



vacuum homogenizing unit

Model: Normit VMG S 650

Model Normit VMG S is an **effective and reliable** vacuum homogenizing unit designed to produce a wide range of liquid, pastry, and viscous products with different requirements for the production conditions.

Ideal solution for industrial production of various sauces, whether they are completely homogeneous or contain inclusions.

Performs mixing, grinding, homogenizing, dispersing, heating and cooling, vacuuming and deaeration on a high quality.

It creates perfect stable emulsions and dispersions. Unlike in the case of other similar models, homogenization and pumping are carried out separately. This approach ensures a higher level of homogenization that can be achieved

by comparing to a combined mixer-homogenizer with an enhanced pumping function. The necessary degree of homogenization and grinding of the particle is achieved by circulating the mixture through a dispersing device integrated into the machine.

The device is equipped with several cones for loading ingredients, automatic dosing system of wet solutions, touch panel control.

The equipment is intended for use in the food, chemical, cosmetic and other industries



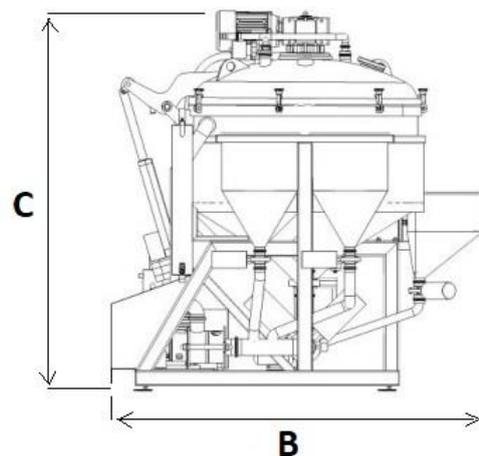
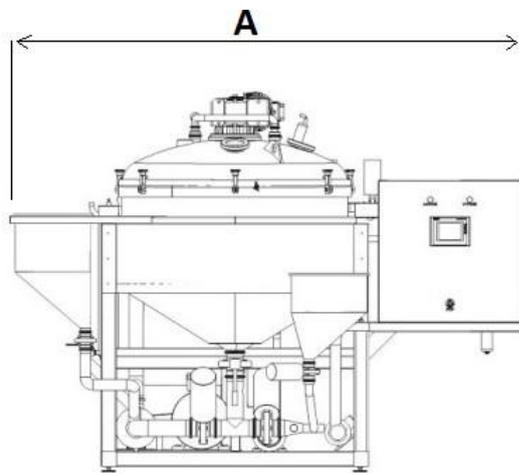
Vacuum homogenizer VMG performs:

- Mixing
- Heating and cooling
- Vacuuming
- Homogenizing
- Grinding
- Emulsification
- Melting



CHARACTERISTIC FEATURES:

- Automatic control system. by the customer' s request, the plant can be supplied with a manual or semi- automatic control system.
- Modern and compact design – the optimal location of all modules with minimum space taken up and easy access for the operator and maintenance staff.
- Hygienic design- easy access to all surfaces with no dead zones in the vessel where the product can accumulate. Additional unloading pump is not required - which leads to higher hygiene.
- The complete dissolving of components
- Energy saving is achieved by reducing the processing time
- Perfect homogenization. The powerful homogenizers that are applied in the plant are the leaders in their class and they ensure the maximum level of product homogenization in the minimum possible time, with minimum energy consumption. On the bottom of the working vessel, there is an integrated homogenizer with the rotor-stator principle. The integrated homogenizer of the container ensures fast and efficient dispersion, emulsification and homogenization
- Heating and cooling. The specially designed heating/ cooling jacket allows using a heat transfer agent or coolant under high pressure for heat exchange maximum efficiency. The heat transfer agent or coolant circulates inside the jacket through special ducts that guarantee the absence of dead spots. Heating is performed by supplying steam into the jacket or by direct steam injection to the product, or by a combination of the two methods.
- Macro-mixing. A slow-speed agitator of a special shape with installed Teflon scrapers ensures an even distribution of ingredients across the entire volume – even if there is a small quantity of them. The shape of the mixer ideally reflects the conical bottom part of the operating tank, which guarantees that there are no unmixed spots. Macro-mixing is carried out carefully, without damaging the structure of the product or its inclusions and without it breaking down into fractions (when manufacturing products that do not require homogenizing but only mixing).
- The scrapers continuously clean the walls of the mixing chamber for maximum efficiency of the heat exchange.
- The design of the mixer ensures efficient mixing of both liquid and thick products with high viscosity (to 100 000 Pas).



Model	VMG S 650
Working volume, oz	17 580
Geometric volume, oz	21 980
A: length, inch	114
B: width, inch	87
C: height, inch	94
Weight, lbs	2 040



Vacuuming – efficient elimination of air, degassing. The prepared product has a homogenous structure without air inclusions. The absence of air prevents bacteria from multiplying and significantly extends product storage time. Thanks to the minimum oxidation, it is possible to preserve the colour and taste

of the product at its most natural, which is especially important in the case of oil- or fat- based products. The process of removing air allows you to lower the temperature of the product processing, maximally preserving its utility properties.

Vacuum homogenizer includes CIP cleaning, vacuum pump, frequency converter.

The ingredients are added through a vacuum chamber of the homogenizer, which ensures their immediate soaking, uniform distribution and dissolution in the entire of the product and without lump formation. The optimum construction of the conical bottom chamber ensures uniform mixing of the product.

The working volume is 20-80% of the total volume, depending on the properties of the product. The device guarantees a stable **high quality finished products** and **batch reproducibility**.

Model VMG can be used separately or integrated to the existing production line.

EXAMPLE OF APPLICATIONS:

Food:

- cream cheese, cottage cheese
- mayonnaise, ketchup
- sauces
- confectionery fillings
- vegetable creams
- soups
- dressing
- concentrates



Cosmetic:

- cream
- gel
- toothpaste
- face mask



OPTIONS:

- Direct steam injection - maximum intensive heating without loss
- The working vessel designed for work with overpressure
- The possibility of the production material AISI316L or AISI316Ti for parts that are in contact with the product
- A dose of ingredients with flowmeters and strain gauge weighing system
- Unload the product using a homogenizer or a supplementary pump





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