

CO₂ Metering in the Dairy

Carbolac



Qualitative and Economic Optimization in Rennet Cheese Production

Carbon Dioxide (CO₂) is a natural ingredient of milk and cheese that features very interesting characteristics.

Its application as an additive in cheese production is therefore highly effective and absolutely safe.

According to EU Guideline 95/2, Appendix 1, CO₂ (E290) is permitted in the EU to be added to all foodstuffs as an additive without restriction.

A labeling obligation does not currently exist for the dairy applications presented.

Cost reduction as a result of:

Less microbial or animal rennet addition at lowered pH (ca. -30% at -0.1 pH, -40% at -0.2 pH), less culture application, less washing water.

More process safety as a result of:

Standardization, optimized pH value, higher anaerobicity (prevention of harmful germs), stabilized protein structures (CO₂ binds as hydrogen carbonate to casein structures).

Shorter production times as a result of:

Shorter preripping of cheese milk (protein swelling improved by CO₂), more standardization – uniform production process in connection with the application of DVS cultures.

Quality improvement as a result of:

Less dry matter variation (< + 0.5%), increased syneresis, firmer texture in the product with uniform water content in connection with the application of DVS cultures.

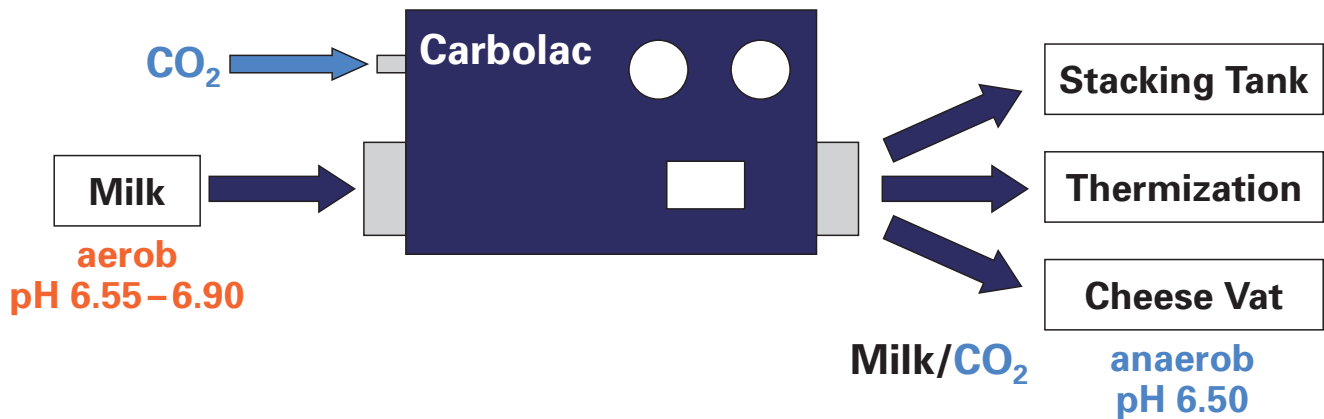


Technica

Technica Entwicklungsgesellschaft
GmbH & Co. KG
Robert-Bosch-Straße 6
D-23909 Ratzeburg
www.technica-gmbh.de

Carbolac

The Carbolac technique can be applied to virtually all dairy facilities. It is compact, installation is easy and quickly done. Only a few prerequisites have to be taken into consideration.



Carbolac Processor Technical Data

Stainless steel design (1,4571)
CO₂ metering 0.05 to 4 g/l milk
Preliminary gas pressure > 6.5 bar
3 levels of milk flow performance:
M 10: up to 15 cbm/h,
M 60: up to 54 cbm/h,
M 80: up to 72 cbm/h
Dimensions (H x W x L)
150 mm x 240 mm x 100 mm
Weight acc. to performance 13 kg to 17 kg
Milk pressure 1 bar to 10 bar
Milk line connections as desired
Inline metering with suction injector
No electrical connection
Remote control or automatic control as accessories

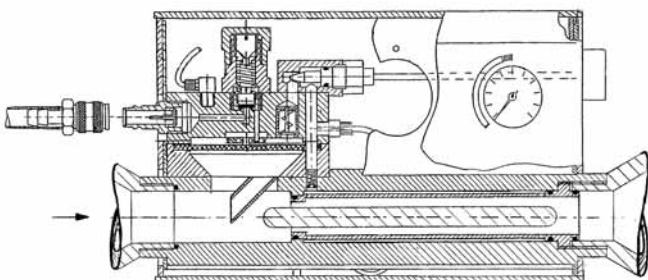
Carbolac Technique Benefits

- CIP-capable as standard feature, no hygiene considerations
- Fully automatic gas pressure regulation with safe on & off switching
- High quality due to gas metering proportionate to milk quantities
- Digital display of value setting
- Simple function and hygiene controls
- Compact design, flexible applicability
- Good price/performance ratio
- Economically improved by individual service concepts

Carbolac

Play it safe with:

- Proven, patent-protected technology,
- competent technological advice and startup,
- reliable service at all times



Stamp of the trader (agent)