

GE  
Sensing & Inspection Technologies

## Pressure Automated Calibration Equipment

### K0478 Burst Pressure Test

#### Addendum 1 to User Manual K0443 Issue 3



#### Introduction

This addendum describes the burst test option for PACE controllers and must be used with the user manual K0443. Refer to pages i to iii of user manual K0443, for safety and other details when using PACE Pneumatic Pressure Controllers.

### 1 Burst Pressure Testing

#### 1.1 Overview

The PACE instrument, burst test option can be used to test devices, such as a bursting disc device. This is done by a pre-defined test where the user enters pressure values and slew rates to define the form of the burst test. The test concludes with the device bursting, the test terminated by the user or the end of pressure is reached.

#### 1.2 Select Burst Test Task

To set the PACE instrument for a burst test select the required pressure units and pressure range.

#### Test Parameter Entry

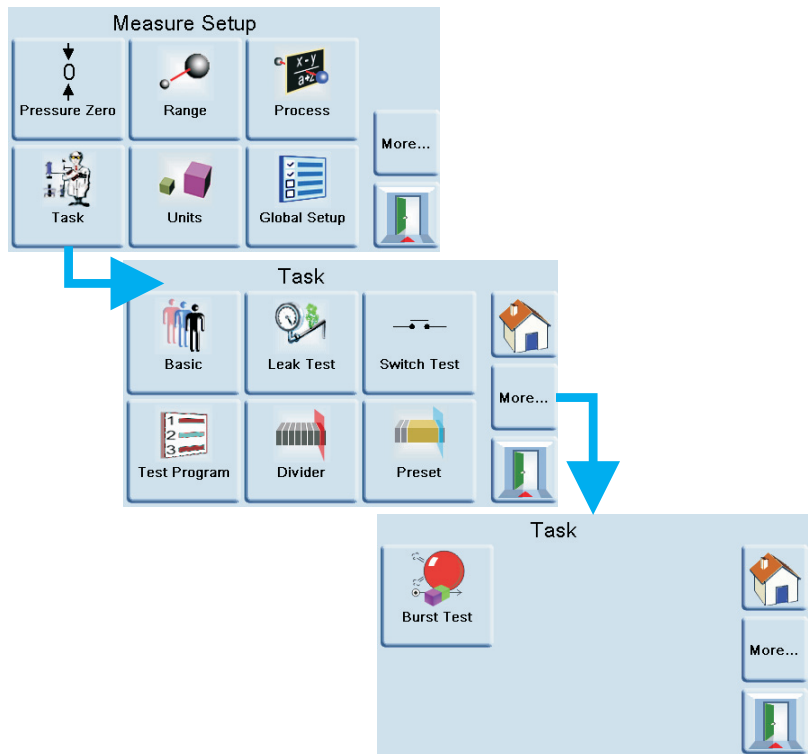
- Start set-point, to take the pressure near the expected burst point.
- Start slew rate, a default value of 10% full-scale can be changed to another value suitable for the device under test.
- End set-point, to take the pressure to and past the expected burst point.
- End slew rate, a default value of 1% full-scale can be changed to another value suitable for the device under test.

# Burst Pressure Testing

## Using the Burst Test

### Selecting

Select Task, More then Burst Test:



### 4.2 Burst Test Menu

The menu enables the following to be set:

- Start set-point (P1)
- Start slew rate  
*Fast slew rate allowing a fast approach to near the burst area.*
- End set-point (P2)
- End slew rate  
*Slow slew rate allowing for precise burst point detection.*

User selected set-point near the expected burst point.

**Burst Test**

**Start Setpoint**  
0.00000

Start Setpoint = 0.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 0.00000 bar  
End Slew Rate = 0.03500 bar/second

Start slew rate default value 10% full-scale/second.

**Burst Test**

**Start Setpoint**  
3.00000

Start Setpoint = 3.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 0.00000 bar  
End Slew Rate = 0.03500 bar/second

User selected set-point of the expected burst point.

**Burst Test**

**Start Slew Rate**  
0.35000

Start Setpoint = 3.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 0.00000 bar  
End Slew Rate = 0.03500 bar/second

End slew rate default value 1% full-scale/second.

**Burst Test**

**End Setpoint**  
0.00000

Start Setpoint = 3.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 0.00000 bar  
End Slew Rate = 0.03500 bar/second

**Burst Test**

**End Setpoint**  
3.40000

Start Setpoint = 3.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 3.40000 bar  
End Slew Rate = 0.03500 bar/second

**Burst Test**

**End Slew Rate**  
0.03500

Start Setpoint = 3.00000 bar  
Start Slew Rate = 0.35000 bar/second  
End Setpoint = 3.40000 bar  
End Slew Rate = 0.03500 bar/second

## Burst Pressure Testing

### 4.3 Test Parameters

The burst test parameters may be changed and adjusted for start and end slew rates and set-points:

Each of the parameters have a maximum and minimum value depending on the physical or set limits of the PACE instrument. The test continues until: a burst is detected, the test is stopped by the user or the pressure reaches the end set-point, at which point, measure mode can be selected.

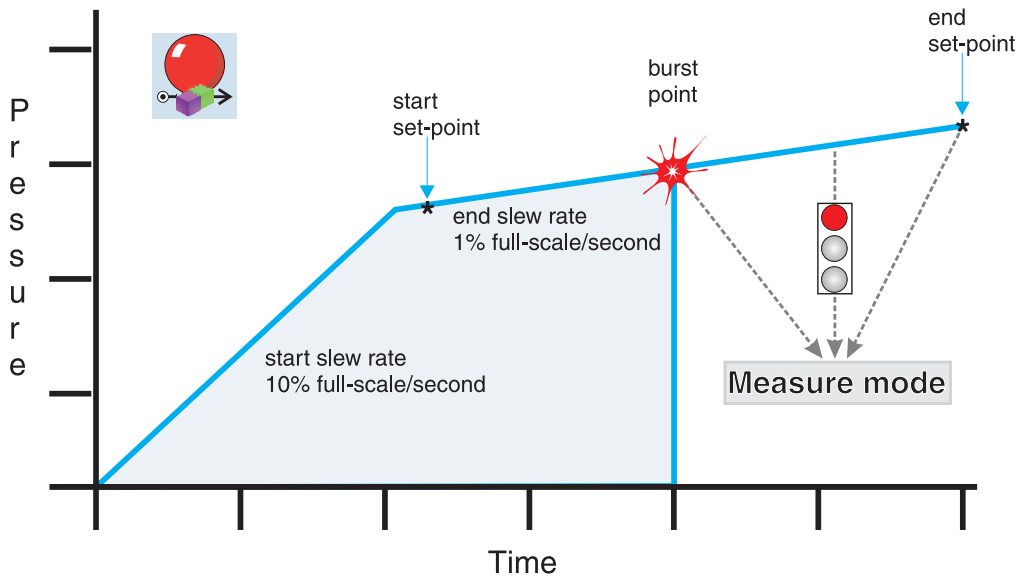


Figure 2, Burst Test

### 4.4 Burst Detection (Figure 2)

At the point of burst detection the PACE instrument automatically changes to measure mode and displays the burst pressure value.

