Physical Test Solutions

Innovative Solutions in Material Test Equipment

Solutions Software

The Physical Test Solutions **(PTS)** *Solutions software* has been designed to work with a large variety of test methods that comply with ASTM, DIN and ISO standards.

OUTSTANDING FEATURES

1. The data acquisition and control system uses a special controller which achieves the digital adjustment of zero point and load gain, deformation and displacement. The software has the convenience of being user friendly and reliable.

2. Numerous parameters and assets can be set, loaded and stored. This feature is especially convenient when multiple load cells are used with one machine.

3. With the closed loop control, the reference curve can be seen in real time and then the parameters can be changed to see the effects on the curve after changing the data.

4. Intelligent expert control mode system features an automatic programming function that allows the user to set control mode during the test after each step of the test according to the user's actual needs to compile the program. This meets the test requirements and specifications of various materials and international standards.

5. Versatile graphic functions allows the curve to be analyzed "as is" after concluding the test, and then re-traced, amplified or reduced, or overlapping of curves for further analysis of the coordinates and data for display , storage and print out.

6. Data processing supports automatic data and graphic analysis for manual – automatic comparison of test results.

7 The user can self-define the output of the test reports for utmost flexibility.

8. The *Solutions software* performs an automatic diagnostics of the Windows 2000, Widows XP, Windows NT and other operating systems in real-time acquisition and for accurate timing and high-speed sampling.
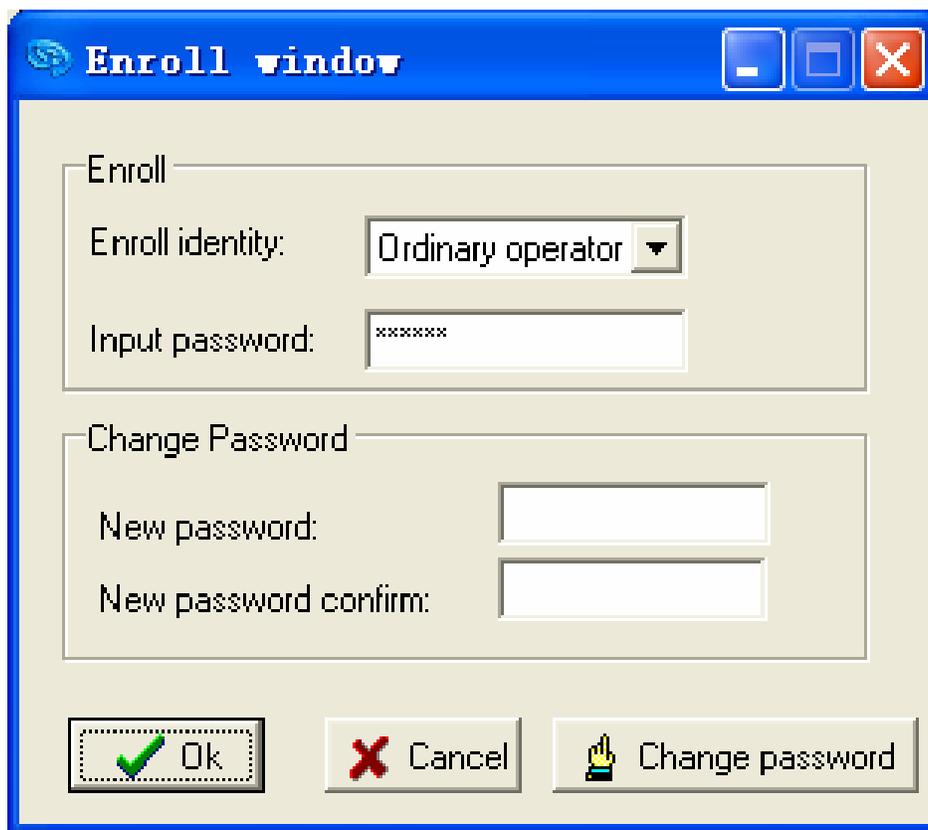
9. Multilevel identity management integrates the flexible function of the testing machine with easy operation. This feature facilitates daily use by operators, and integrates security functions so that only authorized personnel can make program changes.
10. Modular open ended framework type design that allows for growth. *Solutions software* can also be connected to internet programs for transmitting data and reports. Data can be transferred to Excel or word files.
11. The *Solutions software* has a database that stores test data in a dbf files. This facilitates data archiving, report generation and data transfer.

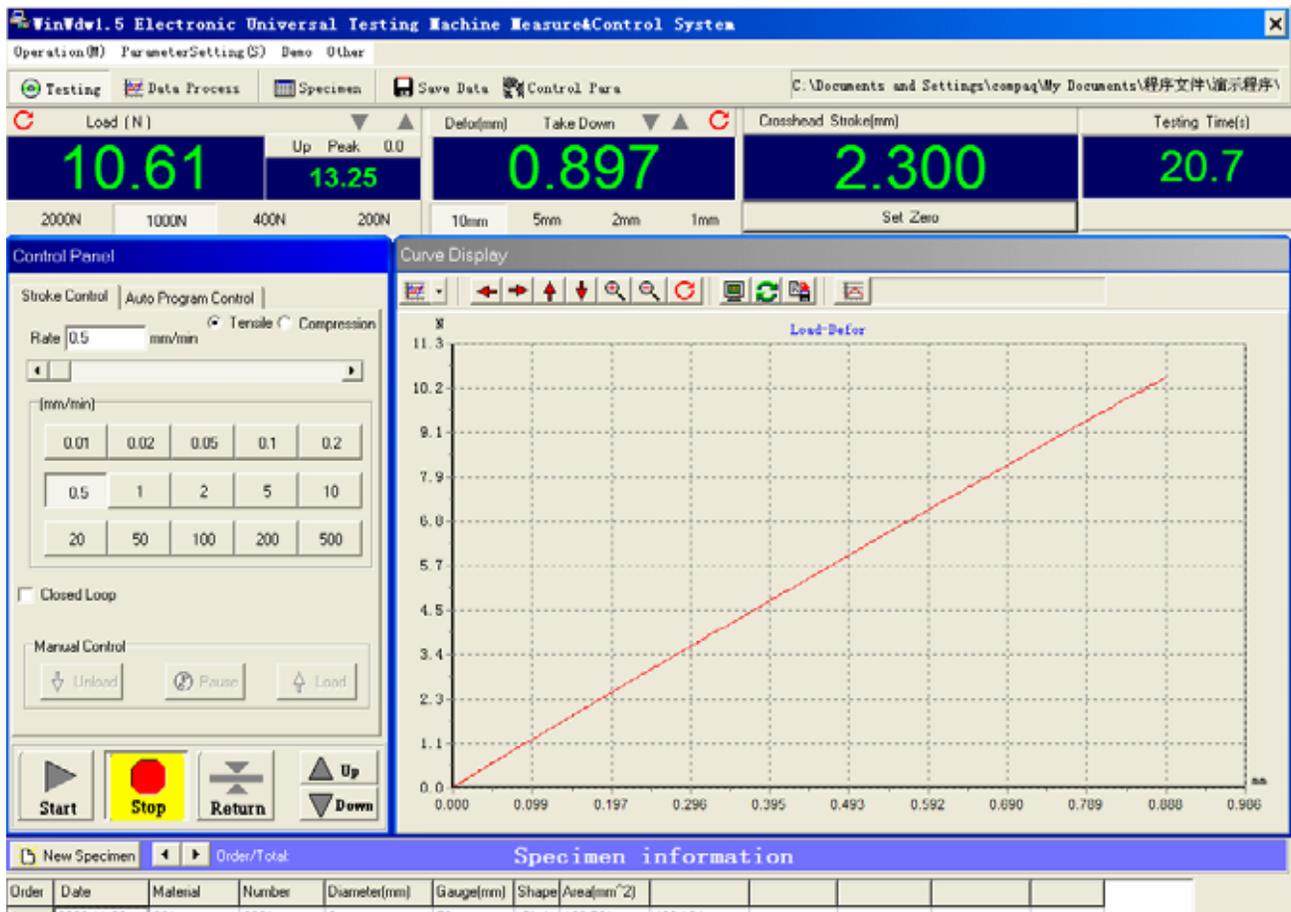Following are graphic descriptions of the *Solutions software* features

● **Multilevel Identity Management**

The *Solutions software* has a multilevel identity management system, facilitates daily operation and integrates security functions.
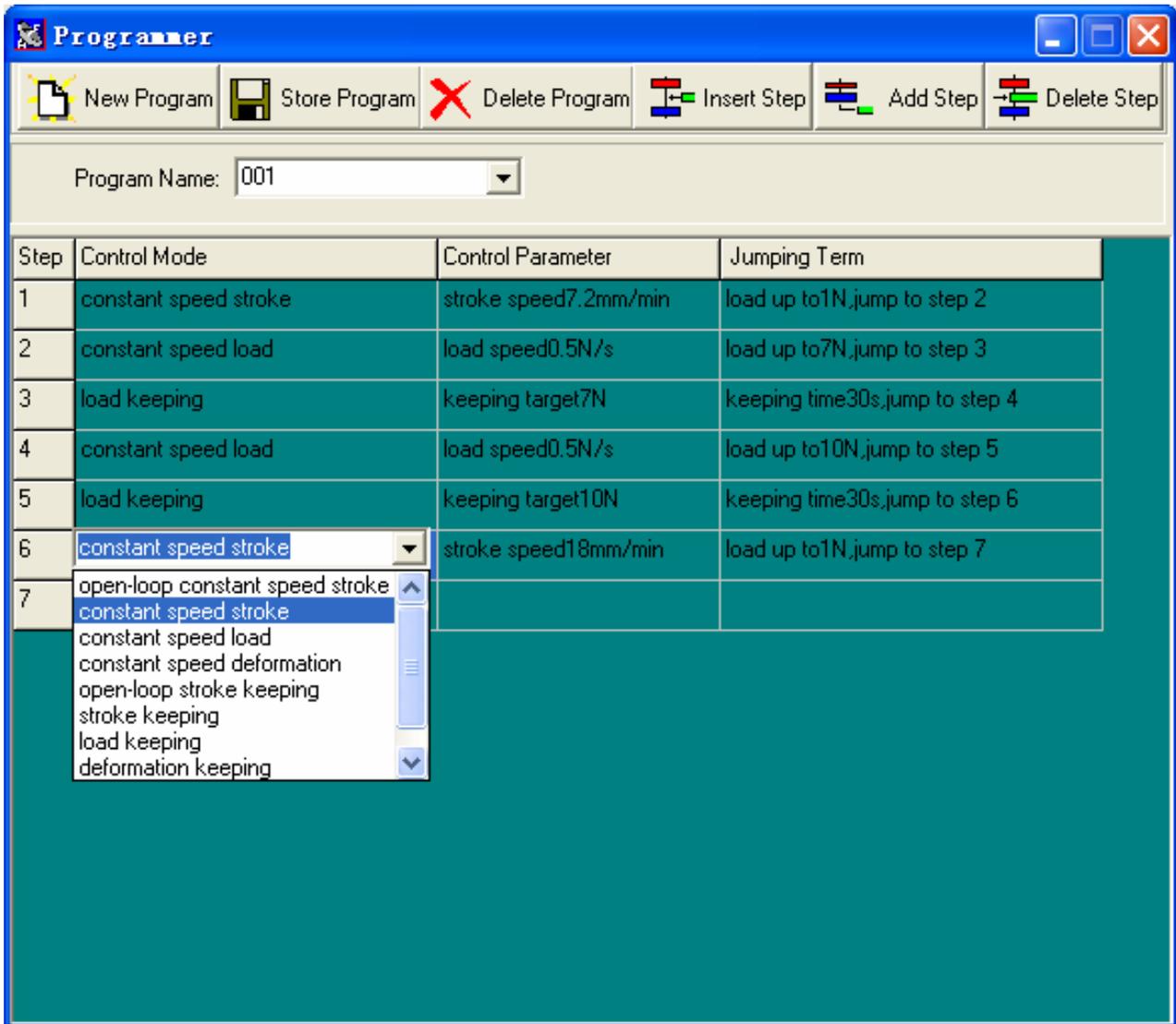
pTs

- **Operating Interface**

Solutions software combines user friendliness with a good-looking and concise operating interface, and high-reliable system.
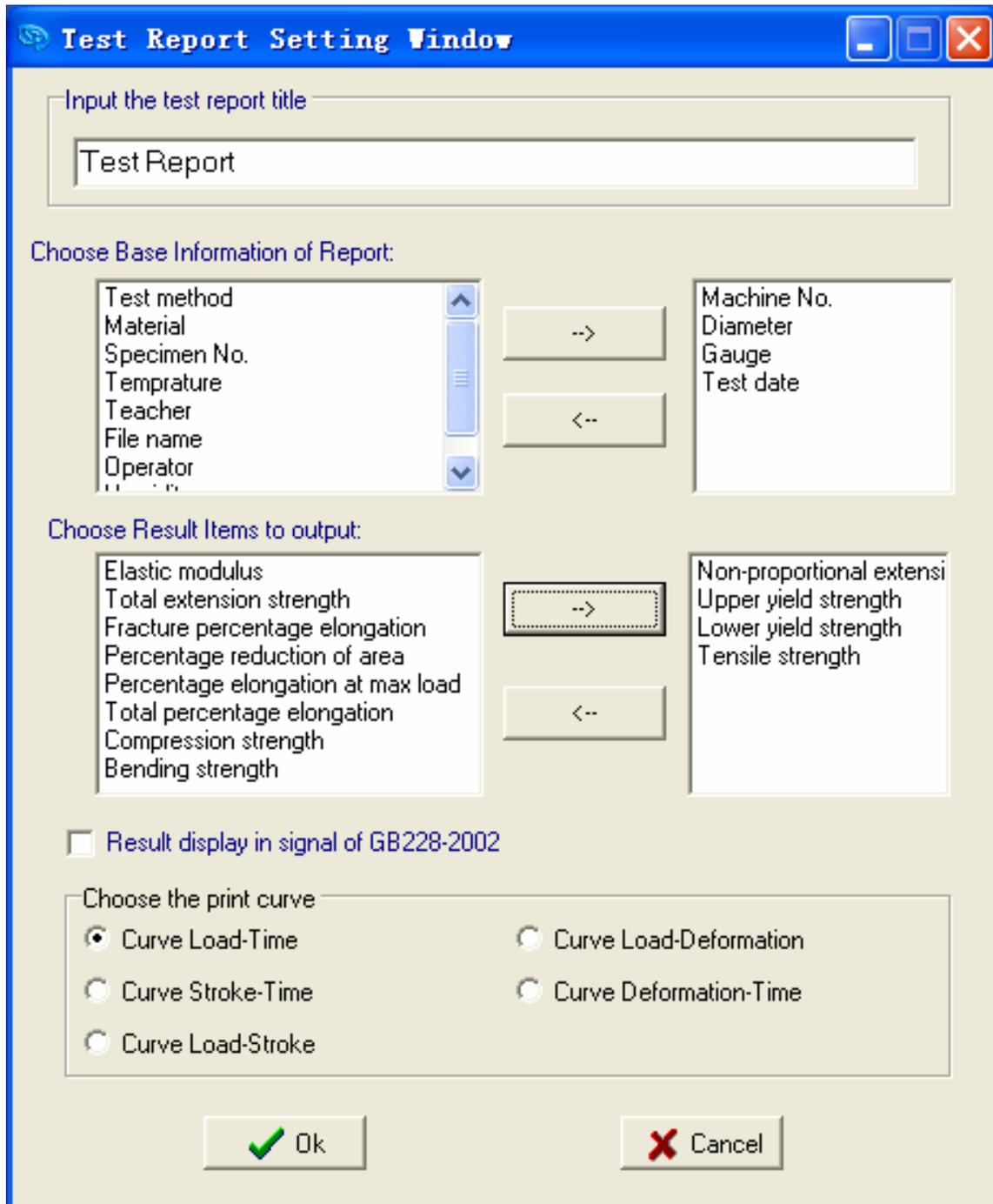
- **Automatic Program Control**

Intelligent expert control mode system features an automatic programming function that allows the user to set control mode during the test after each step of the test according to the user's actual needs to compile the program.

Step	Control Mode	Control Parameter	Jumping Term
1	constant speed stroke	stroke speed7.2mm/min	load up to1N,jump to step 2
2	constant speed load	load speed0.5N/s	load up to7N,jump to step 3
3	load keeping	keeping target7N	keeping time30s,jump to step 4
4	constant speed load	load speed0.5N/s	load up to10N,jump to step 5
5	load keeping	keeping target10N	keeping time30s,jump to step 6
6	constant speed stroke	stroke speed18mm/min	load up to1N,jump to step 7
7			

Program Name: 001

Dropdown options:
open-loop constant speed stroke
constant speed stroke
constant speed load
constant speed deformation
open-loop stroke keeping
stroke keeping
load keeping
deformation keeping

PTs

● Test Report Generation

Basic information and test results generated by the test report and test curves can be exported by the user. The program operates with dbf files and data can be exported to Excel or word documents for report generation, archiving and further analysis.

● **Specimen Information Input**

Specimen information can be Input for single tests or for batch tests.

Batch newly built specimen

Specimen Number

Begin with string(Fixed):

Changing section (Digital): ___ — ___

End with string(Fixed):

✔ Ok   🚪 Cancel

For example: if the specimen number is from Bar1_M to Bar10_M, then "Begin with string" is Bar,"Changing section" is 1--10,and "End with string" is _M

Newly built specimen

Specimen information

Material: A3   Shape: Circular
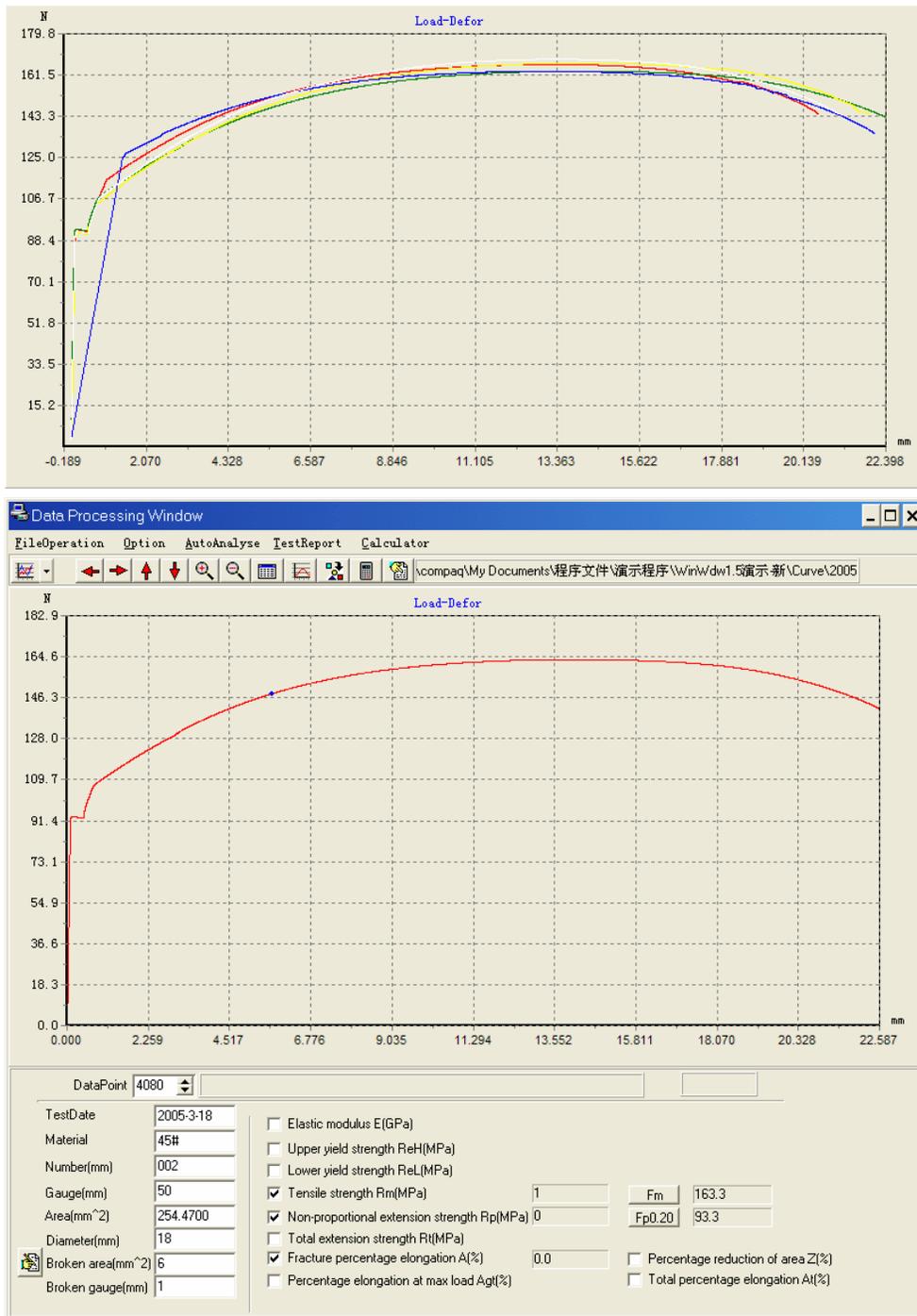
Number: 002   Diameter(mm): 5

Date: 2005-6-2

Origin Gauge: 50   ☐ Area(mm^2):

📋 Newly built one   📂 Batch newly built   ✖ Delete

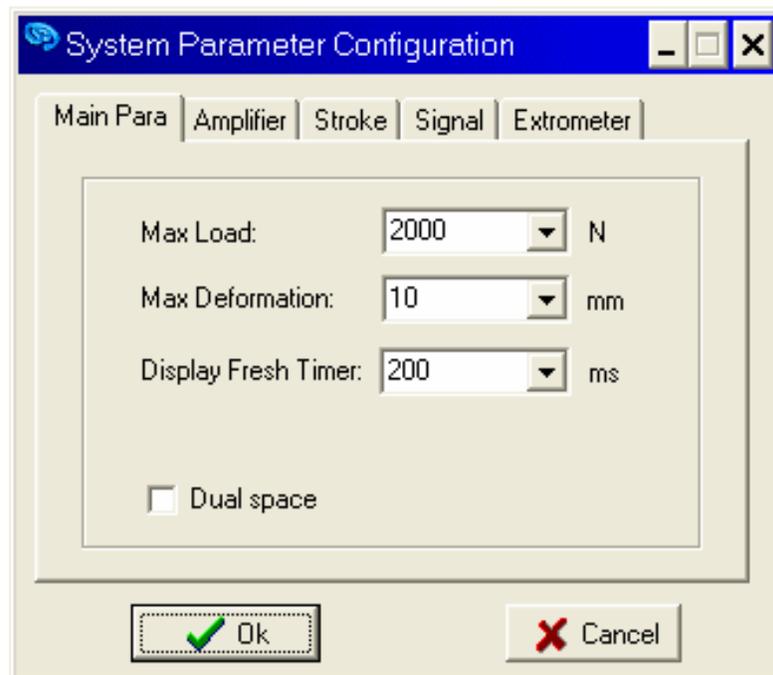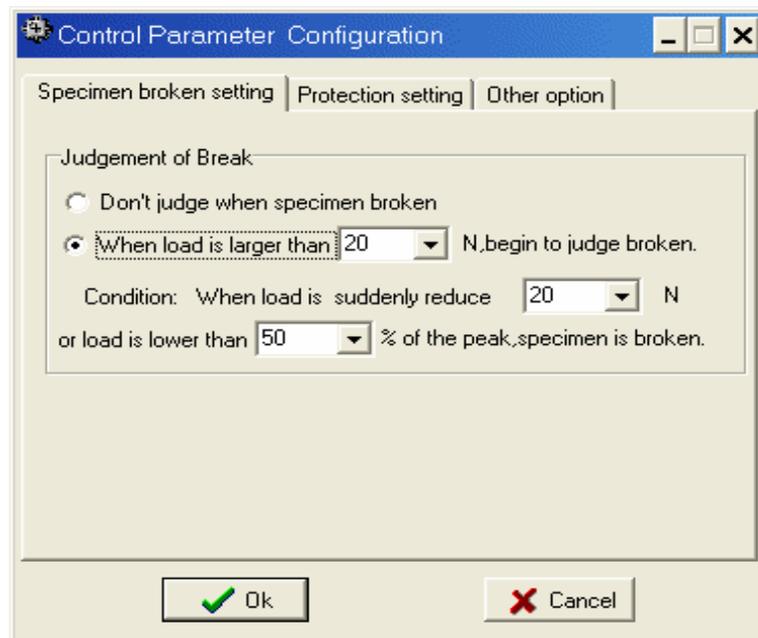| Order	Date	Material	Number	Diameter(mm)	Gauge(mm)	Shape
1	2005-6-2	A3	001	5	50	Circula
2	2005-6-2	A3	002	5	50	Circula

✔ Ok   🚪 Cancel

PTs

● **Test Curve Analysis**

Versatile graphic functions allows the curve to be analyzed "as is" after concluding the test, and then re-traced, amplified or reduced, or overlapping of curves for further analysis.

- **Parameters setting**

  Convenient and flexible to suit different situations through the functions of storage, setting and loading of control parameters and system parameters.

  ### Control Parameter Configuration

  | Specimen broken setting | Protection setting | Other option |

  Judgement of Break

  ○ Don't judge when specimen broken

  ● When load is larger than 20 ▾ N,begin to judge broken.

  Condition: When load is suddenly reduce 20 ▾ N

  or load is lower than 50 ▾ % of the peak,specimen is broken.

  [✔ Ok]   [✖ Cancel]

  ### System Parameter Configuration

  | Main Para | Amplifier | Stroke | Signal | Extrometer |

  Max Load: 2000 ▾ N

  Max Deformation: 10 ▾ mm

  Display Fresh Timer: 200 ▾ ms

  ☐ Dual space

  [✔ Ok]   [✖ Cancel]

- **Database Management**

Adopting the database technology can manage test data effectively.

PTs

Sales Offices

México

Comercializadora Rivasa
Tel: (55) 5577-3067, 5781-9882
comrivasa@yahoo.com.mx
www.rivasa.com.mx