

CAMTU Compressed Air Microbial Test Unit

Identify Sources of Contamination in Compressed Air and Improve Food Safety



Compressed air is used in a broad range of applications in the food processing industry, such as mixing of ingredients, cutting, sparging, drying of product, transporting/propelling product through processing systems and packaging of final product. In many of these applications, compressed air is in direct contact or indirect contact with food product. The impurities in the compressed air may contaminate the food product which can result in change of color and taste, reduced shelf life, in addition to exposure to bacteria and other micro-organisms, can result in product recalls.

Compressed air is warm, dark and contains moisture which is the ideal environment to promote the production of microbes. These microbes migrate through the entire compressed air system and are released at exit points, critical areas that food, packaging or surface areas come in direct contact.

Recently, Safe Quality Foods (SQF) released a 7th edition amendment in sections 10.5.7 and 11.7.5 stating, compressed air used in the manufacturing process shall be clean and present no risk to food safety. Others have also identified compressed air as a source of contamination and risk to food safety.



Features & Benefits:

- Lightweight and ergonomically designed for ease of use
- Constructed of durable polypropylene - easily sanitized
- Pre-filled petri dishes with specialized tryptic soy agar designed to hold up to compressed air flow/pressure
- No electrical supply required
- No refrigeration required for the petri dishes – 300 day shelf life
- Quick sampling time – 20 seconds
- Complete kit with connection tubing, pressure regulator/ metering orifice, shut off valve, timer and petri dishes

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British Compressed Air Society has produced a specification for dewpoint (-40F/C), oil removal <0.01mg/m³ and particulate removal (including microbiological particles) 0.1-0.5 microns. Request white paper by Lee Scott, "Reducing Contamination Risks of Compressed Air in Food Plants".

However, to date, the only devices capable of sampling compressed air systems for microbes are expensive, very cumbersome, require lengthy sampling times and require extensive training. Parker Balston recognized the need for an alternative device that is easily transported throughout the food plant and can provide a quick qualitative analysis of compressed air purity requiring very little training.

The Parker Balston CAMTU (compressed air microbial test unit) is easily transported weighing less than a pound. It comes complete with connection tubing, shut off valve and a special designed pressure regulator and metering orifice. These matched components provide the exact amount of compressed air exposure for each sampling. The petri dishes are filled with specialized tryptic soy agar designed to hold up to compressed air flow and pressure. TSA is used for the cultivation of a wide variety of microorganisms including most bacteria and mold spores.

The Parker Balston CAMTU has been validated by Dr. Mclandsborough, head of the Food Science Department of the University of Massachusetts, Amherst MA. —request white paper, "Comparison of the

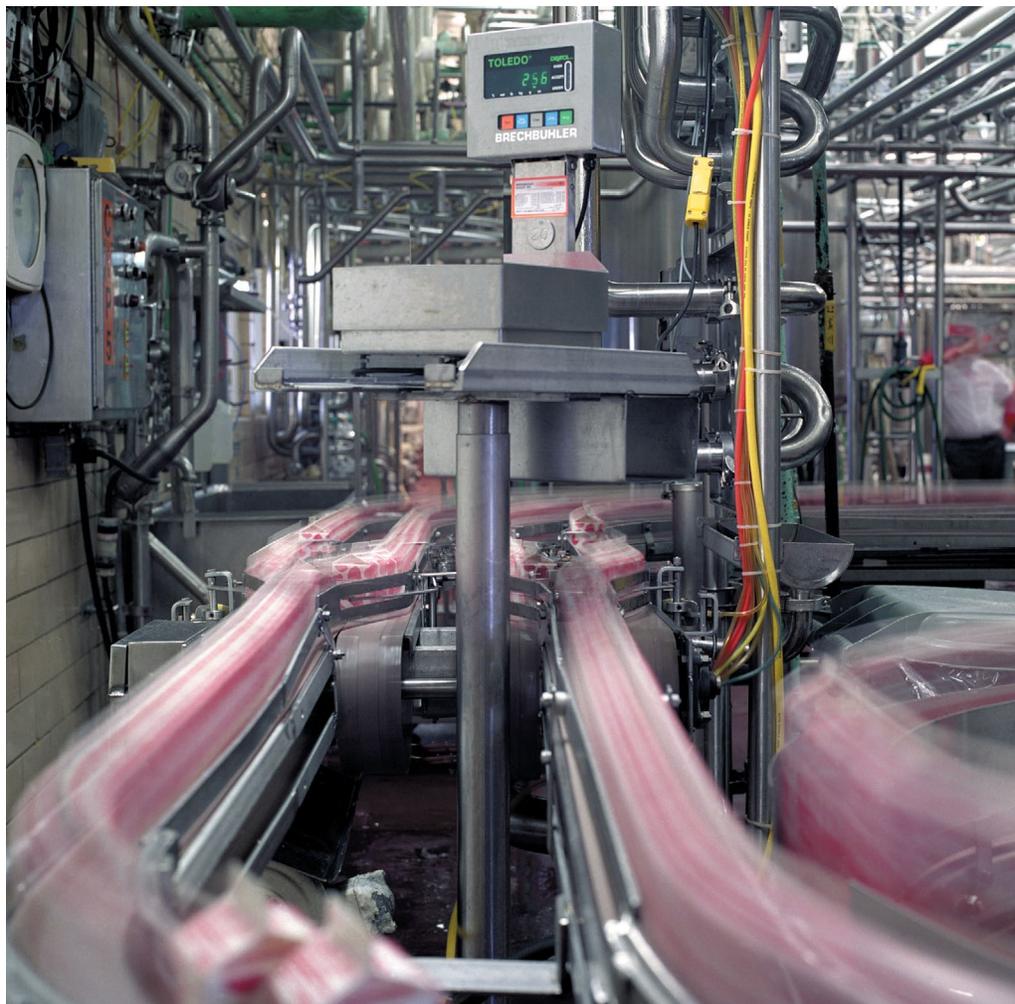
Compressed Air Microbial Testing Unit (CAMTU) to a standard method of bioaerosol sampling."

To obtain a sample, simply plug the connection tubing into the sample point on the compressed air system, insert a petri dish into the CAMTU, close the CAMTU, open the shutoff valve and expose the agar for 20 seconds. After exposure simply place the petri dish in an incubator for 48 hours or in a controlled environment of at least 68F and observe for colony forming units (CFUs).

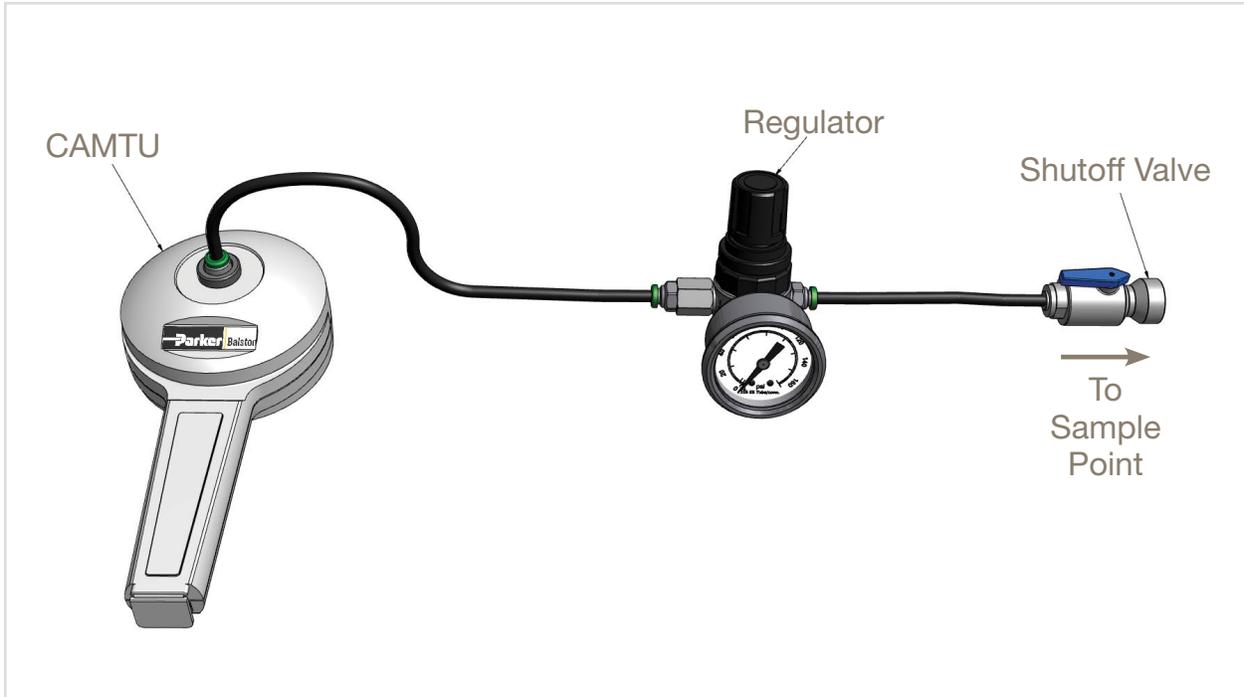
This is an ideal device to incorporate into your Good Manufacturing Practices program for monitoring all the identified HACCP risk points. For those risk points where microbes are discovered, we would recommend installing Balston 3 stage sterile air systems which will remove



oil, water, rust, pipescale and all microbes from the compressed air (Request literature bulletin FMB09-B). The CAMTU can then be used to monitor those filter systems for optimum performance.



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CAMTU Sampling System



Principal Specifications and Ordering Information

Complete Kit: C01-0128	
CAMTU Sampling Device	C01-0122
DFU Assembly	C01-2418
Timer device	C01-0123
Tubing ¼" OD	A01-0459
Regulator/Metering Assembly	C01-0125
Sanitizing spray bottle	C01-0124
Shut off valve	C01-0126
Petri dishes (20 each)	C01-0127
Dimensions	15.63"w x 13.63"h x 6.38"d (40cm x 35cm x 16cm)
Shipping Weight	7 lbs. (3.2 kg)

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