



# PROCAL TRACK & PROCAL



BOOKING, CALIBRATING &  
DESPATCHING INSTRUMENTS  
USING

# ProCal :: PROGRAM SETUP OVERVIEW

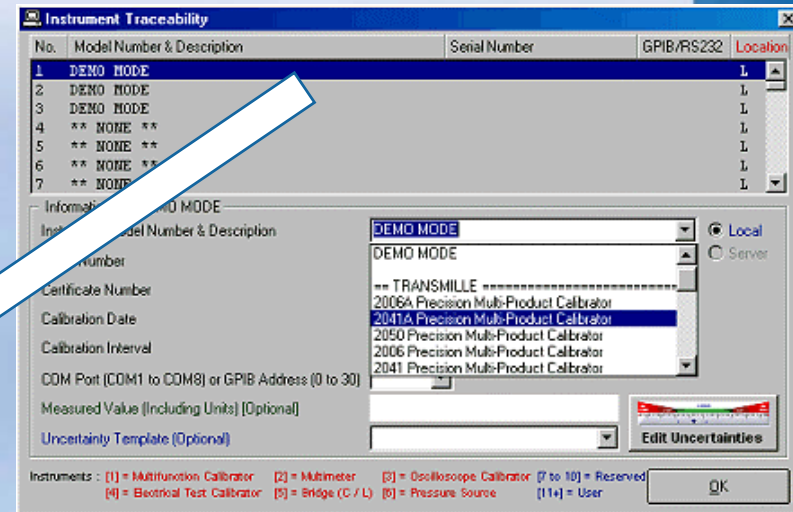
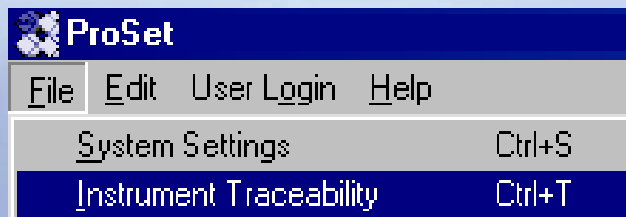
## Step 1



- Start ProSet
- Select File → Instrument Traceability
- For instrument 1 use the dropdown box to select the system calibrator - select 2041A Precision Multi-Product Calibrator



Click the 'Uncertainty' button to view the uncertainty table for the 2041A. This will be used to include contributions for the test uncertainty calculations by ProCal.



No.	Model Number & Description	Serial Number	GPIB/RS232	Location
1	2041A Precision Multi-Product Calibrator	123456A1	COM1	L

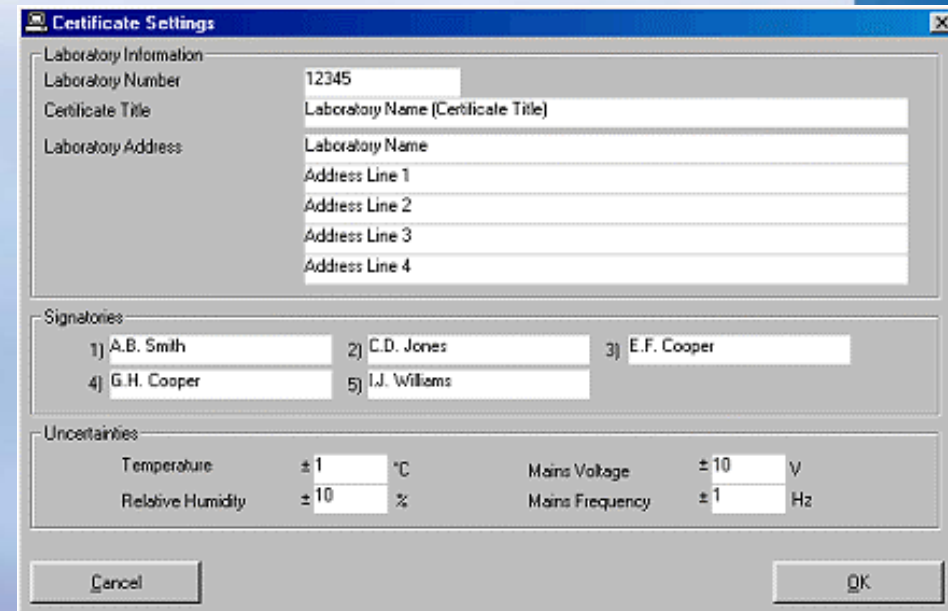
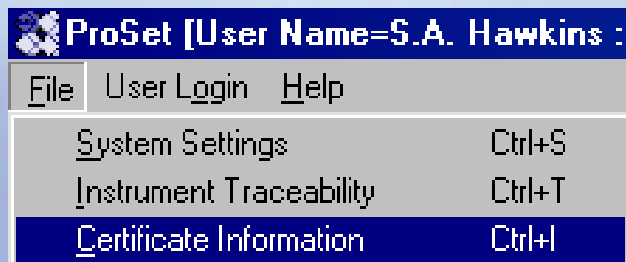
# ProCal :: PROGRAM SETUP OVERVIEW

## Step 2



→ Select File → Certificate information

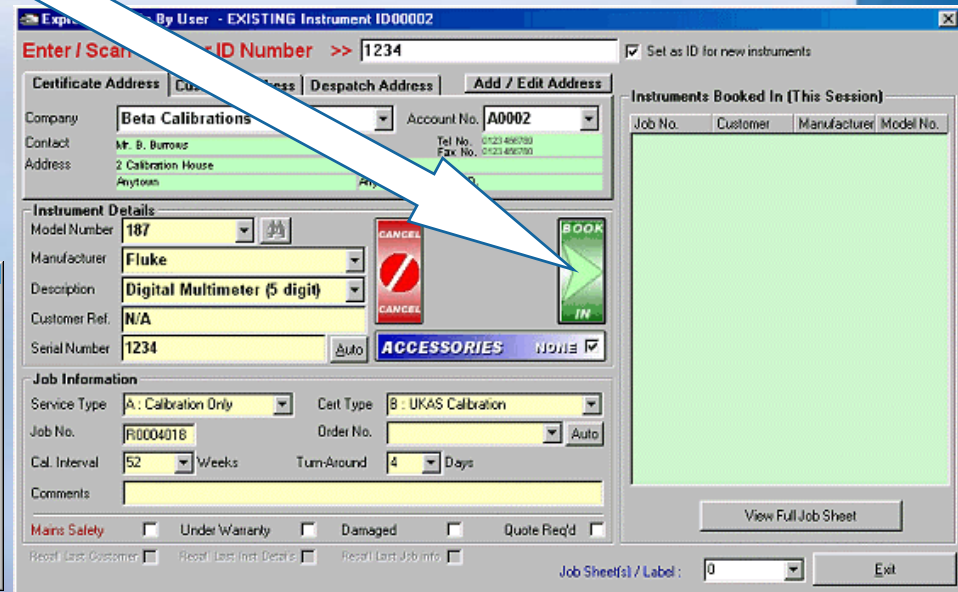
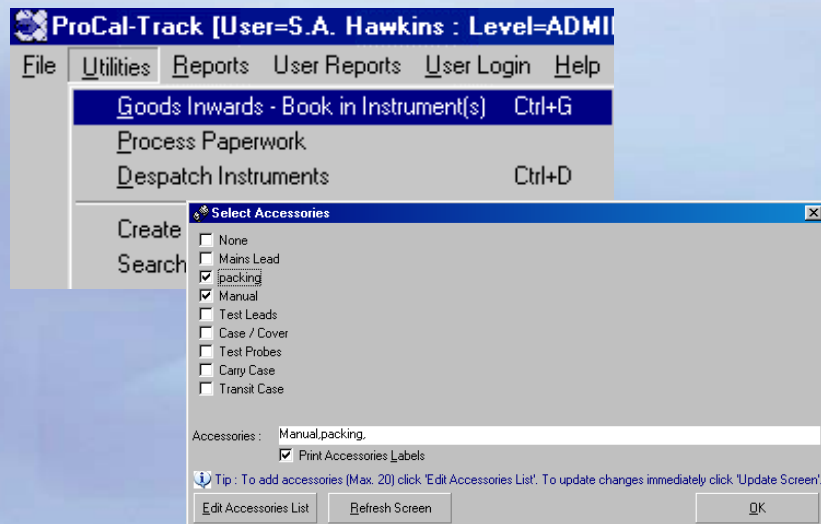
→ Set the Laboratory address etc. and enter your name as one of the signatories.



# ProCal :: BOOKING IN AN INSTRUMENT



- Start ProCal-Track
- Select Utilities → Goods Inwards (Book in instrument)
- Type '1234' in the serial number box at the top of the screen then press enter (This instrument is pre-installed in the database and known to ProCal).
- Click ACCESSORIES button – select MANUAL – Click OK
- Simply click the green 'Book in' button - ProCal Track will print a booking in label or Job sheet.



# ProCal :: CALIBRATE AN INSTRUMENT

## Step 1



- Start ProCal
- Select File → Instrument Calibration Priority Lists → List all Instruments (Active Jobs)
- Click on the Fluke 187 (serial number 1234) you have just booked in.
- Click 'Calibrate Instrument'

The screenshot shows the ProCal software interface. The 'File' menu is open, and 'Instrument Calibration Priority Lists' is selected. A sub-menu is displayed with 'List All Instruments (Active Jobs)' highlighted. A white arrow points from the text 'Click 'Calibrate Instrument'' in the instructions to the 'Calibrate Instrument' button in the software interface.

Status	Model Number	Serial Number	Job Number
E	Example	SN0005	000145-1
E	SMARTPAT3K	SN0003	000143-1
E	CM500	SN0002	000139-1
E	Example	SN0001	000141-1
E	Example	SN0004	000144-1

Below the table, the 'DUPLICATE' field is visible with the value '22/08/2005 [4] Beta Calibrations'. At the bottom of the window, there are buttons for 'Cancel', 'Refresh List', and 'Calibrate Instrument'.

# ProCal :: CALIBRATE AN INSTRUMENT

## Step 2



→ The calibration information screen is now displayed, drop down the 'Tested By' box and select your name (as entered in ProSet) then click Next >>

The screenshot shows a software dialog box titled "Calibration Information - Accredited Certificate". It is divided into several sections:

- Instrument Information:** System ID (ID00002), Customer Ref. (N/A), Manufacturer (Fluke), Serial Number (1234), Model Number (187), Cal. Interval (52 Weeks).
- Environmental Information:** Room Temperature (20 °C), Mains Voltage (240 Volts), Humidity (50 %RH), Mains Frequency (50 Hz).
- Calibration Information:** Date of Receipt (22/08/2005), Date of Calibration (22/08/2005), Job Number (R0004018).
- Tested By:** A dropdown menu is open, showing a list of names: A.B. Smith (highlighted), C.D. Jones, E.F. Cooper, G.H. Cooper, and I.J. Williams.
- Certificate Type:** Accredited Certificate (selected).
- Customer Information:** Customer Name (Beta Calibrations), Customer Address (2 Calibration House, Anytown, The Drive, AnyCounty, AB12 3CD).

Buttons at the bottom include "Cancel", "<< Back", and "Next >>".



# ProCal :: CALIBRATE AN INSTRUMENT

## Step 3



→ The list of procedures which match the model number are displayed.

Select procedure 3 then click Next >>

Please confirm the procedure for instrument 'ID00002'

No.	Manufacturer	Model	Description	Version
2	Fuke	187	Multimeter	1.00AUTO/N
3	Fuke	187	Multimeter	1.00/N

Procedure Type:

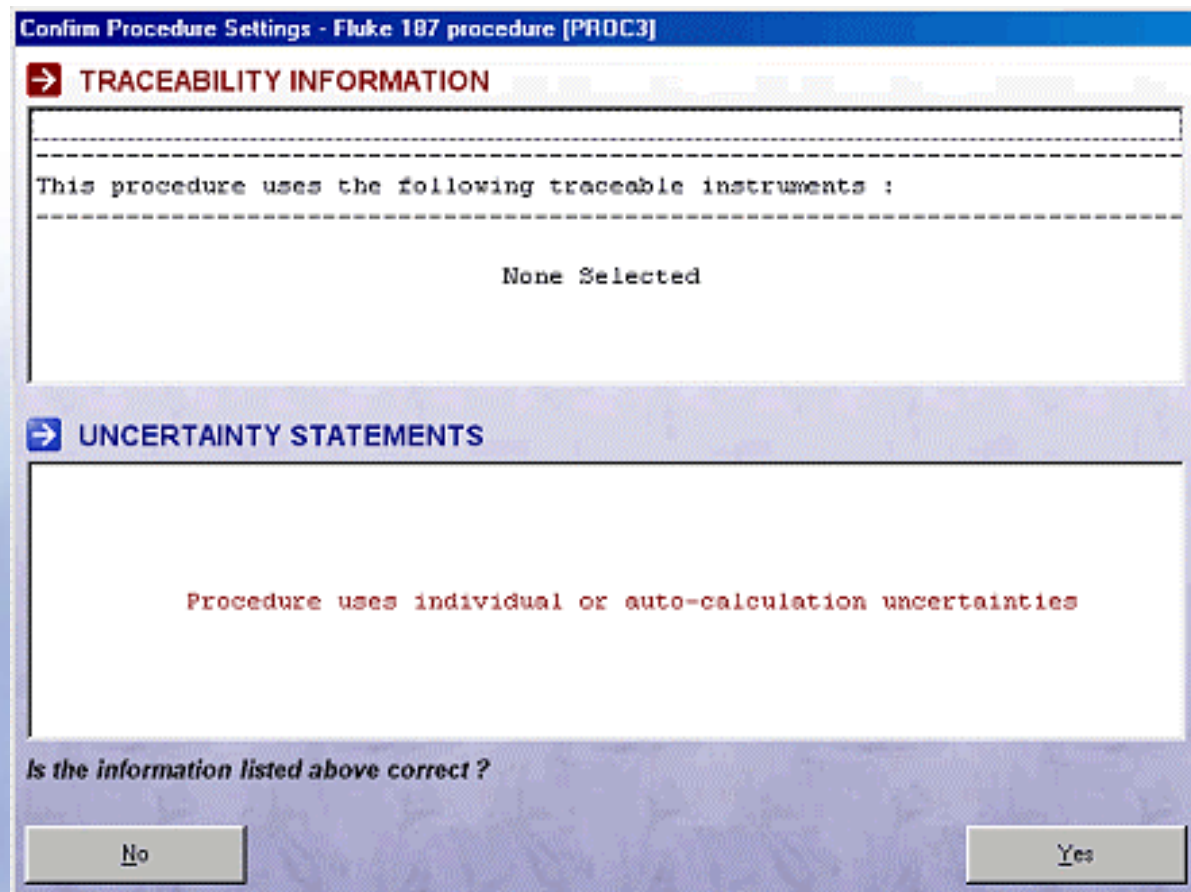


# ProCal :: CALIBRATE AN INSTRUMENT

## Step 4



→ The next window lists reference instruments and uncertainty information - Click yes to proceed.



Confirm Procedure Settings - Fluke 187 procedure [PRDC3]

→ TRACEABILITY INFORMATION

-----  
This procedure uses the following traceable instruments :  
-----  
None Selected

→ UNCERTAINTY STATEMENTS

-----  
Procedure uses individual or auto-calculation uncertainties  
-----

Is the information listed above correct ?

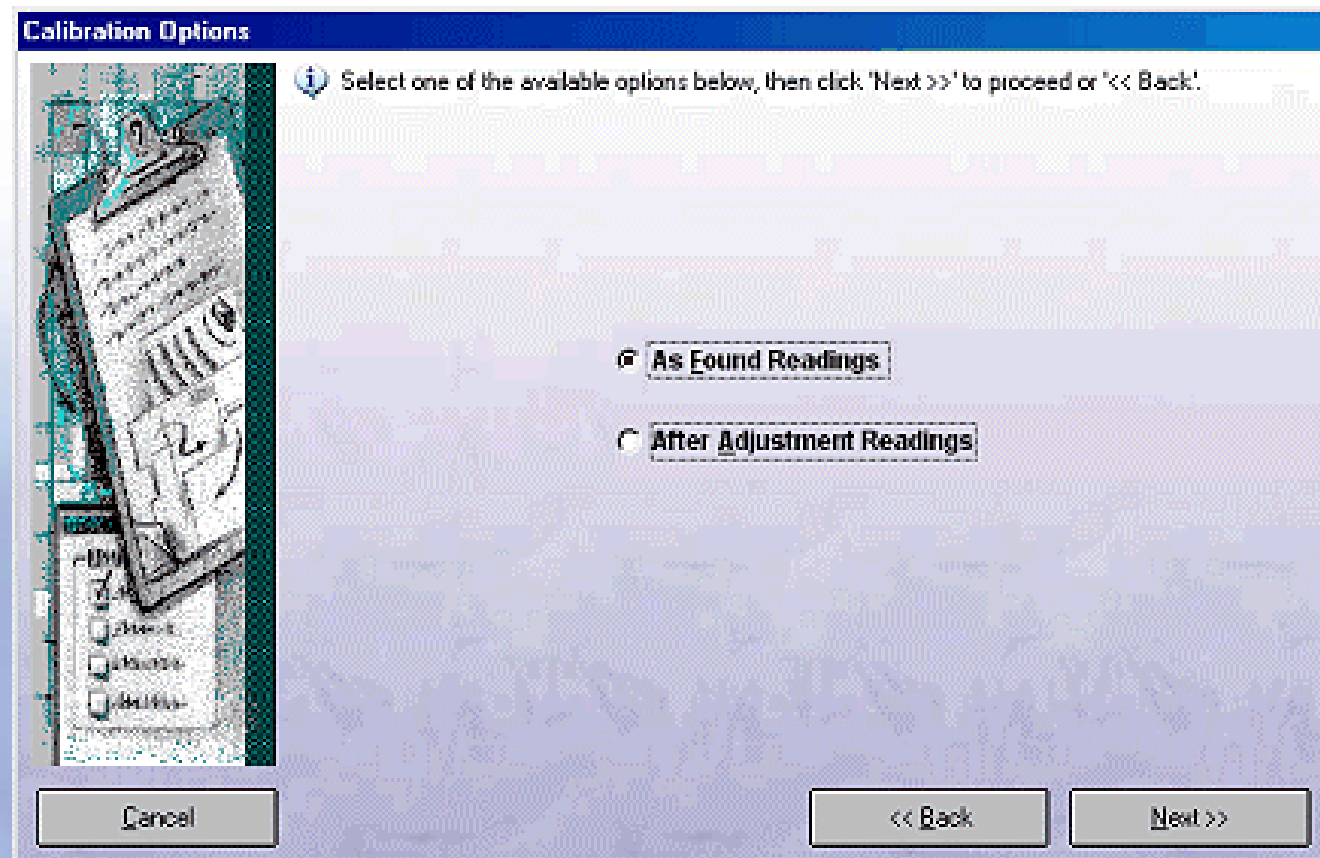




# ProCal :: CALIBRATE AN INSTRUMENT

## Step 5

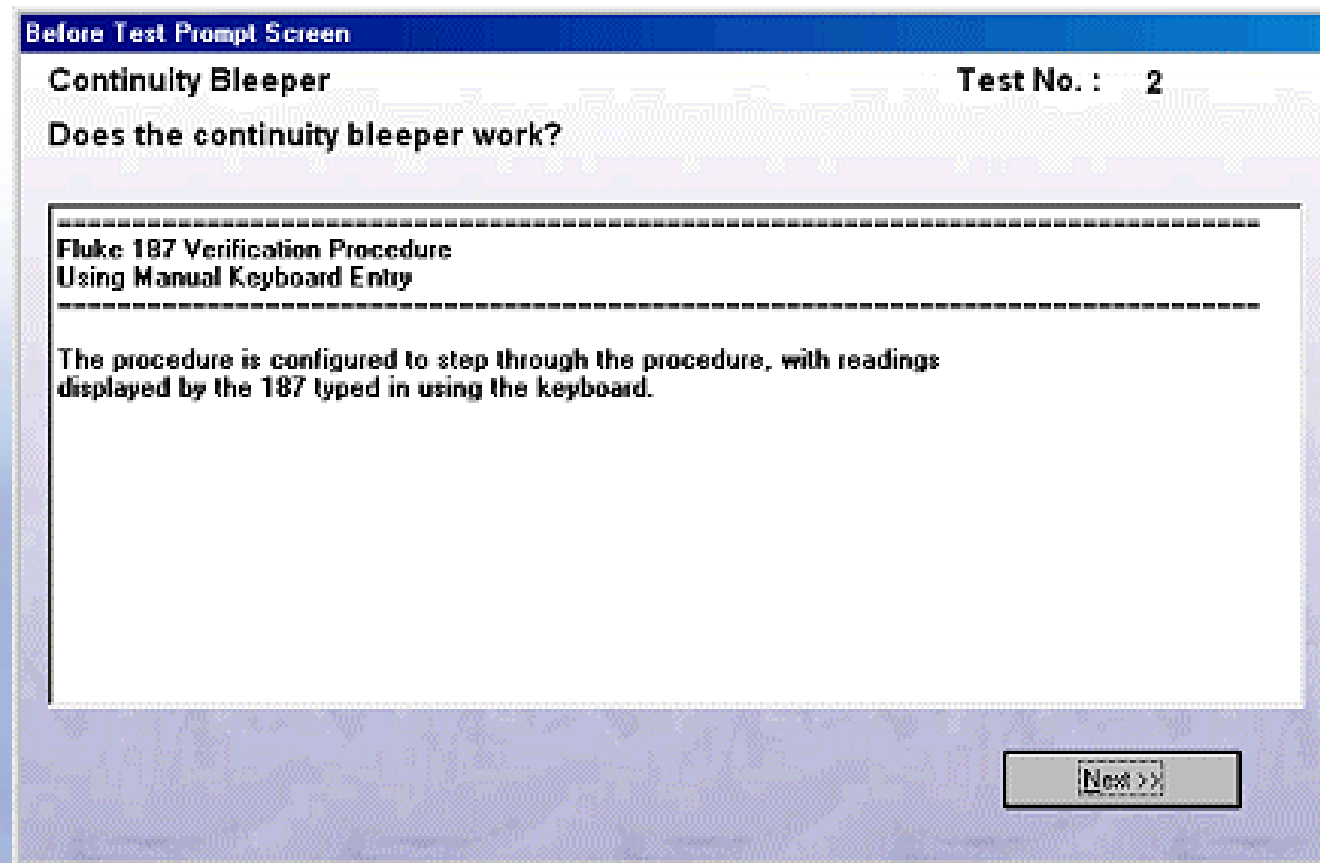
→ The next window asks if As Found or After Adjustment Readings - click As Found Readings then click Next >>.



# ProCal :: CALIBRATE AN INSTRUMENT

## Step 6

➔ Prompt for first test is displayed - Click Next >>



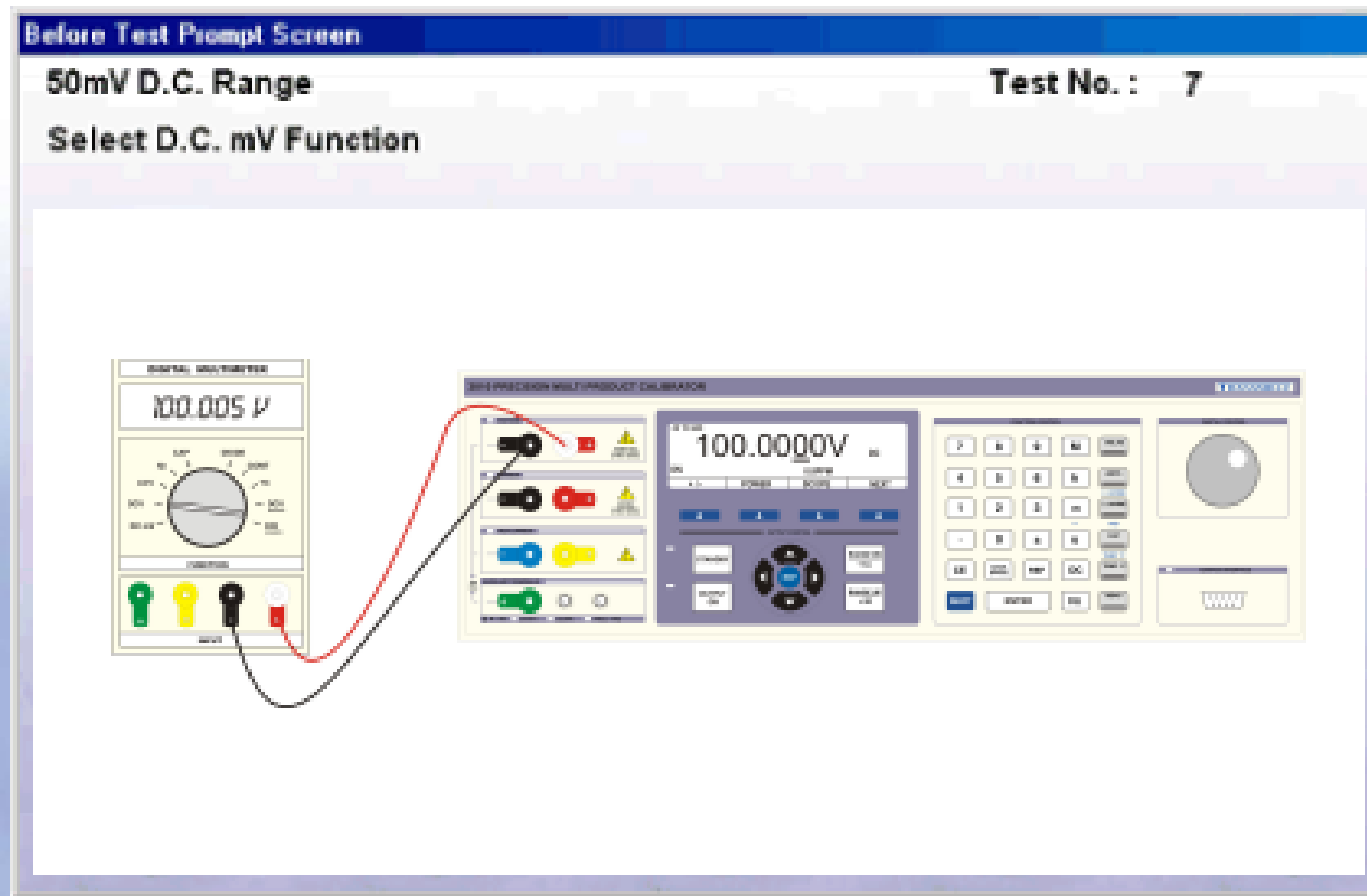


# ProCal :: CALIBRATE AN INSTRUMENT

## Step 8



→ Test 5 displays a picture prompt, demonstrating the graphical capabilities of ProCal in aiding the user. Click Next >> to continue.



# ProCal :: CALIBRATE AN INSTRUMENT

## Step 9



→ Tests 5 and above are METER type tests with keyboard entry of the value – enter a reading and click Next >> to go to the next test.

Multimeter Calibration - After Adjustment - Procedure PRODC3

**Test 7 : 50mV D.C. Range** **TEST PASSED**

Select D.C. mV Function  
Enter value displayed on meter (without units)

No.	Test Title	Test Value	Reading	% Spec (B)	% Spec (F)
1	General Operation Tests				
2	Continuity Beeper	---	Pass	---	---
3	Diode Test	---	Pass	---	---
4	Bar Display	---	Pass	---	---
5	----- Blank Line -----				
6	DC Voltage				
7	50mV D.C. Range	49.900mV	49.900mV	0	
8	500mV D.C. Range				
9	3000mV D.C. Range				
10	5V D.C. Range				

Manual Input > 49.9 < Manual Input

FAIL (LOW) 69.9uV | 49.900mV | 49.900mV

FAIL (HIGH) 49.900mV

UKAS Calibration

Buttons: Fault, Cal Help, Uncerts, Restart Test, Next >>

Test Value 49.900mV Noise / Flicker 1uV Uncertainty 0% of Spec.

# ProCal :: CALIBRATE AN INSTRUMENT

## Step 10



→ When the last test is reached, the test review Screen is displayed - Click Next >> (if a message stating some tests are not completed appears, simply click YES to proceed)

Review Calibration Results - Tests Incomplete - Procedure PROC3

### Calibration Results (After Adjustment)

Tests Incomplete : 51    Tests Marginal Pass : 0    Tests Failed : 0

No.	Test Title	Test Value	Reading	% Spec (B)	% Spec (F)
1	<b>General Operation Tests</b>				
2	Continuity Sleeper	---	Pass	---	---
3	Biode Test	---	Pass	---	---
4	Ear Display	---	Pass	---	---
5	----- Blank Line -----				
6	<b>DC Voltage</b>				
7	50mV D.C. Range	49.900mV	49.900mV	0	0
8	500mV D.C. Range	499.00mV	499.00mV	0	0
9	3000mV D.C. Range	2900.0mV	2900.0mV	0	0
10	5V D.C. Range	4.9900V	4.9900V	0	0
11	50V D.C. Range	49.900V	49.900V	0	0
12	500V D.C. Range	499.00V	499.00V	0	0
13	1000V D.C. Range	1000.0V	1000.0V	0	0
14	----- Blank Line -----				
15	<b>Linearity</b>				
16	50V Linearity				
17	50V Linearity				

Click on any test to repeat.    Current View: All Tests

<< Back    Next >>



→ To finish at any time select Control → Finish Calibration

Control    Help    User Login    About

- ✓ **AUTO STEP [Y]**
  - Ignore Fail
- ✓ Show Auto Safety Prompts    Ctrl+S
- Set to Non-Printing    Ctrl+P
- ✓ Run Calibration Tests

---

**Finish Calibration (Review Results)**

Abort Current Test

---

Abort Calibration Run

# ProCal :: CALIBRATE AN INSTRUMENT

## Step 11



→ Enter/select certificate comments

Note : Drop down lists can be set using '...' buttons

Click Next >>

The screenshot shows a software window titled "Certificate Comments". On the left side, there is a vertical strip containing a graphic of a clipboard with a checklist and a small image of a person. The main area of the window contains an information icon (i) followed by the text: "Enter any required certificate comments below - to import an external text file click on 'Import Comments' and select the required file. To edit the contents of the 'drop down' lists click on the button marked '...'". Below this text are five rows, each consisting of a text input field and a small button with three dots (...). The first row's text field contains the text "Instrument was in lab for at least 4 Hours to stabilise before calibration." At the bottom of the window, there are three buttons: "Import Comments", "<< Back", and "Next >>".



# ProCal :: CALIBRATE AN INSTRUMENT

## Step 12



→ Job information, parts used & engineers report – click Next > 3 times to step through each tab and proceed to the status screen

**Job Information**

Enter any required job information below. To edit the contents of the 'drop down' lists click on the button marked '...'

Parts Used | Engineers Report | Job Comments | Quote

Code	Description	Quantity	Cost (Each)
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£
<input type="text"/>	<input type="text"/>	<input type="text"/>	£

Total Parts Cost  
£

Repair Cost  
£

Calibration Cost  
£ 35.00

Repair Time (Hours)

Cal / Test Time

Engineer

Edit Parts List

<< Back      Next >>





# ProCal :: CALIBRATE AN INSTRUMENT

## Step 13



→ Set instrument status - if unfinished, calibration complete will be disabled. Use 'Other' and select 'M Cal complete waiting paper work' then click Next >>

Instrument Status Information

Select an instrument status from the available options below.

Calibration Complete [NOT AVAILABLE - 51 Incomplete Tests]

Adjustment Required

Awaiting Customer Response / Information

Calibration Incomplete

Other

Run a Report

E : Received - awaiting cal.

I : Before cal. done - awaiting adj.

J : Calibration Incomplete

K : Sent for repair (OEM)

L : Sent for repair (Internal)

M : Cal. done - awaiting paperwork

N : In despatch

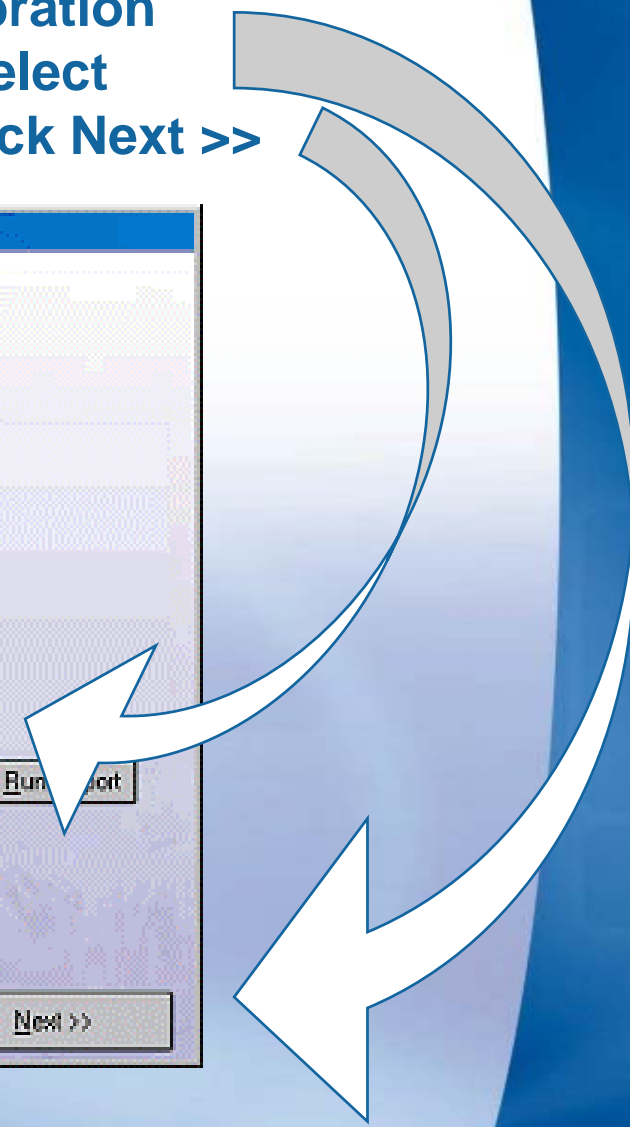
O : Requested (Posted)

P : OverDue (Posted)

Run Report

<< Back

Next >>

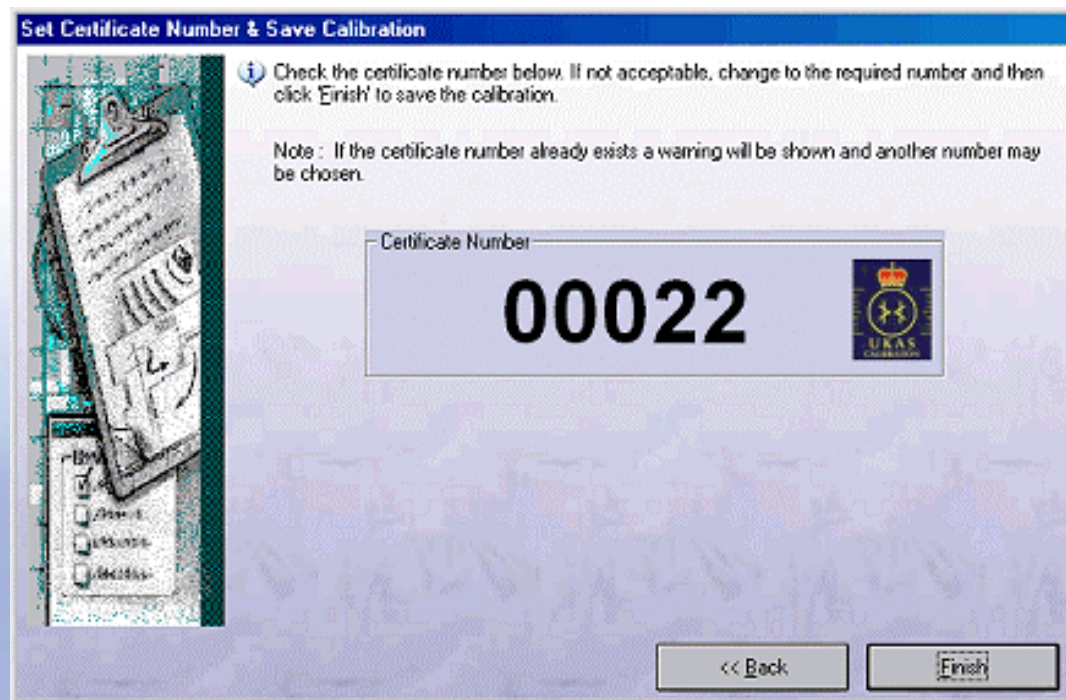


# ProCal :: CALIBRATE AN INSTRUMENT

## Step 14



→ The next certificate number is displayed (Note : This can be overtyped with another number if required). Click 'Finish' to save results.



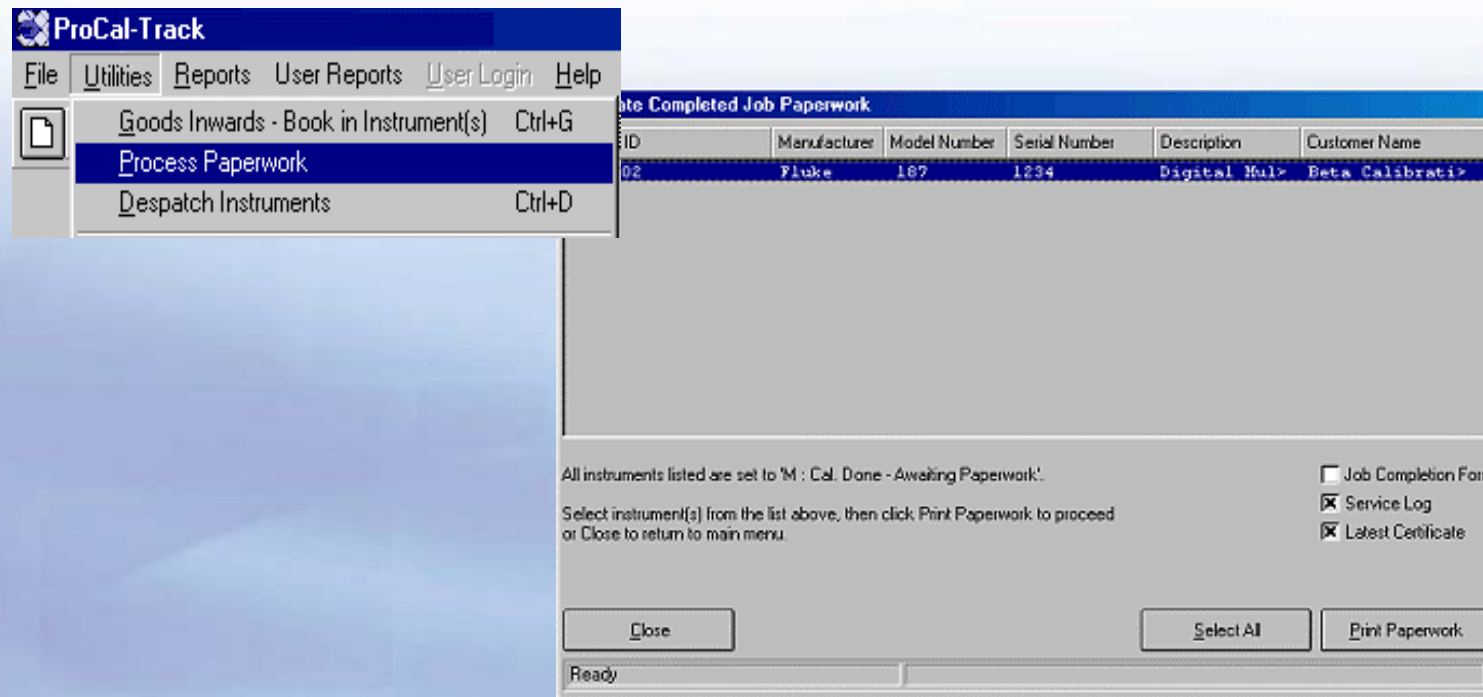
If set in ProSet Options, the Print Certificate dialog is displayed to allow certificate and label to be printed

# ProCal :: DESPATCH AN INSTRUMENT

## Step 1



- Start ProCal-Track
- Select Utilities → Process Paperwork
- A list is displayed of instruments ready for paperwork processing. Click on the Fluke 187 and select the required paperwork items, then click Print Paperwork.



# ProCal :: DESPATCH AN INSTRUMENT

## Step 2



→ Select Utilities → Despatch Instruments

→ A list is displayed of instruments ready to despatch. Click on the instrument to produce a despatch note.

The screenshot shows the ProCal-Track software interface. The main menu bar includes File, Utilities, Reports, User Reports, User Login, and Help. The Utilities menu is open, showing options: Goods Inwards - Book in Instrument(s) (Ctrl+G), Process Paperwork, and Despatch Instruments (Ctrl+D). The Despatch Instruments dialog box is displayed, titled "Confirmation". It contains a text field for "Enter a system ID", a "Delivery Note" section with three radio buttons: "Individual (One Per Instrument)" (selected), "Multi-Instrument Delivery Note", and "No Delivery Note". Below this is a table with columns: Customer Name, Customer Ref., Model No., Serial No., and Job No. The table contains one row: Challenger Laboratories, N/A, 187, 1234, 20004018. At the bottom of the dialog, there are buttons for "Close", "Address Labels" (set to 0), "Dispatch Notes" (set to 1), and "Dispatch Instrument". The status bar at the bottom right shows the date 22/08/2005 and time 12:45:10.

Customer Name	Customer Ref.	Model No.	Serial No.	Job No.
Challenger Laboratories	N/A	187	1234	20004018

# ProCal :: DESPATCH AN INSTRUMENT

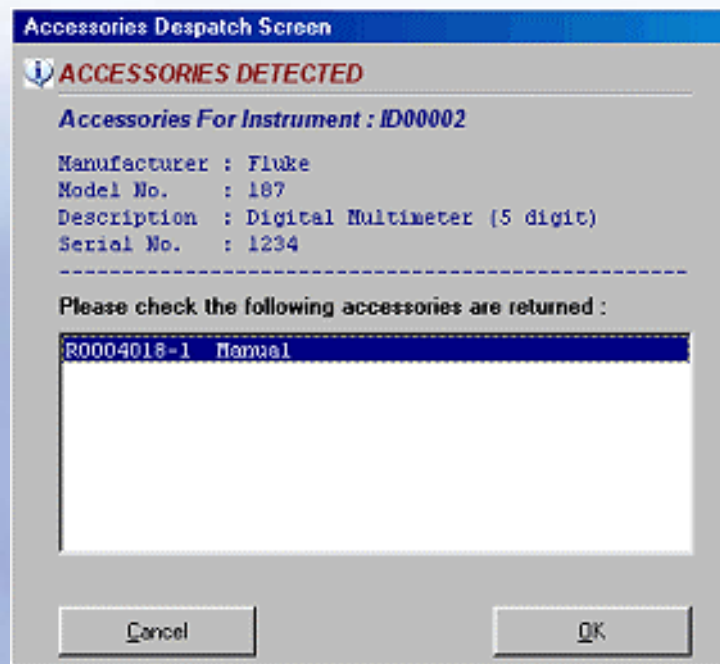
## Step 3



→ It is at this point the software will want to confirm return of the accessories that were booked in with the job.



If the system is running with a barcode reader, a label could have been printed with a unique number to each accessory that had been booked in - this label would need to be scanned before the despatch paperwork could be printed.



# ProCal :: DESPATCH AN INSTRUMENT

## Step 4



→ Check / change despatch details and enter shipping information, then click despatch to complete the process.

The screenshot shows a software window titled "Details For Instrument ID00002". The window contains the following fields and controls:

- Account Number: A0002 (dropdown menu)
- Contact Name: Mr. B. Burrows
- Department Head: Mr. B. Burrows
- Company Name: Beta Calibrations (dropdown menu)
- Address: 2 Calibration House, The Drive, Anytown, AnyCounty. AB12 3CD.
- Telephone: 0123 456789
- Fax: 0123 456780
- email: (empty field)
- Site: West Building
- Dept: Engineering
- Location: Room 15
- Comments: Two empty text boxes with dropdown arrows and ellipsis buttons.
- Buttons: Cancel, Dispatched Via: (dropdown menu and ellipsis button), Dispatch
- Icon: An "Add Company" icon with a printer symbol and the text "Add Company" is located to the right of the Contact Name and Department Head fields.



# *ProCal* : LIFECYCLE COMPLETE

→ This completes the cycle of calibration and the instrument status is returned to 'A - With Customer' - the calibration date & certificate number are updated automatically.

