

# MODEL 9009C4

## END BUCKLING TEST STATION FOR BEVERAGE ENDS

### FEATURES

- SPC "IN CONTROL" RATED
- FREE END FAILURE RESEMBLES SEAMED END FAILURE
- MICROPROCESSOR CONTROL OF TEST
- HIGH RESOLUTION DIGITAL DISPLAY
- RS-232 COMMUNICATIONS CAPABILITY
- TEST POINT FOR CALIBRATION
- SELF-ADJUSTING END CLAMPS
- EXTENSIVE SAFETY FEATURES
- ANALOG OUTPUT (OPTIONAL)



LATEST MODEL MAY VARY SLIGHTLY FROM PHOTO

### DESCRIPTION

The MODEL 9009C4 End Buckling Test Station is used to determine the pressure at which an unseamed beverage end fails. The failure pressure is registered upon buckle or tab blowout of the free end.

### OPERATION

An appropriate set of Change Parts, determined by end being tested, is installed on the unit. An end is clamped in place and a test sequence is initiated. The end is pressurized at a pre-determined rate until it fails; the pressure at which the end failed is indicated on the front-panel mounted digital display.

### SAFETY

The 9009C4 safety features include a front shield interlock, automatic venting of pressurized air after testing, and a strategically-located clamp control which prevents the accidental release of a pressurized end.

## PRODUCT OVERVIEW

The 9009C4 End Buckling Test Station was designed to test the failure pressure of an unseamed beverage end by gradually pressurizing the end and displaying the pressure at which it fails. Each unit is tested at the factory using SPC methods to ensure that it is "in control" before being shipped.

The 9009C4 incorporates specially designed Change Parts which clamp and restrict an end in such a way that the sample failure closely resembles the failure of an end that has been seamed to a can. This helps make it possible for customers to establish a correlation between free end failure pressures and pasteurizer failure pressures.

The 9009C4 uses plant-supplied air to pressurize a sample. The test sequence is controlled by the 9009C4's built-in microprocessor, and a bright, front panel mounted digital display indicates both the pressure behind the sample as it is being tested and the pressure at which the sample fails. The high resolution test results (see SPECIFICATIONS) provide accurate data for use by the customer's SPC process monitoring software.

This unit provides switch-selectable test or calibration modes, and provides a test point to which a calibration accessory can be attached for calibrating the unit. The 9009C4 provides RS-232 communications capability, allowing test results to be sent to a PC or similar device. This allows direct importation of test results into SPC software packages capable of reading ASCII textfiles.

The 9009C4 must be fitted with an appropriate set of Change Parts in order to test each specific size and type of sample. These Change Parts are manufactured by the Altek company and are required for operation of the unit.

The 9009C4 incorporates the use of pneumatic clamps to hold the end in place. Various guards and shields, shield interlocks, and strategic switch locations help to ensure safe operation of the 9009C4 End Buckling Test Station.

## APPLICATION NOTES

The 9009C4 is normally used when a high-resolution digital display and an RS-232 compatible output are desirable. This unit was designed to test unseamed (free) ends. This allows testing of ends without having to first seam the end to a can, providing rapid cycle times for "off the line" testing. The 9009C4 tester produces high resolution test results

## SPECIFICATIONS

The following document describes the specifications for this unit:

CDXM47### - Specifications for the 9009C4

## CHANGE PARTS

This unit requires the use of Change Parts. Please refer to the following documents for details regarding the Change Parts available for this unit:

CDLC17### - Advertising Flier

CDXC17### - Change Parts Specification

## OPTIONS

Options specified when ordering the 9009C4 include the following:

Input Line Voltage

Digital Display Readout Units

Serial Communication Settings

Analog Output

## ACCESSORIES

Accessories available for this unit include:

9835 - Calibration Plug

CDLA07### - Advertising Flier

CDXA07### - Specifications

9842 - Pressure Calibrator

CDLA08### - Advertising Flier

CDXA08### - Specifications

## TECHNICAL SUPPORT

Altek provides comprehensive technical support to its customers worldwide. For assistance, contact Altek and ask for the Engineering department.

## REPAIR

Altek customers can obtain a return authorization from Altek and ship a faulty unit in for repair, if necessary. In addition, replacement parts for all models are available from Altek.

## WARRANTY

All Altek products are built to the highest standards of quality and reliability. This Altek product is backed by a full 90-day warranty.

## FURTHER INFORMATION

See the accompanying fliers and specifications for additional information concerning this product. If these documents were not included with this flier, please call Altek; they will be mailed or faxed as quickly as possible.

## CUSTOM DESIGN

Altek can custom design inspection and test equipment to meet specific customer requirements. Custom Change Parts can also be designed and manufactured for most Altek products; contact Altek for further information.

For more information, contact Altek between 8:00 am and 5:00 pm ET, Monday thru Friday. The Altek company address and phone numbers can be found on the front of this flier.

## ORDERING INFORMATION

To purchase this product:

This flier is supplemented by additional literature, including specification sheets and Change Parts fliers and specifications.

The 9009C4 End Buckling Test Station requires the use of Change Parts, which must be ordered separately; see the accompanying literature.

Accessories must also be ordered separately.

Options are specified when the unit is ordered.

The 9009C4 is ordered by requesting the 9009C4 Customer Order Guide from Altek Sales Department. The Order Guide, which is filled out by the customer and returned to Altek, provides Altek with the information necessary to process an order for this unit.

*Thank you for your interest in TECH • products from Altek!*

CDXM4701.012

9009C4 SPECIFICATIONS

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

MODEL: ..... 9009C4 END BUCKLING TEST STATION

CHANGE PARTS SPECIFICATIONS: .. C17 (CDXC1701)

EFFECTIVE DATE: ..... DEC 21, 1996

& DENOTES OPTIONS SPECIFIED BY CUSTOMER

\* DENOTES FIELD ALTERABLE OPTIONS INITIALLY SPECIFIED BY CUSTOMER

WEIGHT/DIMENSIONS: ..... 74# / 21"l X 20"w X 22"H

ENVIRONMENT: Temperature ..... 50 - 105 degrees F  
Humidity ..... 80% max

ELECTRICAL: Supply Connection ..... standard 3-prong grounded  
& Supply Voltage ..... {115, 230} vac  
Supply Frequency ..... 50/60 hz, single phase  
Supply Protection ..... 15 amp max  
Operating Current ..... 1 amp max

PNEUMATIC: Supply Connection ..... male 1/8 npt fitting  
Supply Pressure ..... 140 - 300 psig  
Supply Delivery ..... 1 cfm min  
Test Lubrication Rate .. 1 drop in 1 minute @ 125psig  
Lubricating Oil ..... MOBIL DTE LIGHT or equiv.

OPERATION: Mode Switch (set-up) ... Test or Calibrate  
Calibration adjust ..... inside panel control  
External Regulator .... 140 psig ñ 5 psig  
Test Pressure ..... 125 psig ñ 1 psig  
Clamp Pressure ..... 40 psig ñ 1 psig  
O-Ring Lubrication .... PARKER SUPER O-LUBE or equiv  
Failure Sensitivity ... 2.5 psig  
Breakpoint ..... 80 psig  
Fill Rate (Below BP) ... 10 psig/sec  
Fill Rate (Above BP) ... 1.5 psig/sec  
Flow Rate ..... 0-100 psig in 7.25 to 7.75 sec  
Sample Capacity ..... 200 - 307 dia.  
(2" to 3 7/16")

OUTPUT: Display ..... 3 1/2 digit 0.560" red LED  
& Units ..... {PSIG, KPA, Kg/cm<sup>2</sup>}  
Resolution ..... 000.0 PSIG  
..... 000. KPA  
..... 0.00 Kg/cm<sup>2</sup>  
Max Pressure ..... 140.0 PSIG  
..... 965 KPA  
..... 9.84 Kg/cm<sup>2</sup>  
& Recorder Output ..... 0-1 vdc analog  
Auxilliary Output ..... 25 pin RS-232 serial  
\* Communications ..... 9600, 8 bit, 1 stop, no parity