

PRODUCTION OF SUPPOSITORIES

I Production

The oils are transferred to the melting equipment, heated up and homogenised.

Then, a lobe rotor pump transfers the oils through the filters to the mixing unit

The mixture is cooled to the temperature required for addition of active ingredients (approx. to 30-40°C).

The product is dissolved and homogenised by a bottom-of-the-tank high-shear mixer.

The mixer is switched on for a limited time to avoid heating of the product, and then only the anchor type agitator is used.

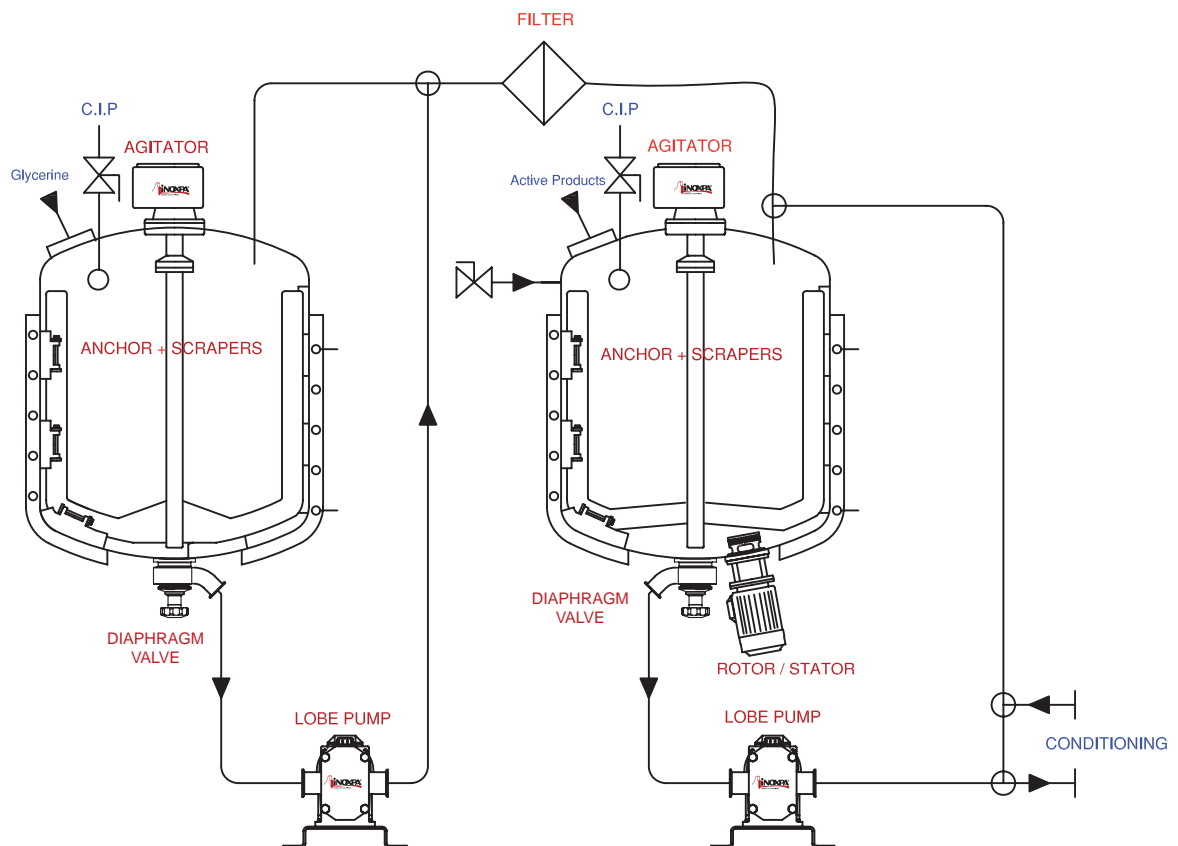
During the conditioning phase, the flow of the lobe rotor pump is always superior to the flow required by the filling machine, as it is necessary to maintain the piping at 40°C without external heating.

I Data

Basic products: Active ingredient (liquid or powder)
Different types of oils and glycerine

Temperature: Homogenisation of oils: 80/85°C
Mixing of active ingredients: 40°C
Heating: steam
Cooling: water

CIP / SIP: No sterilisation
CIP by means of rotating spray balls



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I Operating principle: heating/cooling

The water is in the chamber, the steam is inside the coil of the chamber. There is at least 1 cm between the coil and the internal wall.

The temperature of the wall can be maintained uniform with the precision of ± 1 °C.

The precision of the product temperature regulation is $\pm 0,3$ °C (sensor precision).

It is very important because even $+2$ °C rise provokes nonconformity of the production.

I CIP

The product turns solid at 20°C. It is possible to clean the melting equipment and the piping between the melting unit and the mixing unit immediately after the product transfer without cooling the unit.

The mixing unit and the piping are cleaned after the conditioning.

I Materials

- 1 melting unit with anchor type agitator
- 1 mixing unit with anchor type agitator and high-shear mixer
- 2 lobe rotor pumps
- 1 filter
- 2 bottom-of-the-tank diaphragm valves
- Other valves

