

Tanks & Vessels

Fruit



Products

- Jam
- Confiture
- Marmelade
- Bakeproof jam and fillings
- Jellies
- Fruit preparations

Applications

- Heating and cooling
- Evaporation to required brix value
- Buffering and keeping homogeneous



www.terlet.com

 **terlet**

MEMBER OF THE MPE GROUP



MMR processing tank for the processing of fruit products

The MMR is a heating/mixing tank that is used for fruit products requiring a combination of processing operations. Firstly, an optimum mixture has to be obtained. Secondly, the fruit pulp must be heated without causing it to burn and stick to the side.

Process

As a pre-mixer in the preparation of jam, fruit, sugar and pectin are added, mixed to a homogeneous consistency, pre-heated to 70°-80°C (21°- 27° F), after which the mixture goes to a specific vacuum evaporator tank. The advantages of this application are that an exchange of sugars is already brought about, so that the fruit remains firmer and, moreover, this pre-mixing and pre-heating increases the capacity of the evaporator.

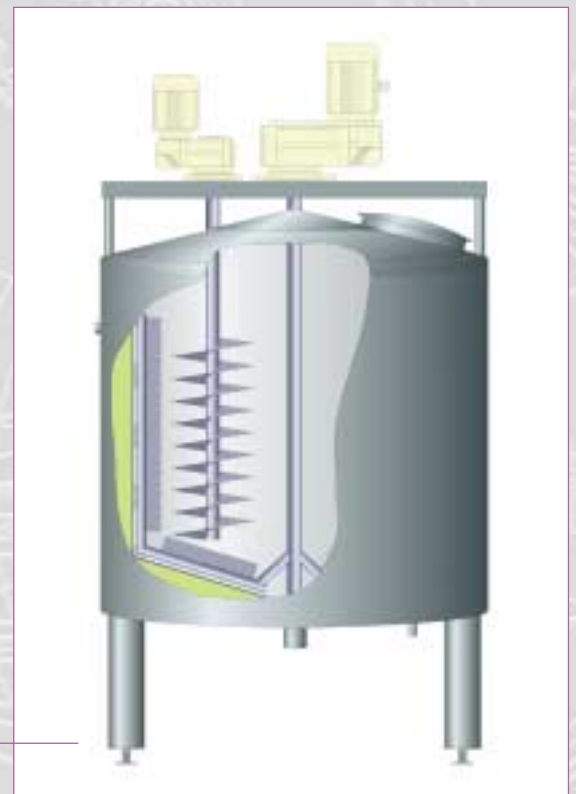
As heating/mixing (and cooling) tank for fruit preparations, fruit, sugar and thickening agents are added, quickly mixed to a homogeneous consistency and heated to a pasteurising temperature of 90°-95° C (32° - 35° F). Next, the product can be brought back to a temperature of < 30° C (-1° F) in the tank, before being (aseptically) packed in, for example, buckets, bag-in-box or (sterile) containers. The advantage of carrying out the entire process in these tanks is a high-quality end product with whole fruit segments. In production lines with a higher capacity, the cooling process can be carried out in-line in a scraped heat exchanger.

Design

The MMR is a top-driven tank with a conical bottom and a central outlet. To enable it to perform the aforementioned operations the MMR is equipped with a combined agitator mechanism. First, there is an anchor agitator mechanism with scrapers along the side and bottom that provides the horizontal stirring action, and also serves to keep the sides clean. Next, there is a screw blade that provides the upwards, vertical stirring action. The turning speeds of both agitator mechanisms are matched in such a way that there are no collisions. The screw draws away the same quantity of material that the anchor supplies.

Features and benefits

- Optimum mixing action
- Hardly any damage to the product.
- Good heat transfer, resulting in fast heating or cooling.
- Vacuum and pressure versions possible



MMR process tank



Horizontal tanks for the processing of fruit products

A horizontal tank can be used for the preparation of all kinds of fruit products. A great advantage is the very efficient mixing of products that tend to sink to the bottom or, conversely, float to the top.

Process

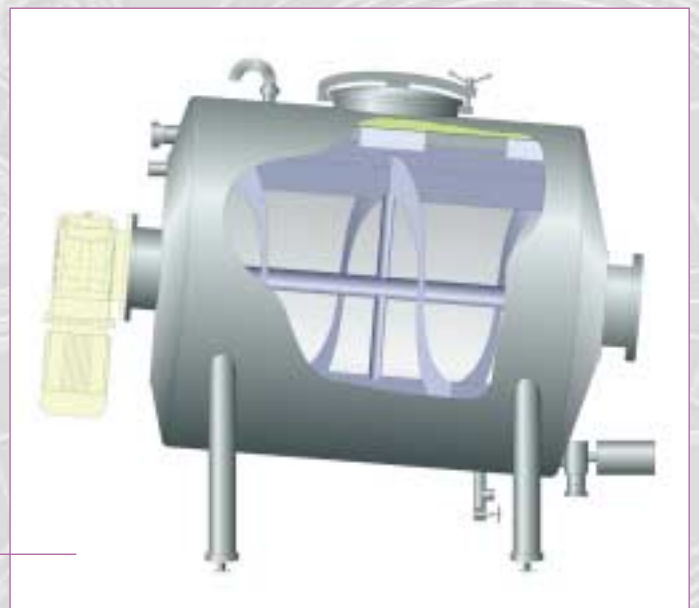
The processes that can be performed in this tank are very diverse. In addition to the aforementioned very efficient mixing action, this tank can also be used for heating or cooling. Furthermore, it can function as a buffer tank for a filling unit. The great advantage here is that homogeneity is maintained even when the tank's fill ratio is constantly being reduced. This also applies to sinking or floating products.

Design

Horizontal cylinder with flat, conical or HP (high pressure) bottom. The term 'horizontal' is not entirely appropriate, as the cylinder is slightly inclined in the direction of the outlet, which is situated on the lowest side. The stirring mechanism consists of a central (horizontal) shaft, to which the various stirring (mixing) elements are attached. This means that scoops can be positioned along the side, possibly with scrapers and/or a screw blade. In general, this type of stirring mechanism is operated at a low speed of revolutions.

Features and benefits

- Optimum mixing action, even at minimum fill ratio.
- Large heat-exchanging surface
- No damage to the product because of the low revolving speed of the stirring mechanism



Horizontal fruit tank



Tanks & Vessels specifications

Terlet develops and builds tanks and vessels specified by our customers. The tanks and vessels are based on standard diameters.

Tanks and vessels from 50 up to 150.000 liters (15 up to 40.000 gallons).

- Atmospheric full vacuum and/or pressure options
- Other high quality SS-alloys applicable
- PED classification
- Insulation
- Various agitator designs for efficient heat transfer
- Product/medium side SS 316/ 304
- Dimple jacket guarantees quick/smooth heat transfer
- ASME U-stamp
- Internal finish $RA \leq 0,8 \mu$
- Designed and constructed in accordance with EHEDG recommendations



Terlet International

P.O. Box 62, 7200 AB Zutphen

The Netherlands

T: +31 575 593 100 F: +31 575 593 111

I: www.terlet.com E: info@terlet.com

Terlet USA

6981 North Park Drive

East Bldg., Suite 201, Pennsauken, NJ 08109

T: +1 856 317 9960 F: +1 856 317 9963

E: info@mpegroupusa.com



MEMBER OF THE MPE GROUP

