Variomix®
Mixer cooling – fast and efficient

Advantages:

- Eco-friendly product cooling with natural cold gases
- Increased productivity – more batches per day
- No cold water or crushed ice required
- Low consumption
- Hygienic
- Cost-efficient
- Low maintenance
Many mixing processes require precise control of the product temperature. The Variomix® process is by far the quickest method to obtain the optimum temperature.

That will be done by adding proper doses of liquid nitrogen (LIN) or liquid carbon dioxide (LCO₂) as a coolant. It is particularly beneficial when the coolant is injected through the bottom of the mixer or trough, i.e. directly into the product phase. This is made by so-called Clapet nozzles – a Messer development.

The Clapet nozzles open self-medium controlled with applied gas pressure, and require no extra energy or heating. Their design prevent the penetration of product residues or cleaning water. Furthermore, the approved Variomix® process can be integrated into the machine control system.

Variomix® is particularly suitable for:

- Standardisation of meat in a mixer
- Minering of meat products, e.g. in a mixer grinder
- Production of formed meat from poultry meat (here the formed meat has to be cooled to -2 °C to -3 °C during mixing)

Further advantages:

- Extremely rapid cooling by direct injection of coolant into mixer
- Precise temperature control
- Optimum utilisation of coolant by direct product contact (large heat exchange surface)
- Lower coolant consumption compared with other processes
- Simple set-up of coolant supply to mixer
- Retrofitting possible

Please do not hesitate to contact us if you have any questions regarding the Variomix® process or would like to arrange a personal consultation with our application experts.

This and many other brochures can also be downloaded from the Internet in PDF format: www.messergroup.com