurt, condensed milk, milk and cream
- **Fat** - oil, margarine, mayonnaise, pasta
- **Garden** - jams, ketchup, sauces, purees, pastes.
- **Confectionery** - cream filled chocolate hazelnut, chocolate, etc



- **Soft** - juices, nectars and drinks
- **Cosmetics** - creams, shampoos, conditioners, gels, toothpaste
- **Pharmaceutical** products - ointments, emulsions, gels
- **Chemicals** - detergents, adhesives, paints and disinfectants



Carried out processes:

- Heating, Cooling
- Cooking
- Mixing
- Evacuation
- Dispersion
- Emulsification
- Homogenization
- Deaeration

BENEFITS:

- Significant time reduction for preparing a batch of products, due to the high efficiency of the processes of heating, cooling, mixing and homogenization.
- Consistently high quality of the finished product, repeatable results from batch to batch.
- Highly reliable construction and long-term trouble-free operation.
- Ability to produce a wide range of products at the same plant.

DESIGN

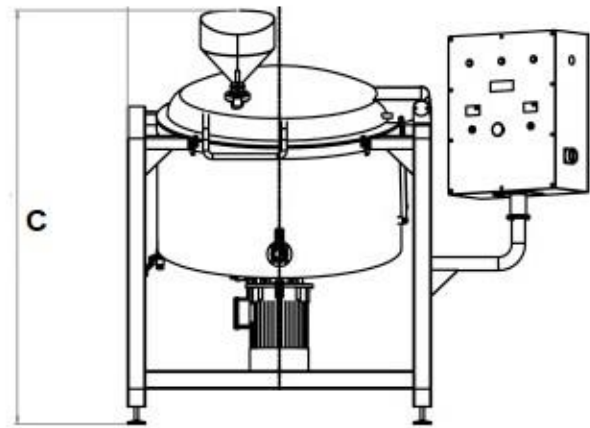
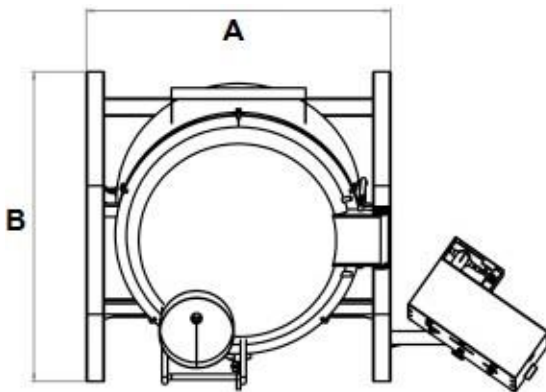
The plant's design consists of a thermally insulated cylindrical vessel equipped with a heating jacket for a liquid heat-carrier or steam. Depending on the customer's requirements, the working vessel's design can be welded or fitted with a lifting or hinged lid. The unit is equipped with a frame agitator with a top or bottom drive and built into the bottom of the vessel's homogenizer type rotor-stator. The plant in its standard configuration is equipped with a vacuum station and an automatic control system based on PLC.

The product is intensively circulated through an integrated high performance homogenizer and mixed with a horizontal agitator, providing efficient heat transfer between the sides of the vessel and the product. The special shape of the agitator and the placement of the emulsifying homogenizer ensure efficient operation of the plant using only 15% of the total volume of the vessel. Installation of a one or two-level contour of the outer recirculation is possible.

A highly hygienic design of a vacuum emulsifying mixer is made in accordance with the requirements of GMP.



| Model | VMG S 300 |
|---------------------|-----------|
| Geometric volume, L | 300 |
| A: length, mm | 1 360 |
| B: width, mm | 1 387 |
| C: height, mm | 1 850 |





FEATURES AND OPTIONS


- Any degree of surface treatment.
- Standard configuration of the plant is designed to work under a vacuum; it is possible to manufacture the plant for operation at significant pressure.
- Any form of agitator on demand, variable speed mixer.
- Ability to install a multi-stage homogenizer to produce super thin emulsions and ointments.
- Possibility for installation of an external high speed homogenizer, which for certain applications may replace the use of a high pressure homogenizer.
- Feeding of ingredients with a flow meter or tensometric system.
- Device for sanitary sampling during the process.
- When inserting of powdered ingredients directly into the vacuum chamber, a homogenizer for complete wetting and uniform distribution of the particulates in the fluid.
- Fixed or rotary CIP balls.
- Interchangeable working elements of homogenizer allow picking the perfect type of rotor and stator for various applications.
- Advanced control system with visualization, temperature control, agitator speed, homogenizer speed, depth of the vacuum pressure.

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