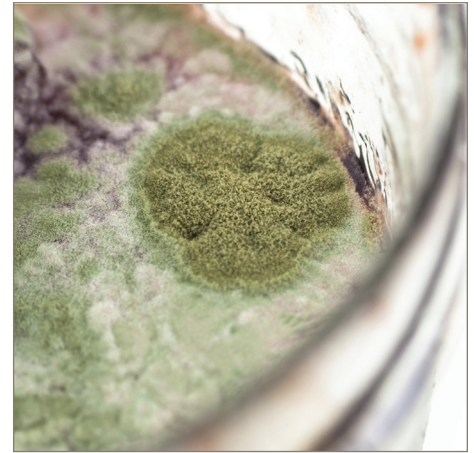


CAMTU Compressed Air Microbial Test Unit

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 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 and reduced shelf life. In addition, 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 growth of microbes. These microbes migrate through the entire compressed air system and are released at exit points; critical areas at which food, packaging or surface areas come into direct contact.

Most GFSI food safety schemes now recognize food contact compressed air as a potential contamination risk. Safe Quality Foods (SQF) has released the 7.2 Edition. Sections 11.5.7.1 and 11.5.7.2 state "Compressed air that contacts food or food contact surfaces shall be clean and present no risk to food safety." "Compressed air systems used in the manufacturing process shall be maintained and regularly monitored for purity." The CAMTU provides a quick, effective, cost efficient method of identifying potential sources of contamination. At high risk food contact points where contamination is detected Parker Balston Sterile Air Filters can be used to protect the processes.

NEW FEATURES!



Features & Benefits:

- Lightweight and ergonomically designed for ease of use
- Built in timer with indicator lights
- Pre-filled agar plates with specialized tryptic soy or potato dextrose agar designed to hold up to compressed air flow/pressure
- No electrical supply required
- Quick sampling time - 20 seconds
- Complete kit with connection tubing, pressure regulator/ metering orifice, shut off valve, timer and agar plates.
- Constructed of durable polypropylene - easily sanitized

CAMTU Compressed Air Microbial Test Unit

British Compressed Air Society has produced a specification for dewpoint (-40F/C), oil removal <math><0.01\text{mg}/\text{m}^3</math> 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".)

To date, the only devices capable of sampling compressed air systems for microbes are expensive, very cumbersome, require lengthy sampling times and 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 Anti Microbial Tubing, shut off valve and a specially designed pressure regulator and metering orifice. These matched components provide the exact amount of compressed air exposure for

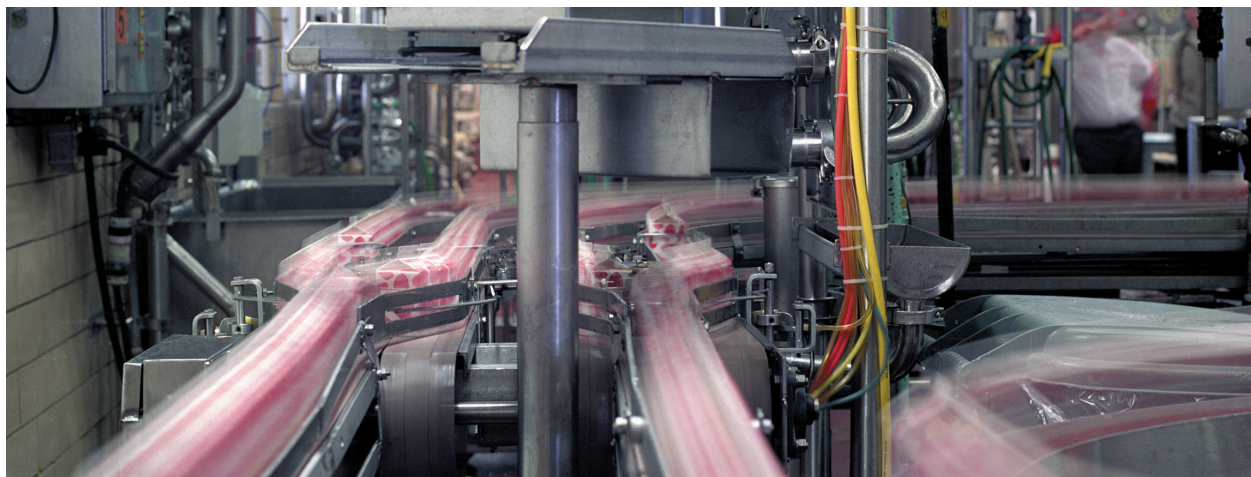


each sampling. The agar plates are filled with specialized Tryptic Soy Agar (TSA) or Potato Dextrose Agar (PDA) designed to hold up to compressed air flow and pressure. TSA is used for the cultivation of a wide variety of microorganisms including most bacteria and mold spores.

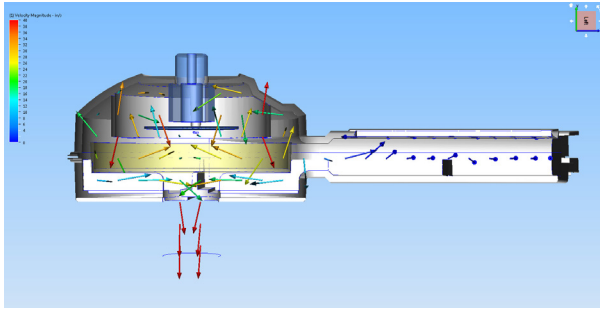
The Parker Balston CAMTU has been validated by Dr. Mclandsborough, head of the Food Science Department of the University of Massachusetts, Amherst MA. (Request white paper by Dr. Mclandsborough "Comparison of the Compressed

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

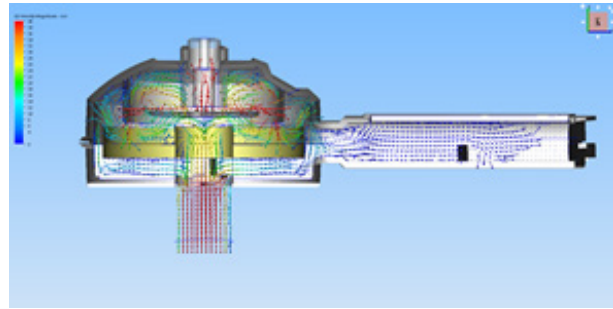
To obtain a sample, simply plug the connection tubing into the sample point on the compressed air system, insert an agar plate into the CAMTU, close the CAMTU, open the shutoff valve and expose the agar for 20 seconds. After exposure simply place the agar plate in an incubator for 48 hours or in a controlled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



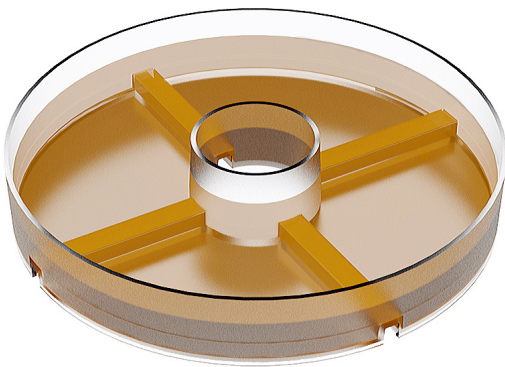
New Custom Designed Agar Plate Provides Enhanced Exposure to the Agar



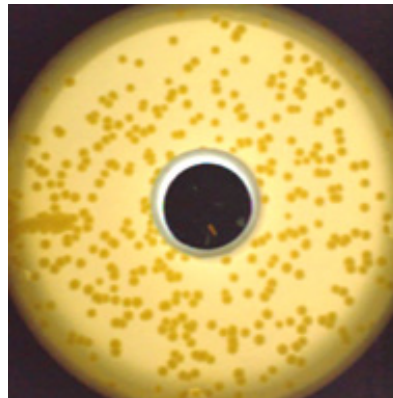
Flow dynamics original CAMTU with standard agar plate



Flow dynamics new CAMTU with custom agar plate providing more compressed air exposure over the agar plate



CAMTU Agar Plate



CFUs growing on an agar plate

Unlike the conventional agar plate, this unique CAMTU agar plate offers greater dispersion of the compressed air over the agar as a result of an improved air flow path through the center hole in the plate. This provides optimum detection performance

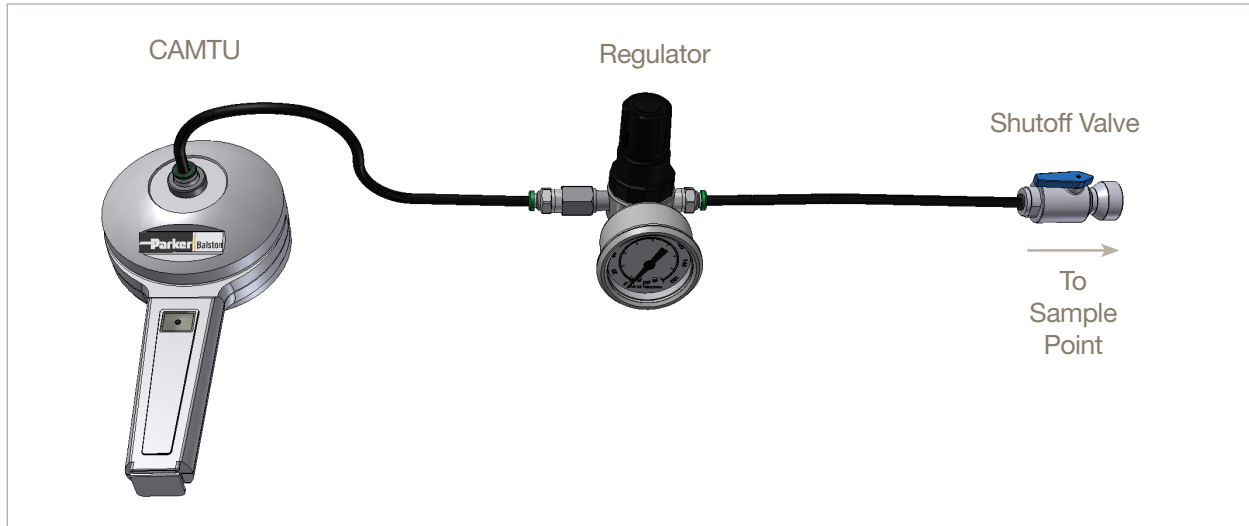
and enhanced capture of microbes. This is an ideal device to incorporate into your Good Manufacturing Practices program for monitoring all identified HACCP risk points. For those risk points where microbes were detected, Parker recommends

installing Balston 3 stage sterile air systems which will remove oil, water, rust, pipescale and all microbes from the compressed air (Request Bulletin FMB09). The CAMTU can then be used to monitor those filter systems for optimum performance.



Sterile Air Filter Systems
Balston 6000 Series

CAMTU Compressed Air Microbial Test Unit



CAMTU Sampling System

Principal Specifications and Ordering Information



Storage and Carrying Case

| Description | Part No. |
|------------------------------------|--|
| Complete CAMTU Kit | C01-0136 |
| Replacement Parts | |
| CAMTU Sampling Housing | C01-0142 |
| Timer | C01-0139 |
| DFU Assembly | C02-2418 |
| Tubing ¼" OD | A01-0484 |
| Regulator/Metering Assembly | C01-0125 |
| Sanitizing spray bottle | C01-0124 |
| Shut off valve | C01-0126 |
| Agar Plates (5 total) Tryptic Soy* | C01-0143 |
| Agar Plates (5 total) PDA* | C01-0134 |
| Petri dishes (5 total) Empty | C01-0133 |
| Dimensions | 15.63"w x 13.63"h x 6.38"d (40cm x 35cm x 16cm) |
| Shipping Weight | 7 lbs. (3.2 kg) |

*Agar plates are shelf life sensitive and should be stored in a refrigerated environment upon arrival to maximize shelf life. Agar plates will have a minimum of 60 days of shelf life remaining at time of shipment and cannot be returned.