





# MIND THE GAP **PROCESS** QC/LAB

Sampling seems to be such an easy concept to understand. Perhaps this is why sampling is so often ignored during the stages of process line design. Or maybe it is simply because the sampling device really is considered to be a piece of lab equipment that just happens to be installed in the process area. Out of sight out of mind?

Whatever the reason, while attention to detail and regulations rule every aspect of hygienic PROCESSING and QC/LAB

functions, the critical procedure of representative SAMPLING - which in fact connects the two - has been surprisingly underestimated by many.

Bridging this gap and working together with leading processors for more than 35 years KEOFITT continues to develop the world's most innovative and complete product range in hygienic, sterile and aseptic sampling.

## WELCOME TO OUR WORLD!

## **WHO WE ARE**

KEOFITT is a specialized Danish company founded by master brewer and engineer Kai Ottung. Working with breweries around the world to improve product quality he developed a unique product range for sterile sampling for the medical, the soft drink and the food industry, as well as, of course for the breweries.

Today, KEOFITT remains an independent company owned by Henrik Lysgaard Salomon and continues to specialize in the niche of hygienic, sterile and aseptic process sampling only.



Kai Ottung, Founder





Every year, the family of KEOFITT distributors from all over the world gather in Svendborg, Denmark for training and to share market experience. Your local KEOFITT distributor is always up to date on the latest in sampling technology.

## THE KEOFITT® STERILE SAMPLING SYSTEM

Ever since its invention in 1980 a "KEOFITT" has become the industry's generic term for inline sterilizable sampling valves. We have often seen our valve design and even our sales literature copied by others, but KEOFITT remains the market standard. We would like you to know why and what it is that sets KEOFITT apart from everyone and everything else in the industry...

#### THIS IS HOW IT WORKS

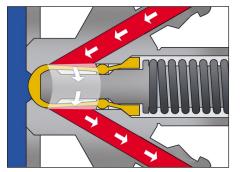


Fig. 1 Closed Valve (sterilizing)

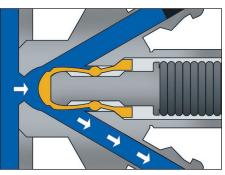


Fig. 2 Open Valve (sampling)

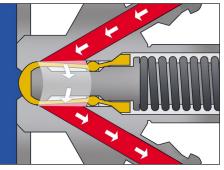


Fig. 3 Closed Valve (sterilizing)

## **PRODUCT GROUP ICONS**

Presenting the market's most complete and versatile product range for sampling we have divided our products into group icons for your convenience:

On the next pages you will see but a few examples of our many standard products. Your local KEOFITT distributor will be pleased to assist and guide you in finding the optimal KEOFITT solution for your application.





SIMPLEX Simplex Sampling Valves



SESAME Sesame Sampling Valves







- W9 is our most popular classic sampling valve and became a standard for aseptic sampling all over the world
- Unique Aseptic design (EHEDG certified)
- One-piece construction
- More than 500 valve head/body combinations
- Electro polished valve interior ensure absolute cleanability
- Can be used with any Keofitt Sampling Bags





- The KEOFITT Aseptic Sampling Bag (Pat.)
- Different sizes and connectors available.

11em no. **130350** Exoiration date **1000** 

• Our ultimate sampling bag solution for truly aseptic samples







- *SESAME*<sup>™</sup> *Patented: WO* 2005 040671 *A*1
- Open Sesame.... The SESAME<sup>™</sup> sampling valve is pure magic.
- The best and safest inline sterilizable sampling valve ever is here!
- Easier to use than any other sampling valve, it minimizes risk of operator failure, airborne contamination and dead space during sampling.
- Compatible with all KEOFITT Sampling Bags.

# **KEOFITT EV**



A big part of KEOFITT's production today ends up in the pharmaceutical or biotech industry. The ultimate hygienic level of this industry's processing plants is of course also reflected in its requirement for sampling solutions.

KEOFITT's standard products already meet these specifications and when required we



can manufacture products in exotic materials such as Hastelloy etc.

Apart from its standard offering KEOFITT has developed sampling valves specifically designed to retrofit bioreactors with Ingold connectors.



Most breweries world-wide have counted on KEOFITT for their sampling needs since Kai Ottung introduced his design in 1980. Fermentation tanks were the first to have their sampling device replaced by a KEOFITT. Later, other critical control points and beverage processing followed...



# **ERYWHERE**



An ever growing market with increasing demands the Dairy and Food industry has been a focus for our product development for years. For instance, only KEOFITT offers inline sterilizable sampling valves in big dimensions (I.D. 25mm) for high viscosity and pulp products.

One of many applications besides the more obvious is



the installation of valves on tanker trucks and the docking bays in- and outlets, where responsibility for the product changes hands and traceability is of the essence. What better way for the trucking company to document that the tanker has been properly cleaned precollection. With multiple pick-up points the transporter will need to know the characteristics of the product added to his load. Suppliers and processors have similar interests at loading and receiving points.



Internationally leading brands in cosmetics and other personal care products such as L'Oréal and Pierre Fabre Dermo-Cosmétique have highly sensitive and complex processes and use KEOFITT for sampling.

KEOFITT products used typically include aseptic sampling configurations.







- M4 is our smallest Classic sampling valve
- Based on our high quality Classic valve design
- Perfect valve for sampling low and medium viscous products
- Wide range of accessories available
- Compatible with all our Sampling Bags



- KEOFITT Spike Sampling Bag
- Safe and easy-to-use. Cost-efficient and pre-sterilized single-use bag.
- Compatible with all our Sampling Valves.







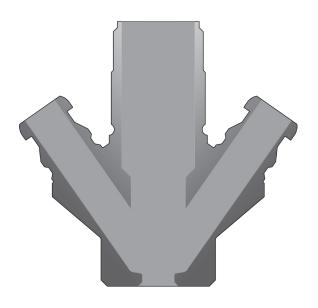


- SIMPLEX is your cost-effective KEOFITT alternative to non-hygienic sample cocks for less demanding applications.
- CIP-able sampling valve
- Supported by EHEDG certification
- + 20 different configurations available
- One-piece construction

# THE DEVIL IS IN THE DETAIL

Imitations are often made to look like the original KEOFITT on the outside. But a steam inlet does not make a sampling valve sterilizable. CIP and steam only works if the equipment has been hygienically designed and manufactured properly on the inside.

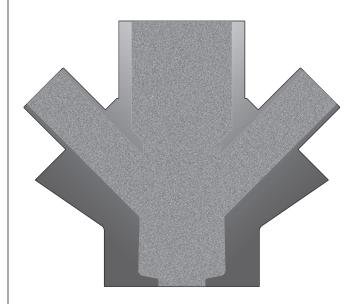
#### **OFTEN IMITATED**



KEOFITT valves have smoother interior surfaces than any other valve. Every valve is electro polished inside using mini-electrodes inside every opening. As a result, bacteria spores are efficiently flushed out with steam minimizing sanitation and sterilization time.

The KEOFITT valve design is co-axial forcing the steam flow directly towards the valve seat and out without any dead space. KEOFITT valve bodies are made from one piece of steel avoiding welding seams that would compromise sterilizability. In short, we take no chances.

### **NEVER EQUALLED**



Copies of our original are not electro polished inside and usually have rougher surfaces, welding seams and dead spaces. Unfortunately, there is no way of knowing. Copies are not tested or measured inside and do not come with test certificates. Maybe because copiers are usually not specialized in sampling like we are. Whatever the case may be, COPYfitts are often purchased and installed as the real thing and may cause serious problems later on. We know, because most of the customer complaints we receive prove to be based on copies that the customer believed was KEOFITT.

Contact your local distributor or KEOFITT directly if in doubt about your sampling valves.

# **DID YOU KNOW?**

- KEOFITT valves are being used in more than 150 countries
- There are KEOFITT distributors in more than 60 countries
- More than 300,000 valves are in use
- KEOFITT distributors from all over the world meet for training every year
- KEOFITT has more than 35 years of experience in sampling liquids
- The KEOFITT valve received the Gold Medal for new Inventions in Geneva in 1984
- *KEOFITT sampling valves are made in Denmark*
- KEO stands for Kai and Eva Ottung
- KEOFITT's webpage includes data sheets, videos, part lists and much more
- KEOFITT is ISO 9001:2015 certified
- More than 1,100 different valve configurations are standard
- Valve heads are interchangeable and can easily be modified or upgraded
- Only KEOFITT valves are available with FFKM membranes (PTFE, silicone and EPDM membranes are also available as a standard)
- Aseptic sampling bags and spike sampling bags are unique and only available through KEOFITT
- Every valve head and valve body has a unique serial number and full traceability
- KEOFITT's QA tests every valve prior to shipment
- Every valve is based on our unique aseptic design (patented)
- Every valve offers superior and effective cleaning/sterilisation, certified by the EHEDG
- Every valve body is electro polished inside (see next page), ensuring a inner surface roughness of 0,5µm as a standard (down to 0,2µm available on request).
- Every valve body is Ra measured in- and outside and is certified
- Every valve body is a one-piece construction
- 3.1 material certificates can be downloaded for all steel parts
- The rubber membranes are made of FDA & USP approved compounds
- The valves are authorized to use the 3-A symbol
- All relevant certificates can be downloaded from our webpage free of charge
- Every valve is in accordance with EC directive 94/9/EC (ATEX)

SAMPLING EQUIPMENT IS ALL WE DO - AND ALWAYS DID





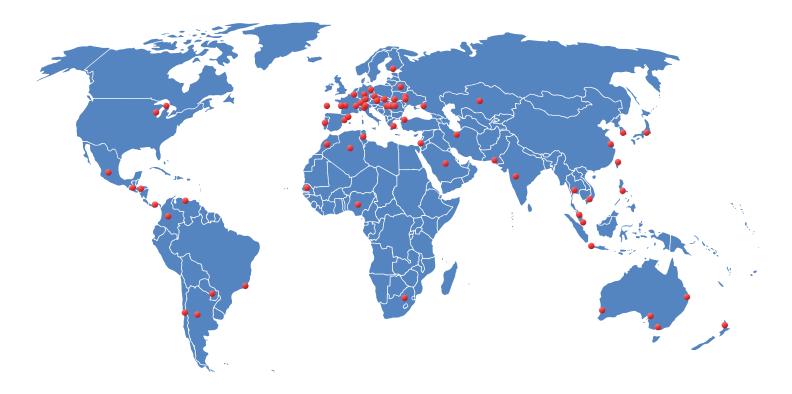








## WE ARE WHERE YOU ARE



ALGERIA • ARGENTINA • AUSTRALIA • AUSTRIA • BELARUS • BELGIUM • BRAZIL • CANADA • CHILE • CHINA • COLUMBIA • CZECH REPUBLIC • DENMARK • ESTONIA • FINLAND • FRANCE • GERMANY • GREECE • GUATAMALA • HOUNDURAS • HUNGARY • INDIA • INDONESIA • IRAN • IRELAND • ISRAEL • ITALY • JAPAN • KAZAKHSTAN • KOREA • LATVIA • LITHUANIA • MALAYSIA • MEXICO • MOROCCO • NETHERLANDS • NEW ZEALAND • NIGERIA • NORWAY • PAKISTAN • PANAMA • PARAGUAY • PHILIPPINES • POLAND • PORTUGAL • ROMANIA • RUSSIA • SAUDI ARABIA • SENEGAL • SINGAPORE • SLOVAK REPUBLIC • SOUTH AFRICA • SPAIN • SWEDEN • SWITZERLAND • TAIWAN • THAILAND • TUNISIA • TURKEY • UKRAINE • UNITED KINGDOM • USA • VENEZUELA • VIETNAM



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