

MICROBIOLOGICAL HIGH PRESSURE GAS SAMPLER: Compressed gas system for AIRWEL



Compressed gas system with AIRWEL



Compressed gas system with AIRHEAD

Index

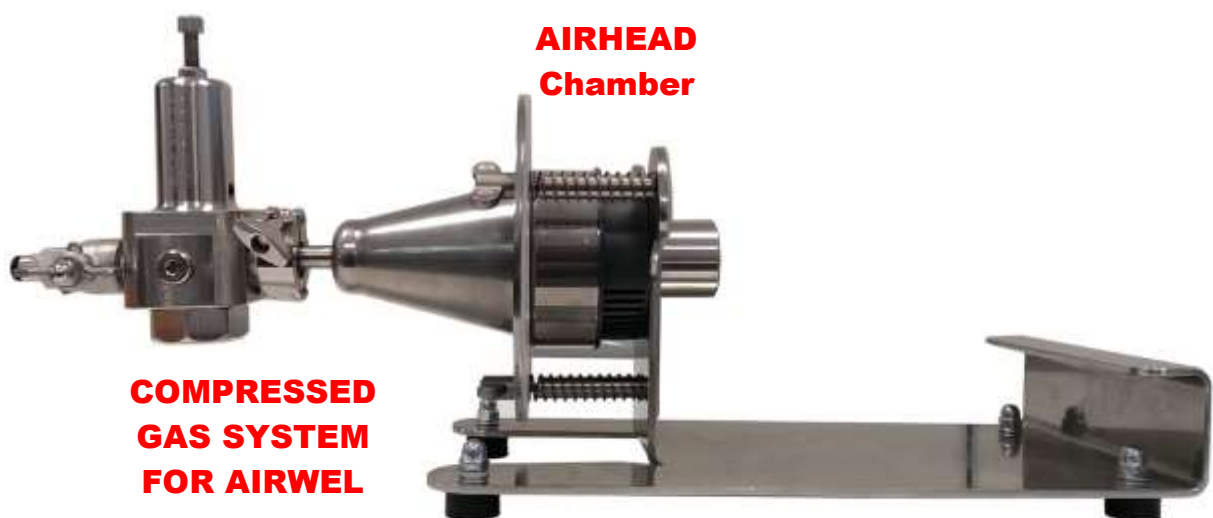
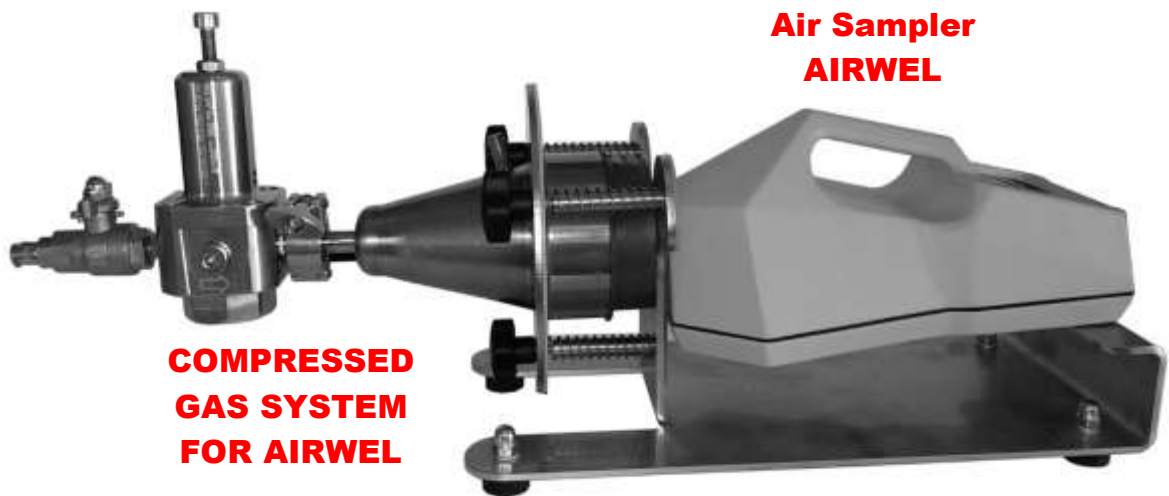
DESCRIPTION	4
TECHNICAL FEATURES	5
PART NUMBER	5
INSTRUCTION FOR USE	6
PREPARATION	6
USE WITH AIRWEL	8
USE WITH AIRHEAD CHAMBER	10
TROUBLESHOOTING (ONLY FOR AIRWEL)	11
TRANSFER OF SAMPLING CYCLE DATA (ONLY FOR AIRWEL)	12
MAINTENANCE	12
INSTRUMENT CLEANING	12
SPARE PARTS	12
PACKAGING	12

DESCRIPTION

This equipment is designed to test the presence of microorganisms in compressed gas samples supplied from tanks and pipes under pressure.

To perform the analysis, it is necessary to have an AIRWEL air sampler with 100 lt/min air flow or the AIRHEAD Chamber (not supplied with the COMPRESSED GAS SYSTEM FOR AIRWEL).

The 100 lt/min flow rate is guaranteed by a special calibrated regulator placed in front of the equipment.



Technical features

• Input size	1/4"
• Input pressure	3 ÷ 6 bar (max 16 bar)
• Flow rate	100 lt/min (210 SCFH)
• Material	Regulator: Stainless steel 316L; structure: AISI 304
• Gaskets	Silicone
• Flow regulation	Automatic
• Sterilization	By autoclave
• Sampling data transfer	Via Bluetooth® (with AIRWEL device)
• Operating temperature	-20 ÷ +200 °C
• Dimensions	620X180H220 mm
• Weight	6,5 Kg

Part number

CODE	/INPUT PRESSURE (PI)	/FLOW RATE	/VERSIONS
600	04: 4 bar	100: lt/min	S: COMPRESSED GAS SYSTEM FOR AIRWEL system without air sampler

Accessories (not supplied with the COMPRESSED GAS SYSTEM FOR AIRWEL)



AIRWEL

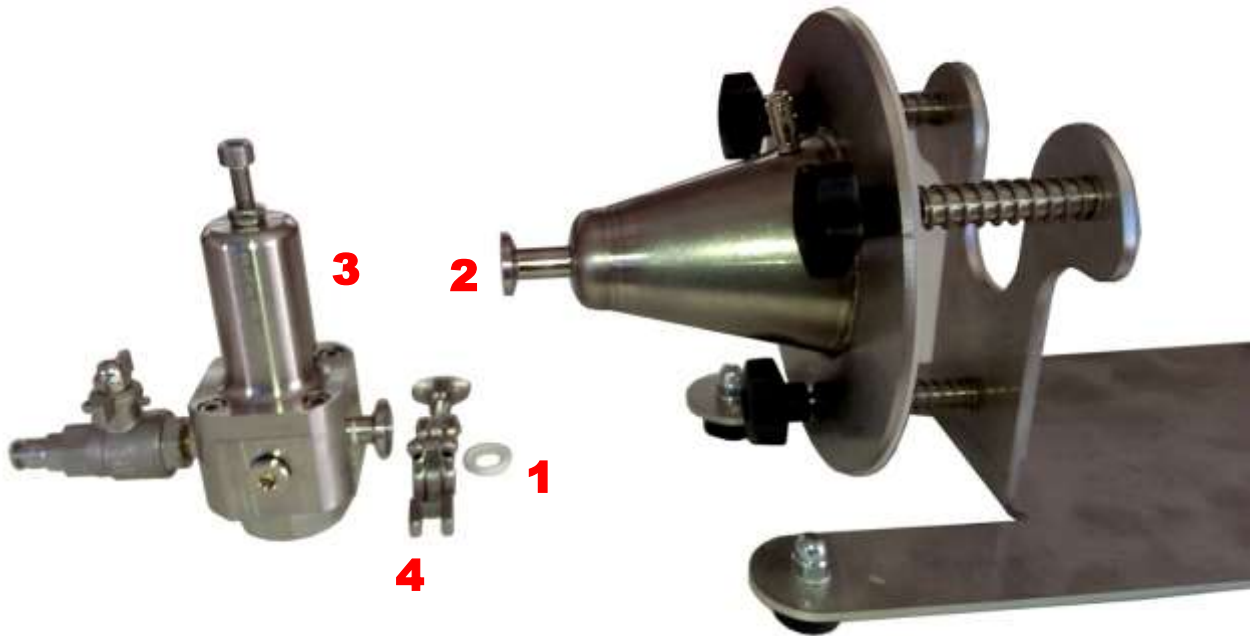


AIRHEAD Chamber

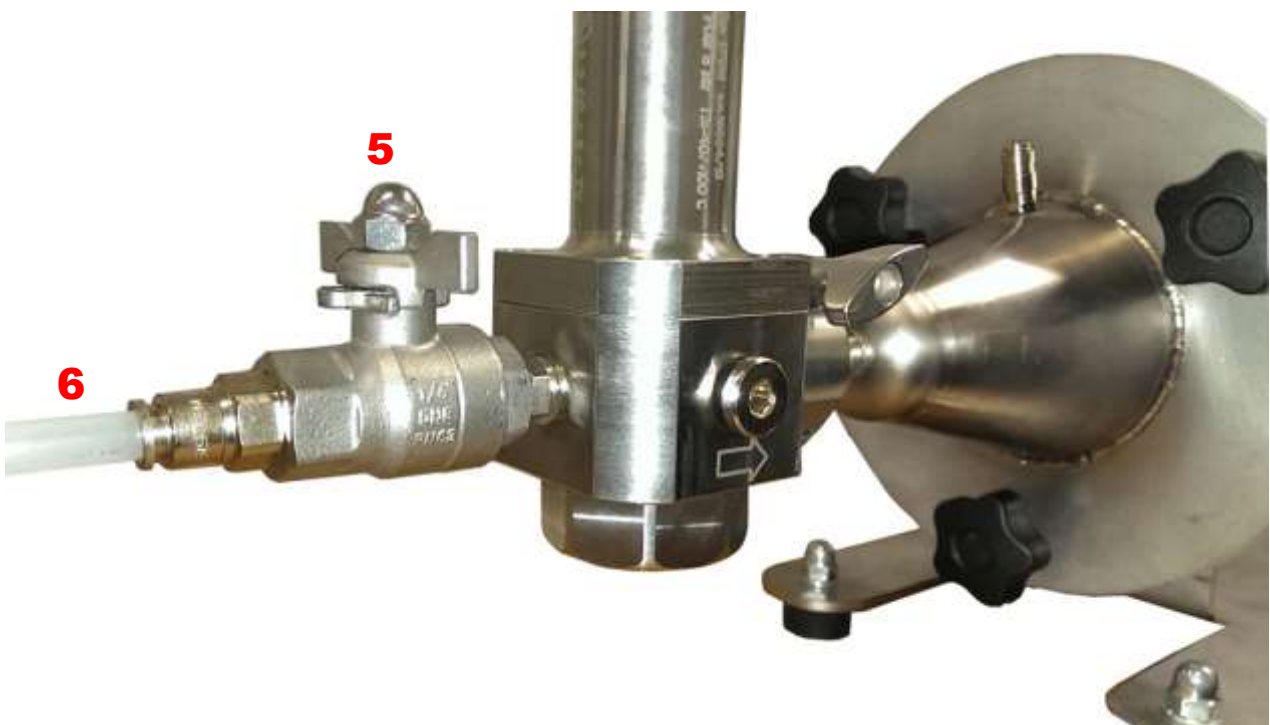
INSTRUCTION FOR USE

Preparation

Fit the seal (1) in its housing (2), place the pressure regulator (3) and secure it using the locking clamp (4).



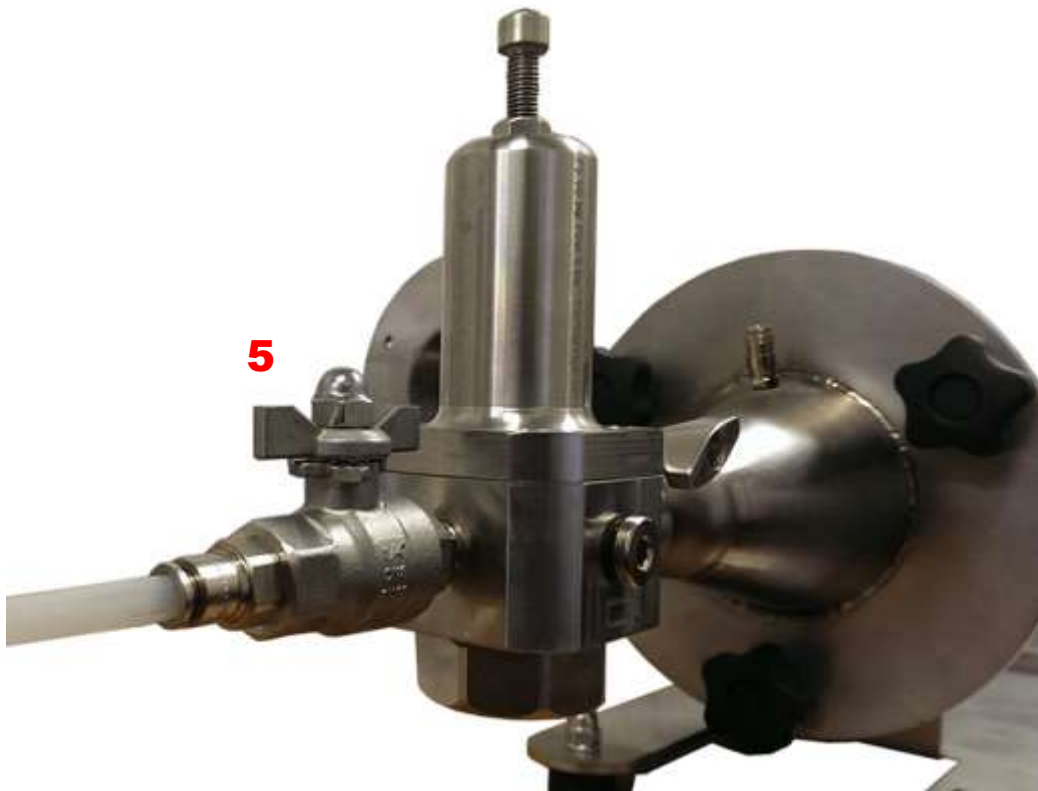
Close the gas valve (5) on the pressure regulator input and connect it through a special tube (6) to the outlet of the gas system (7) to be analyzed (the photo refers to an example as guidance only).



Verify the input pressure: it must be between 3 and 6 bar.

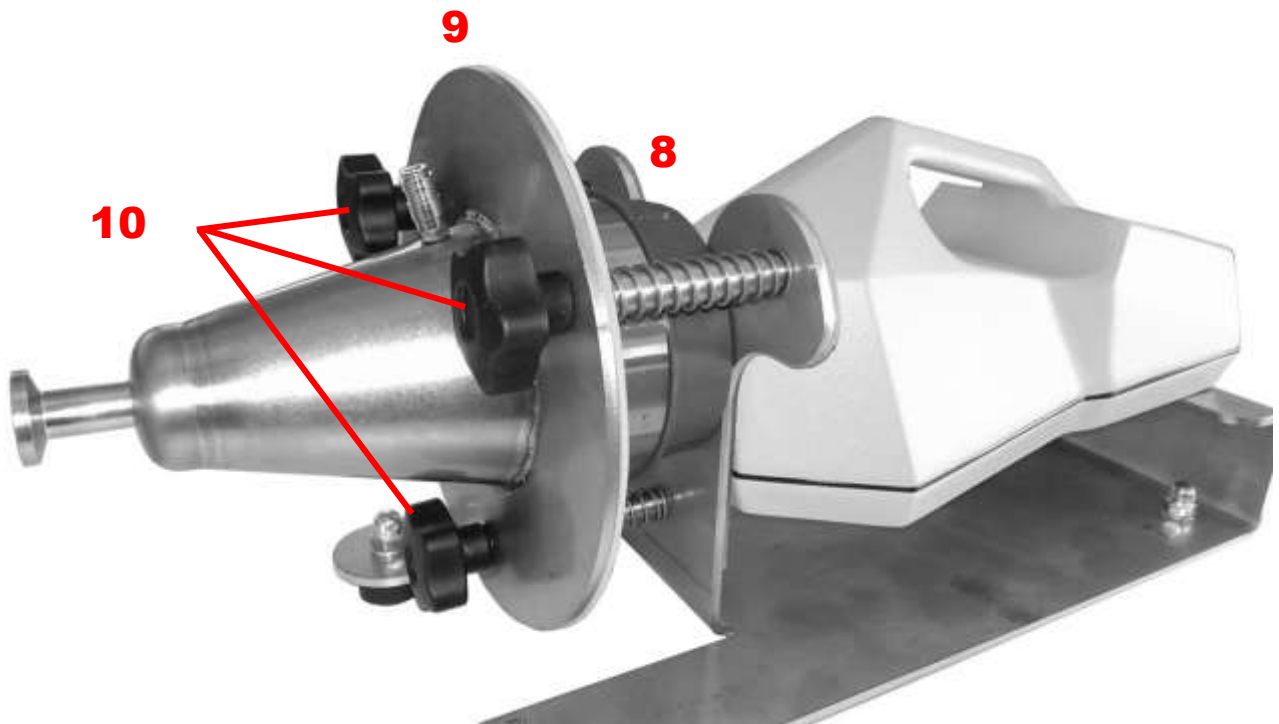


Open the gas valve (5) for a few seconds in order to perform the "circuit cleaning."

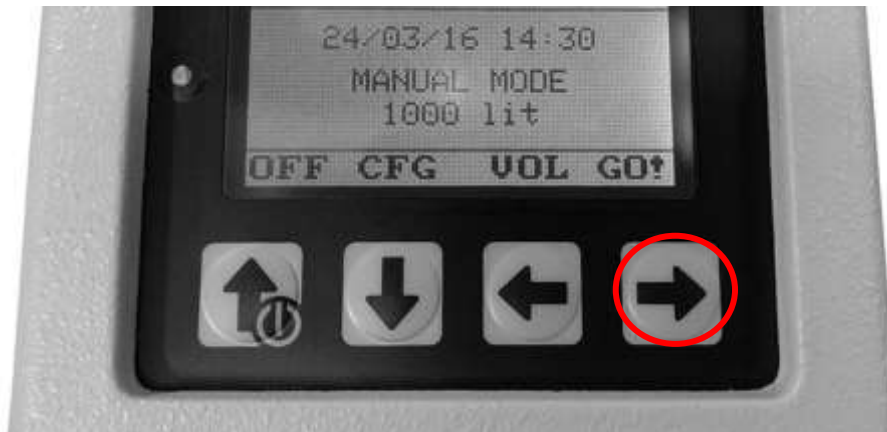


Use with AIRWEL

Place the AIRWEL in its position (8). Press on the seal (9) and tighten the knobs (10) in order to guarantee a good adherence of the instrument head.

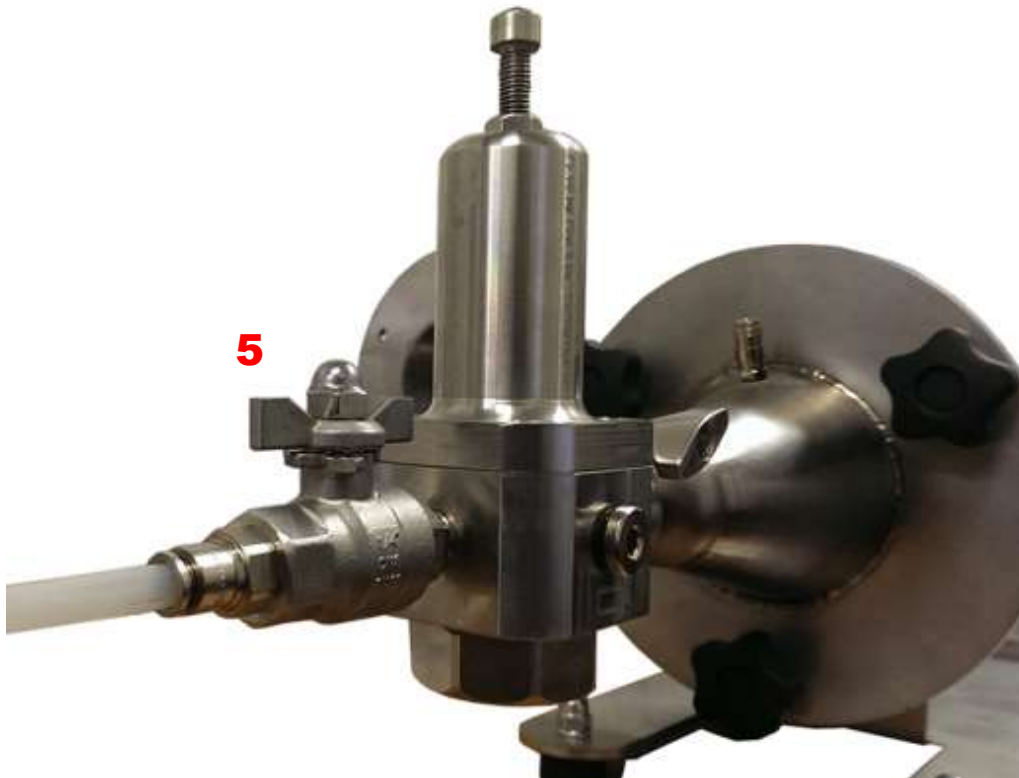


After the required gas quantity has been programmed (e.g. 1000 litres), start the sampling pressing GO! (→) button on the display of AIRWEL.

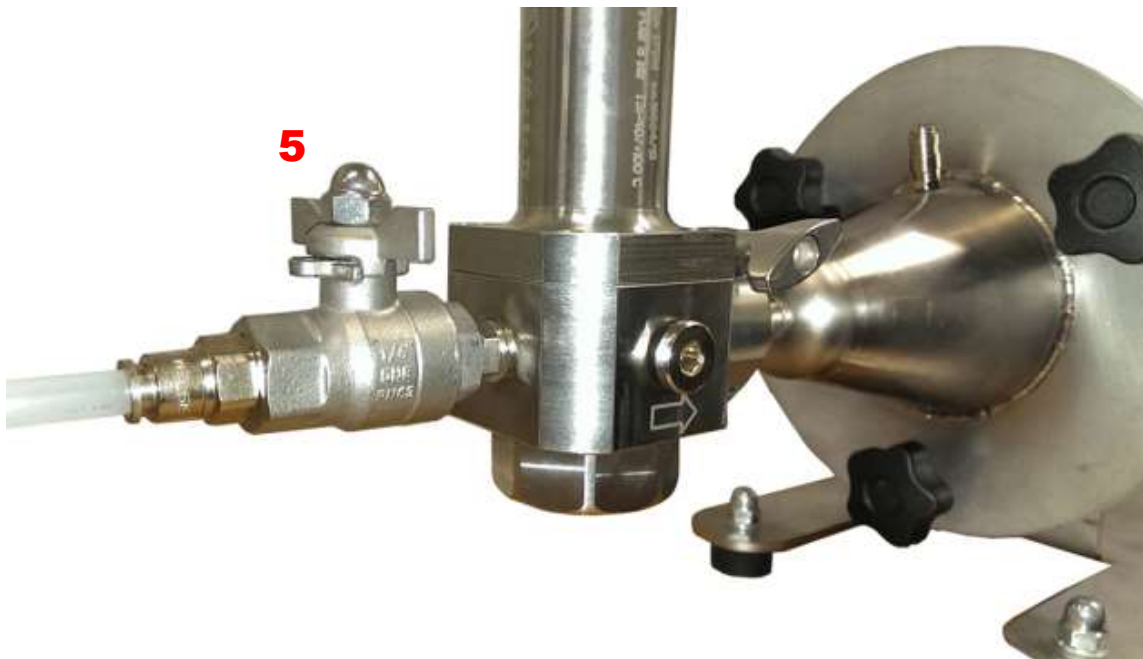


Display of AIRWEL

At the same time open gas valve (5). The sampling process ends after the programmed volume has been reached (for example 1000 lt = 10 min). An acoustic signal informs about the end of the process.

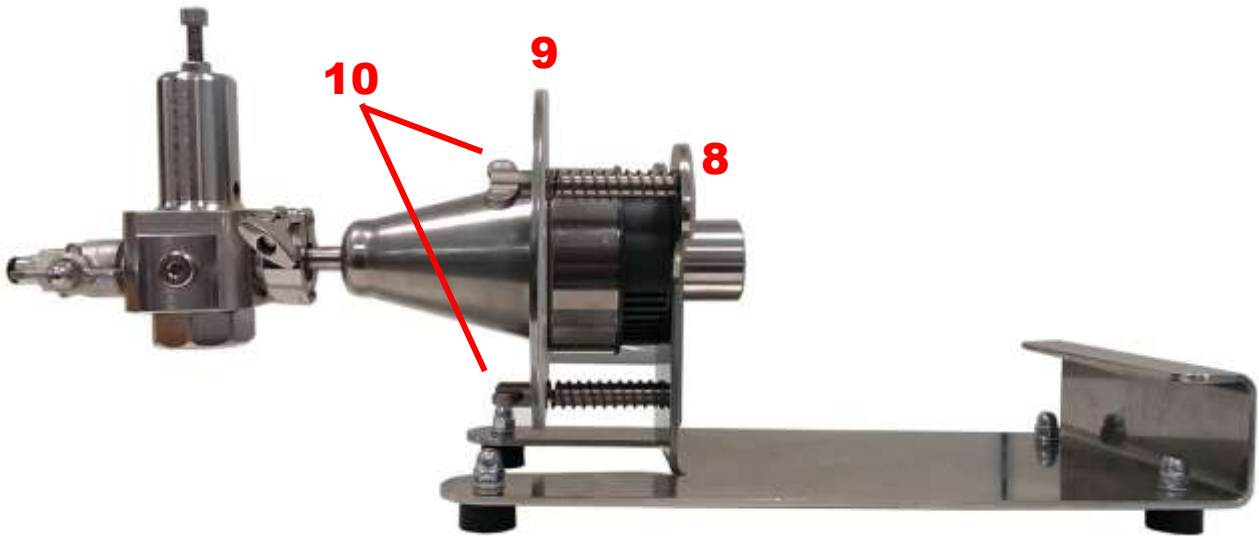


At the end of the sampling process close the gas valve (5), remove the AIRWEL instrument and remove the Petri dish to be analyzed.

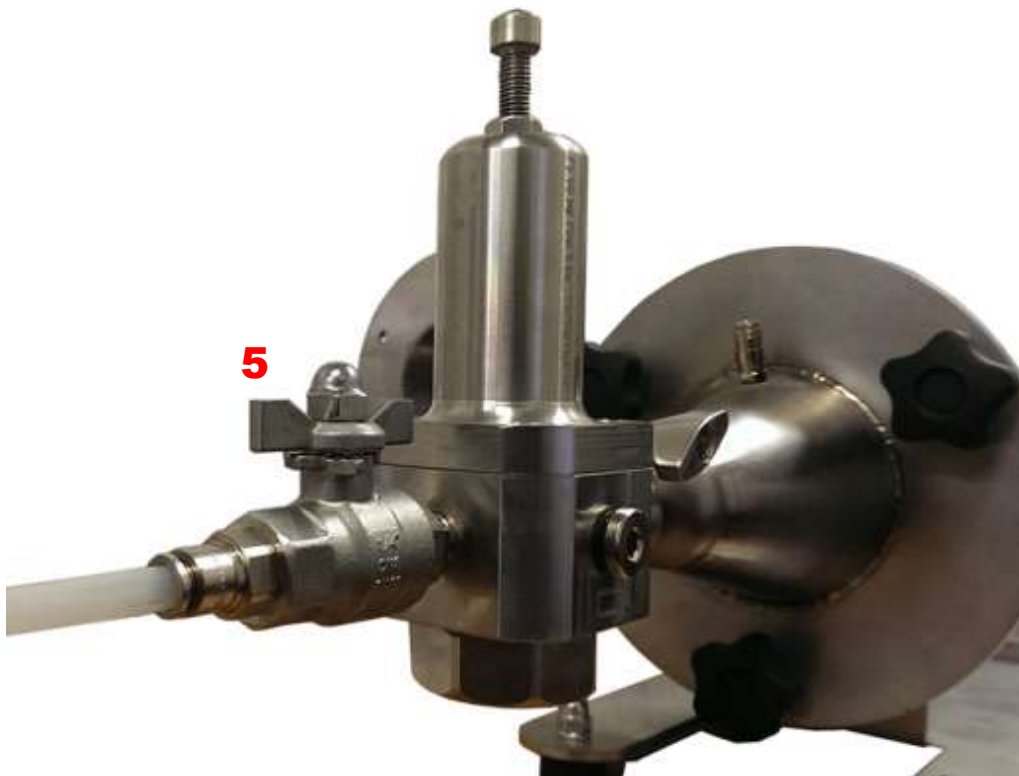


Use with AIRHEAD Chamber

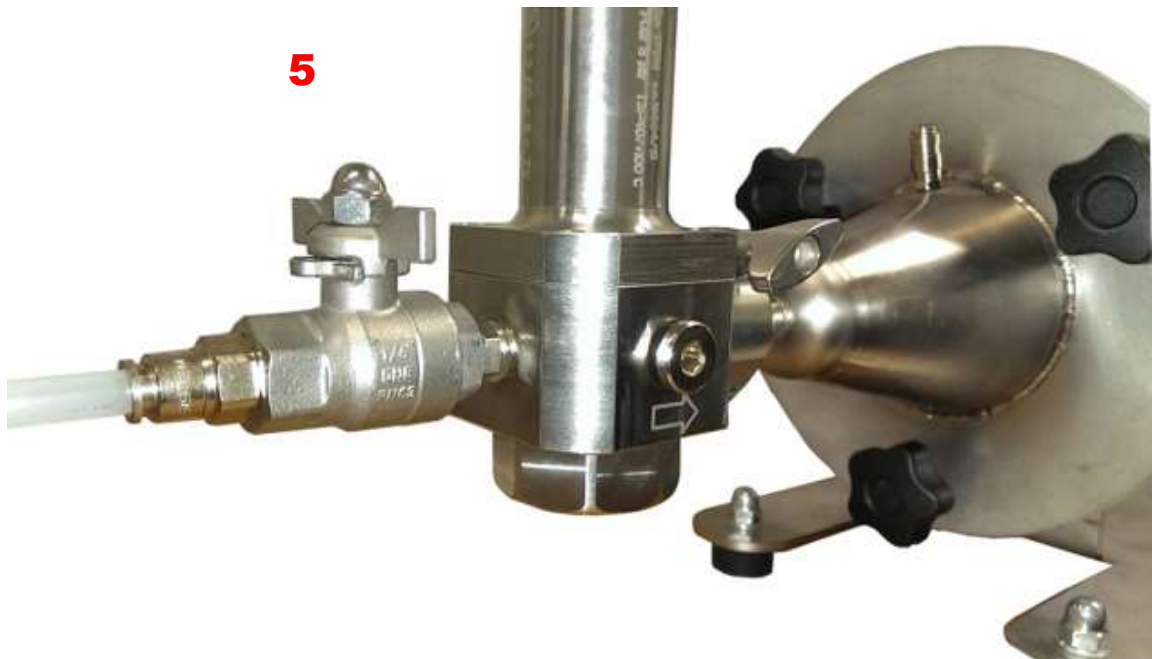
Place the AIRHEAD Chamber in its position (8). Press on the seal (9) and tighten the knobs (10) in order to guarantee a good adherence of the instrument head.



Once defined the amount of air to be sucked, calculate the minutes needed (e.g. 500 liters = 5 minutes). Bring a chronometer or timer, start them and at the same time open gas valve (5). The sampling process ends after the programmed minutes have been reached.



At the end of the sampling process close the gas valve (5), remove the AIRHEAD Chamber and remove the Petri dish to be analyzed.



**Plate in
AIRHEAD Chamber**

Troubleshooting (only for AIRWEL)

The system is designed for 100 l/min flow rate and a gas input pressure of 4 bar (-25% - +50%).

If this rate is not guaranteed the AIRWEL stops and an acoustic alarm warns the “head open” error if the flow is too high, or “head clogged” error if the flow is too low.

If the error persists and the input pressure is in the appropriate range, it is necessary to send back the instrument for re-calibration.

TRANSFER OF SAMPLING CYCLE DATA (ONLY FOR AIRWEL)

The sampling data (progressive identification cycle number, day, hour, operator identification, sampling location, culture plate identification) can be transferred via Bluetooth to Bluetooth printer or P.C. It is necessary to apply the normal procedure for AIRWEL or AIRWEL+ models.

MAINTENANCE

Instrument cleaning

After instrument has been disassembled each part can be sterilized (autoclavable) excluding the AIRWEL and the AIRHEAD Chamber).

SPARE PARTS

Pos.	Picture	Components	Code
1	1	GASKET PRESSURE FOR PRESSURE REGULATOR	470
2	3	REGULATOR	471
3	4	LOCKING CLAMP	472
4	9	GASKET FOR AIRWEL	473
5	10	CLOSING KNOBS	474

PACKAGING

COMPRESSED GAS SYSTEM FOR AIRWEL is supplied in an IP67 case.