FOAMEX CENTRIFUGES
FOR MECHANICAL FOAM SEPARATION

GAS-/LIQUID-SEPARATION OF FOAM

Characteristics:
• For bioreactors and critical process units
• Installation in vessel heads or exhaust lines
• Separates foam into a gas and a liquid phase
• Avoids addition of antifoam agents
• Hygienic design for cleaning in place (CIP)
• Pressure design for sterilisation in place (SIP)
• GMP documentation on demand
• ATEX conformity if required
Applications
FOAMEX systems are mainly used in fermentation plants. However, they have been also applied to a number of different other processes. Typically, they are used for:

• Reduction of chemical antifoam agents
• Enhancement of oxygen transfer in microbial fermentations
• Containment/filter protection in cell culture fermentations
• Foam level control in process vessels
• Maintaining vacuum in stirred tank evaporators
• Foam control in degassing units

Function and Installation
Foam enters the FOAMEX centrifuge directly from a (closed) tank or through a foam pipe. The foam is separated into a gas-fraction and a liquefied foam-fraction by aid of centrifugal forces inside a rotor. The gas leaves the device through a gas pipe while the foam concentrate is pumped through a spiral housing and a return pipe back into the vessel.

FOAMEX Designs
• G series: for GMP processes
• P series: for bioprocess plants
• B series: for brewery/bakery
• C series: for chemistry

Sizing
Standardised sizes of FOAMEX systems are available for pilot scale bioreactors from 10 – 1,500 L. Connection flanges can be chosen from different options. For production plants a custom made design will be carried out based on process and foam data and optionally on laboratory trials. Rotor diameter/height and motor size will be adapted to the specific defoaming task of the process.