

Sampling-system Simplex 2600



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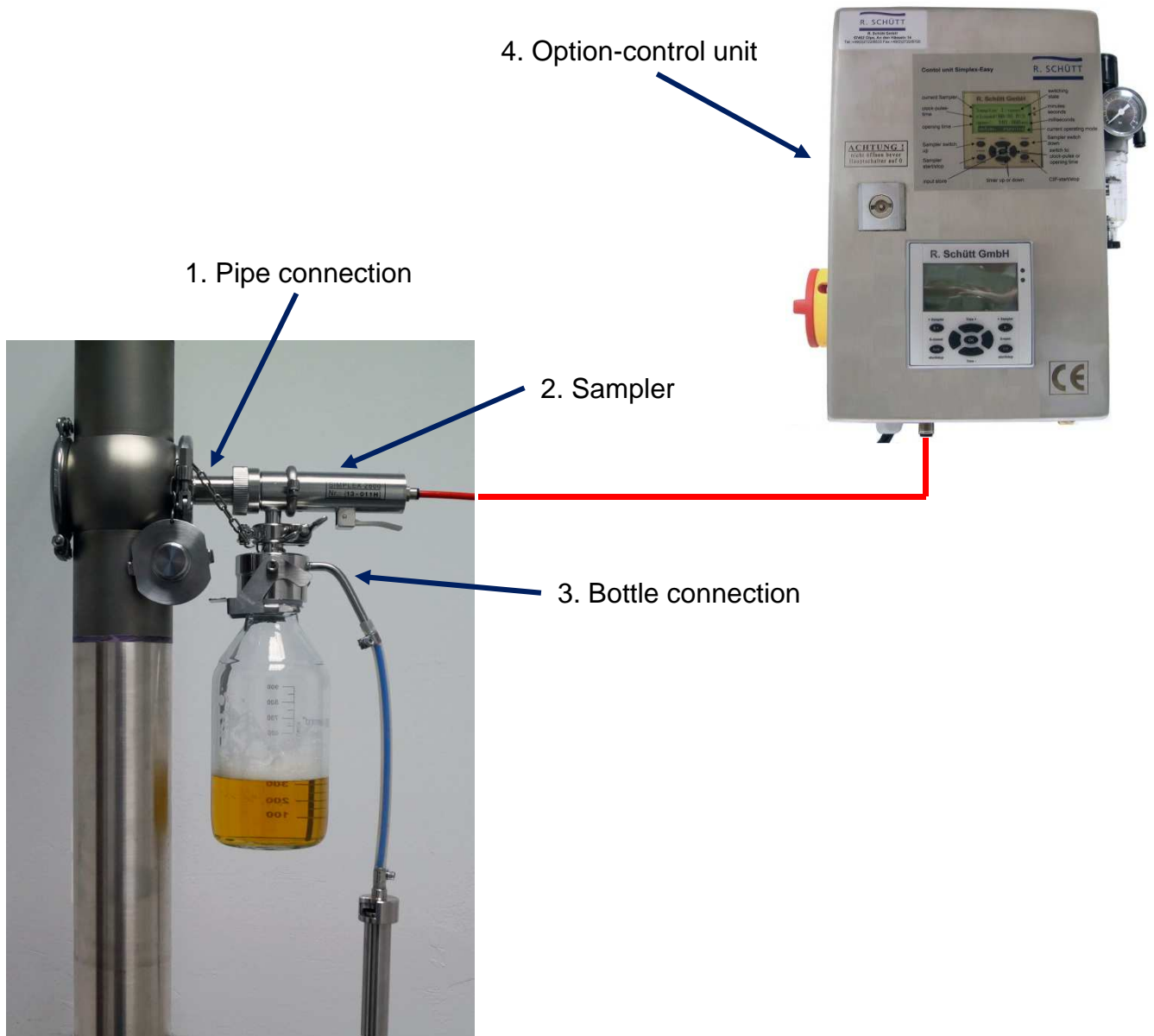
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Sampling-system Simplex 2600

The Simplex 2600 sampling system comprises as standard three or, optionally, four components.

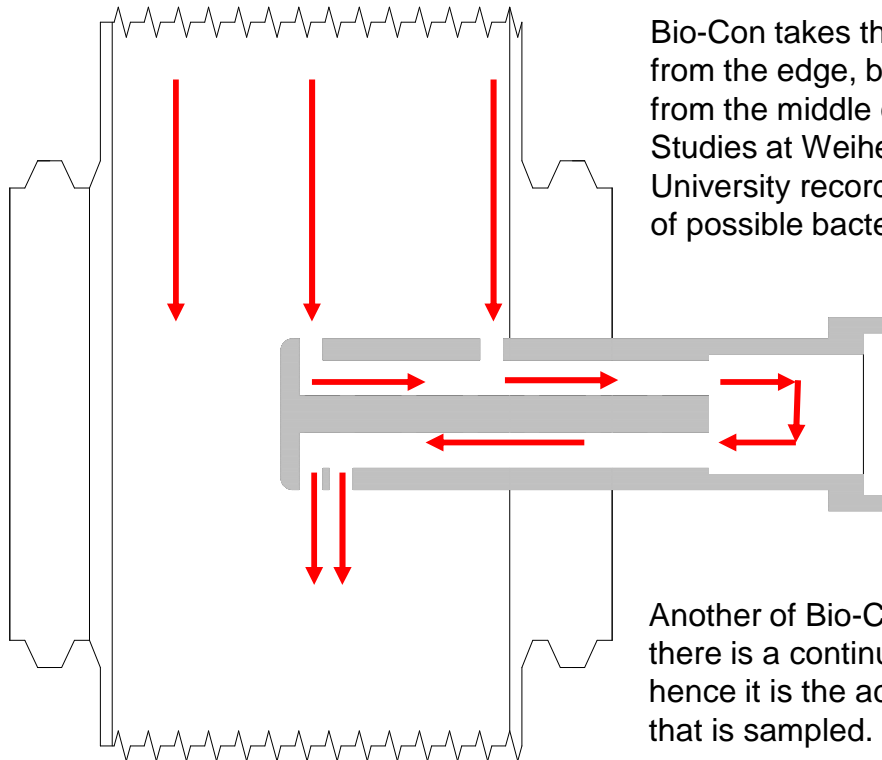


Special versions of all components are available for every type of application.

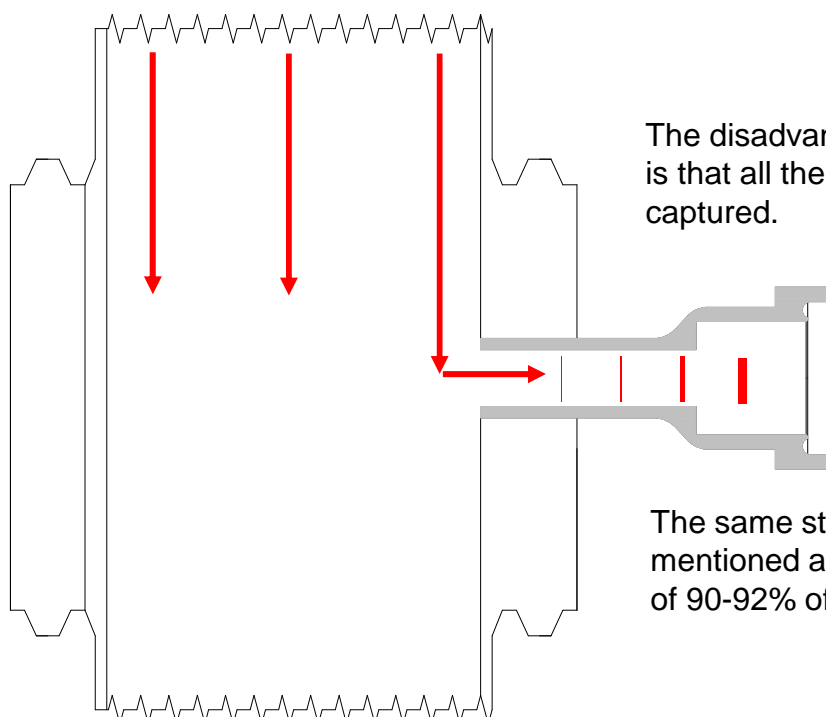
1. Pipe connection principle

Two options are available for taking the product sample.

1. The Bio-Con



2. Welding connection



1. Rohranbindung Darstellung

There are several options for the connection to the pipe



Bio-Con on its own, for direct welding into the pipe system.



Bio-Con welded into a blind cover for a Varivent housing.

Bio-Con welded into a blind cover for a Varivent housing



Bio-Con Superstructure for ground-based pipe systems.



2. Simplex 2600 Probenehmer

Simplex 2600 mit und ohne Handbetätigung

Simplex 2600 with and without manual operation

The Simplex 2600 sampler is the current successor to the Simplex 2000 series, which is well-trying in practice.

It closes with line pressure and works in a pressure-range of 0.5 to 12 bar. This principle prevents uncontrolled opening caused by pressure-spikes, even up to 40 bar.

At the biologically-important connection between pneumatics and sampler, the Simplex 2600 is closed with an aseptic clamp-connector with membrane.

This allows biological security to be even more significantly improved.



An optional variant of the Simplex 2600 is a hand lever which allows manual opening of the sampler.

This is an ideal solution for a "push-through" after CIP cleaning, for a manual sample and for maintenance.

This model can also be interchanged with the other 2000 series models without any problem at all, providing the vessel-connector is a clamp-connector.



2. Simplex 2600 sampler

Technical datas Simplex 2600

Seal: Metal cone complete with Viton-sheath, closing with line pressure.

Working air-pressure: min. 6 bar max. 8 bar

Technical data: Version with Viton metal seal cone

Line pressure: from 0.1 to 12 bar

Function performance: up to 12 bar line pressure – control air pressure 8 bar

Line pressure-shock: up to max. 40 bar without opening, no damage

Opening path: 2.0 to 3 mm

Throughput: Medium water 6° Celsius; line pressure 2 bar; Filler pipe Ø1 mm;
c. 400ml/minute

Maintenance interval: Between 3-12 months, dependent on medium, membrane composed of silicon, strongest impact through alkalis and acids in cleaning.

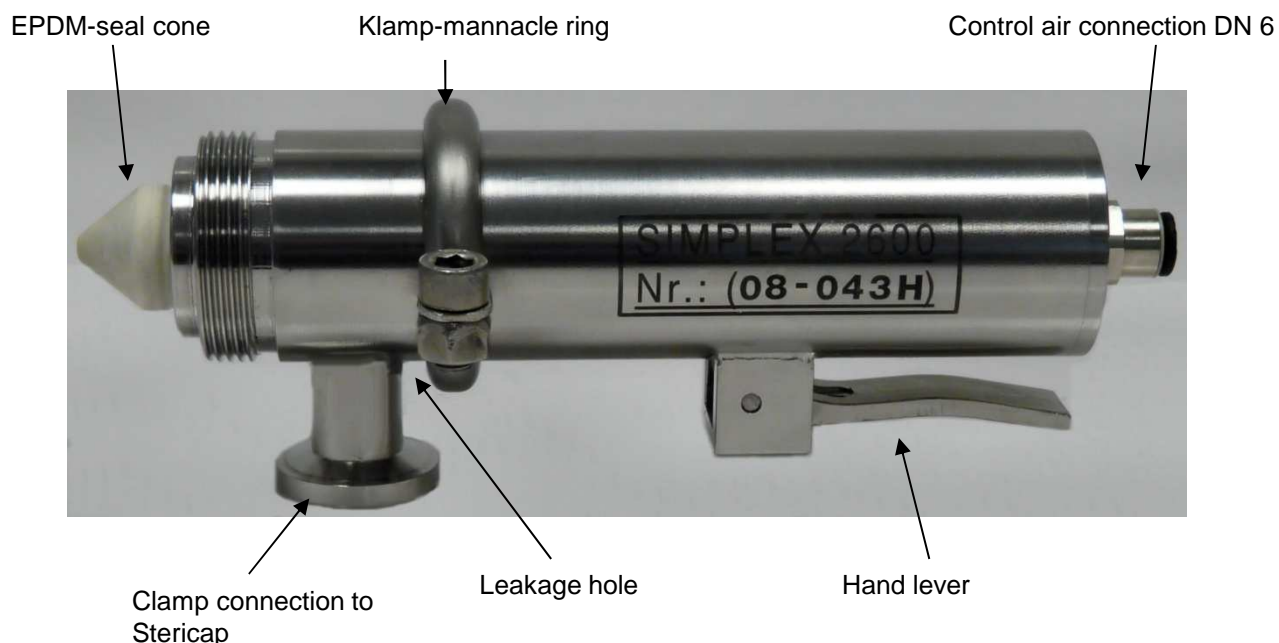
(In the case of warm or cold drinking-water 80,000 strokes of the driving component, at constant temperature.

With temperature variation from 0° to 130° Celsius correspondingly less)

Maintenance costs: max. 2 seals, time required c. 2-3 minutes

Fault display: Leakage hole near the flask connector

Sampler Simplex 2600



2. Simplex 2600 sampler

Optional: End-switch version

Optionally, the sampler may be fitted with an end-switch. This is required, if, for example, the current switch-state of a sampler must be queried by an equipment-control system. The response is either open or closed.



Optional: External cleaning

Optionally, the sampler may also be fitted with a cleaning-valve.

With this version, it is possible to carry out an intermediate clean or intermediate sterilisation between the normal CIP-cleans. A further option would be a CO₂-valve in order to maintain any required anaerobic state in the sampler bottle.



3. Bottle connection



The Stericap is attached to the sampler with a clamp.

For CIP cleaning, the closing lid of the Stericap is pressed tightly against the body of the Stericap by means of a clamp and this closes it tightly.

The cleaning fluids flow out through the Vacu-Compens (single-use cleaning)

and thus ensure the cleaning and the sterilisation of the system right down to the last component.

The sampler bottle is inserted into the middle of the Stericap with the special ring-nut with membrane and fixed in place with the clamp. The flask now has a leak-proof and strong attachment to the Stericap.

The sterile and recontamination-free de-aeration of the flask is via the Vacu-Compens, which has to be filled with alcohol.

By means of this leak-proof, sterile connection to the flask, you can achieve a very high - almost 100% - sterile safety.



3. Bottle connection Stericap-variants

For special versions for filling the testing material, specific solutions exist or can be developed.

In the two pictures, you can see two of the specific solutions.



Filling into sterile plastic bottles which are screwed directly into the Stericap.

Filling into sterile plastics bags, in this version with fill-level sensor in order to avoid overfilling.

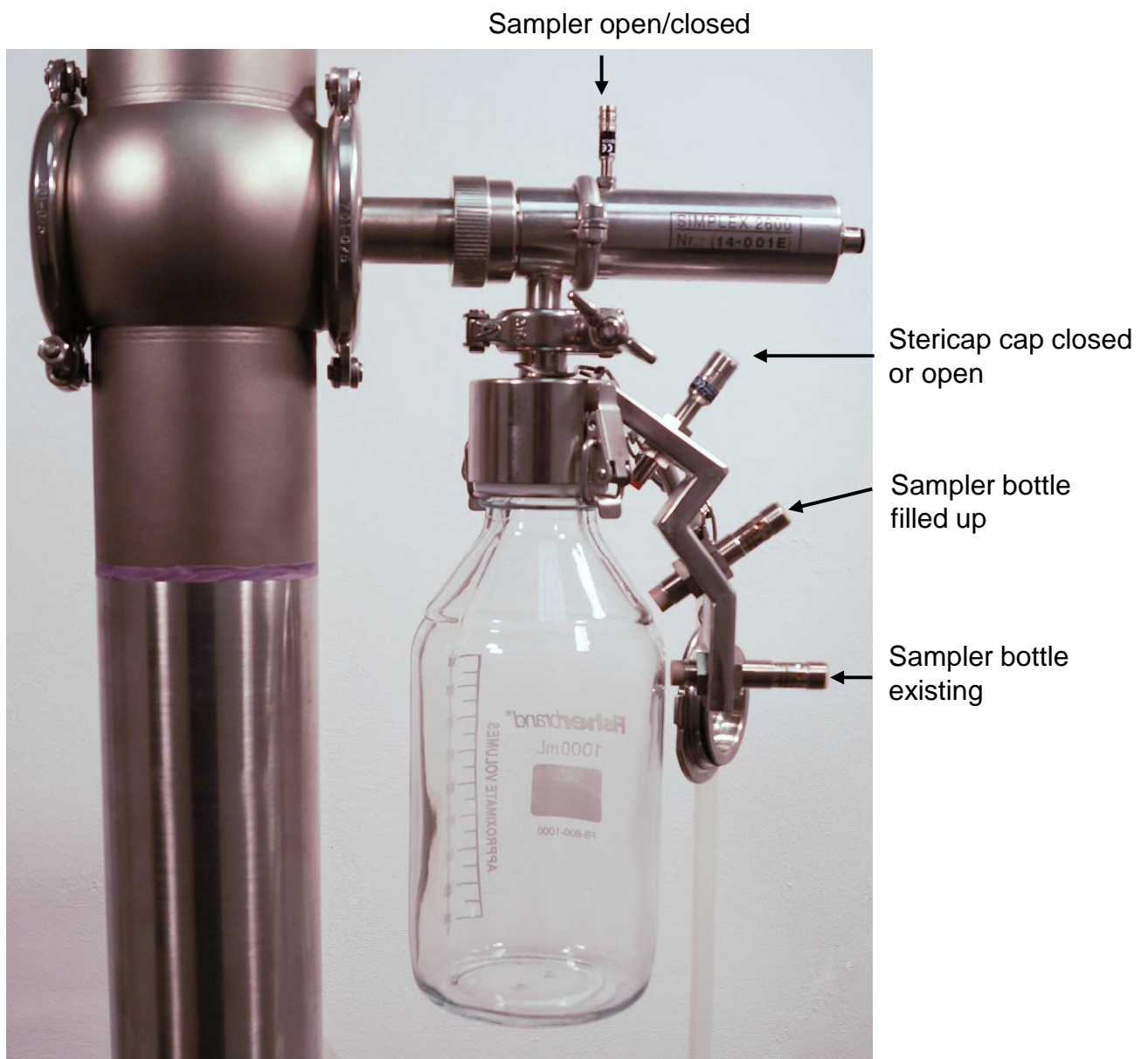


3. Bottle connection options

There are optional sensors for the Stericap which can serve a variety of different functions.

- Stericap closed - important for CIP cleaning,
- Sample flask present,
- Flask filled,

These sensors are extremely useful – indeed, they are essential if the sample is being controlled via remote-control systems.



3. Bottle connection: Filter unit

There are further special variants for the sampling of a product.

Membrane-filtration directly at the sampling-place.



The filter unit is cleaned in the laboratory and autoclaved, or sterilised in a steamer.

After sterilisation, allow to cool down and open in clean air and insert the membrane filter, wrap in aluminium foil and transport to the sampling-site.

Samplers are normally, as we know, cleaned during the CIP process, filter units are then attached and the sampler synchronised as in a continuous sample.

Advantage of this filter method: the quantity filtered is many times the quantity usually filtered in the laboratory.

In practice, filter quantities of c. four litres have already flowed through the membrane filter without blocking. Standard quantity is in the region of c. 2000ml.

These quantities are very strongly influenced by the viscosity of the products.

The advantage of the more representative test is obvious and requires no further explanation.

A significant time-saving can also be observed.

3. Bottle connection: Filter unit components

Membrane-filtration directly at the sampling-place

Individual parts of the filter unit with connection to the sampler and without connection to the test flask, because this is only used for determining the flow-rate.



Granusim Microbiological „finder-programm“ with the new polymer technology

We can use a new method to detect microbes in liquid foodstuffs – the polymer technique.

Short definition: (More detailed information about the polymer can be found at Genial)

If the polymer is kept afloat in the liquid, microbes can “dock onto” the polymer and are thus separated from the sample and recorded.

After that, they can be examined and defined in the laboratory with various methods from incubation to PCR.

At present there are two ways of taking samples:



One way:

Final product control:

With this way of taking samples, a sample about the polymer is taken, automatically controlled, from a filled up unit (bottle, KEG).

Granusim Microbiological „search-programm“ with the new polymer technology

The other way:

Online sampling:

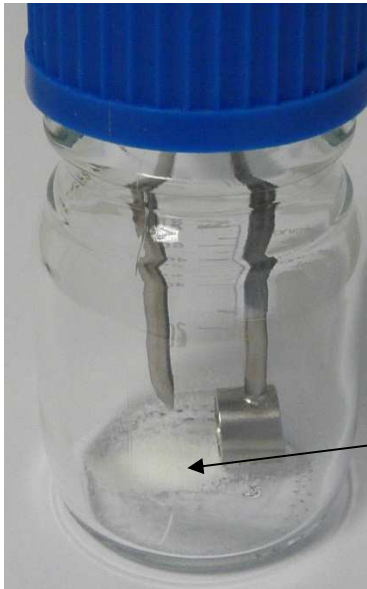
With this method, a sample about the polymer is taken directly from the production line.



Polymer floats into

Granusim Microbiological „search-programm“ with the new polymer technology

Advantage of this quality assurance:



The polymer (100mg) is filled into a cleaned 100ml sample bottle and sterilized together with the bottle (preferably: autoclaving).



After being sterilized, the bottle, packed sterile, e.g. in aluminium foil, is taken to the place of sampling.

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The bottle is docked onto the sampling device under sterile conditions and then automatically sampled.



In the laboratory, the bottle is filled with a culture medium under sterile conditions without opening the bottle (inoculation by way of self-filling needle).

The bottle, still closed and thus sterile, then goes for incubation or similar.