

# Touch Screen Monitoring System For Valve Inspection



## Operation Manual

Zengxin Machine Electron Equipment Co., Ltd

# 1 Introduction

## 1.1 First page

This window is Home of the system, touch "initialization set up" button pop-up " Authority Login" window. You will enter into "initialization set up" if entering the correct password and touching "OK" button, scenes As shown in figure 2. Initialization set up is used for companies to set up their names. The Initial Password: 111111. You will enter into the inquiries screen directly if touch the "inquiries" button. touch blank part of the above region at random in access to the system "Preferences" screen.



Figure 1

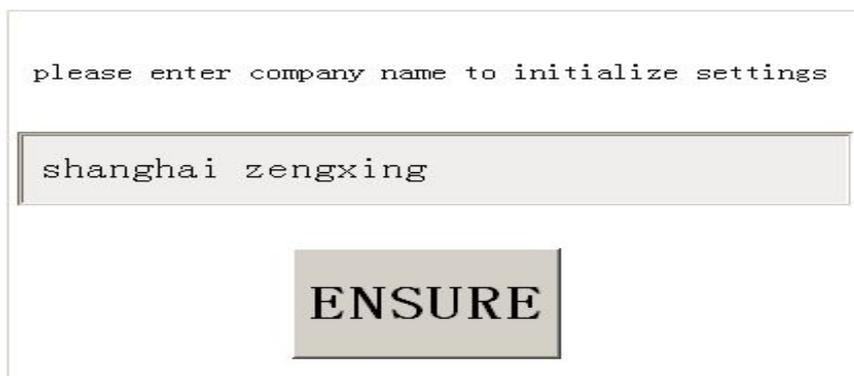


Figure 2

## 1.2 Preferences setting

The screen of preferences setting for system is Preferences set for system. We must set preferences before experiments, otherwise the experiments won't continue .

May directly increase the parameter on each under pulls the frame in the picture (Also may hang the keyboard with outside to pull the frame hypothesis parameter to under) , then touches "the increase" the button and automatically increases to under pulls the frame in tabulating.

If increases the project already existed, then could spring prompts the frame. If wanted to use the soft keyboard entry, touched "the soft keyboard" the button then to assign out the system keyboard.

Attention: After increases, if need choose this item, certainly must pull in the frame in under to select this option, then the system becomes effective. Next pulls tabulates can automatically arrange.

Touching "the monitoring", then enters the monitoring picture and appear the prompt, shown as chart 4 and chart 5: Touching "clear up", all project which chosen will be able to be clear. Touches "the withdrawal", then returns to the home page.

When "experimental project" choice "Tuning pressure test", "the test pressure" can switch to "Tuning the pressure".

### PARAMETERS SET

|   |  |
|---|--|
| <p>FACTORY NUMBER <input style="width: 80px;" type="text"/></p> <p>INSPECTION DATE <input style="width: 80px;" type="text" value="2011/05/16"/></p> <p>VALVE TYPE <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>VALVE MODEL <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>VALVE SPECIFICATION <input style="width: 80px;" type="text"/> mm <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> in <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>NOMINAL PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> lb <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>INSPECTION STANDARDS <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>BACK SEAL PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>SHELL PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>LEFT SEAL WATER TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>RIGHT SEAL WATER TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>LEFT SEAL AIR TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>RIGHT SEAL AIR TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="0"/> s</p> <p>TEST BENCH NO. <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>INSPECTOR NO. <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> | <p>TEST ITEM <input style="width: 80px;" type="text"/></p> <p>BACK SEAL HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>SHELL HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL WATER TEST HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL WATER TEST HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL AIR TEST HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL AIR TEST HOLDING PRESSURE <input style="width: 80px;" type="text"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>BACK SEAL ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>SHELL ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL WATER TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL WATER TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL AIR TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <small>BUBBLE NUMBER/min</small></p> <p>RIGHT SEAL AIR TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <small>BUBBLE NUMBER/min</small></p> <div style="text-align: center; margin-top: 10px;"> <input type="button" value="MONITOR"/> <input type="button" value="SOFT KEYBOARD"/> <input type="button" value="EMPTY"/> <input type="button" value="EXIT"/> </div> <div style="text-align: center; margin-top: 10px;"> <input type="button" value="SAVE"/> <input type="button" value="LOGIN"/> <input type="button" value="LOGOFF"/> </div> |
|---|--|

---

### PARAMETERS SET

|   |   |
|---|---|
| <p>FACTORY NUMBER <input style="width: 80px;" type="text" value="A"/></p> <p>INSPECTION DATE <input style="width: 80px;" type="text" value="2011/05/16"/></p> <p>VALVE TYPE <input style="width: 80px;" type="text" value="碟阀"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>VALVE MODEL <input style="width: 80px;" type="text" value="QQ"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>VALVE SPECIFICATION <input style="width: 80px;" type="text" value="40"/> mm <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> in <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>NOMINAL PRESSURE <input style="width: 80px;" type="text" value="10"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> lb <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>INSPECTION STANDARDS <input style="width: 80px;" type="text" value="GB123"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>BACK SEAL PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="22"/> s</p> <p>SHELL PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="23"/> s</p> <p>LEFT SEAL WATER TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="24"/> s</p> <p>RIGHT SEAL WATER TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="25"/> s</p> <p>LEFT SEAL AIR TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="26"/> s</p> <p>RIGHT SEAL AIR TEST PRESSURE HOLDING TIME <input style="width: 80px;" type="text" value="27"/> s</p> <p>TEST BENCH NO. <input style="width: 80px;" type="text"/></p> <p>INSPECTOR NO. <input style="width: 80px;" type="text"/></p> | <p>TEST ITEM <input style="width: 80px;" type="text" value="BACK SEAL TEST"/></p> <p>BACK SEAL HOLDING PRESSURE <input style="width: 80px;" type="text" value="12"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>SHELL HOLDING PRESSURE <input style="width: 80px;" type="text" value="13"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL WATER TEST HOLDING PRESSURE <input style="width: 80px;" type="text" value="14"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL WATER TEST HOLDING PRESSURE <input style="width: 80px;" type="text" value="15"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL AIR TEST HOLDING PRESSURE <input style="width: 80px;" type="text" value="16"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL AIR TEST HOLDING PRESSURE <input style="width: 80px;" type="text" value="17"/> MPa <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <input style="width: 80px;" type="text"/> psi <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>BACK SEAL ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="4"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>SHELL ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="5"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL WATER TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="6"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>RIGHT SEAL WATER TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="7"/> ml/min <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/></p> <p>LEFT SEAL AIR TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="8"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <small>BUBBLE NUMBER/min</small></p> <p>RIGHT SEAL AIR TEST ALLOWABLE LEAKAGE VOLUME <input style="width: 80px;" type="text" value="9"/> <input type="button" value="INCREASE"/> <input type="button" value="DELETE"/><br/> <small>BUBBLE NUMBER/min</small></p> <div style="text-align: center; margin-top: 10px;"> <input type="button" value="MONITOR"/> <input type="button" value="SOFT KEYBOARD"/> <input type="button" value="EMPTY"/> <input type="button" value="EXIT"/> </div> <div style="text-align: center; margin-top: 10px;"> <input type="button" value="SAVE"/> <input type="button" value="LOGIN"/> <input type="button" value="LOGOFF"/> </div> |
|---|---|

Figure 3

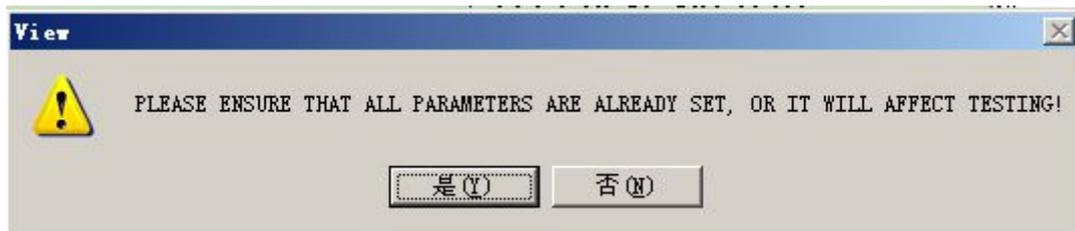


Figure 4

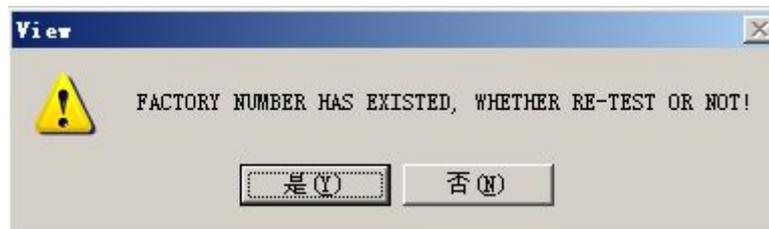


Figure 5

### 1.3 Monitoring pictur

In the monitoring picture, already establishes the parameter and had experimented data was revealed in left side. Before carried on the 3rd experiment, already be carried on 2experimental data had been revealed. Above right, touching "the current examination pressure" the frame and can pop-up "the demonstration precision" the dialog box with by reveal pressure precision of setup.

The tendency controls to be able to draw the test pressure (to be red)and the hypothesis pressure (blue color) curves.

The tendency controls the time scope is approximately for guarantees presses the time of enactment value 1.33 times(Guarantees presses the enactment time is three-quarter of the tendency controls the time scope).If wants to enlarge or the translation examination curve, so far as touch the curve to control under "the enlargement" or "the translation" buttons, after activates this function and directly touches hauls. If from enlarge men condition returns to the normal state need touches "the enlargement" once more or "the translation", then returns to the normal state. Touching "the start" the button then starts to experiment and touching "the conclusion" the button then the conclusion experiment and pop-up the conclusion experiment dialog box, show as chart 7.

After 3 experimental projects completely had finished and touch

"the preservation" the button, the system preserves the testing record. The convenience later will inquire.

Touche "the preceding screen", then throw out an experiment the examination curve. Touches "the latter screen", then throw out next experiment examination curve. Touching "the inquire about " the button will be able to pop-up " Whether save? yes or no" prompts the frame, the choice "yes" carries on save, after save successfully will the prompt. If will touch "no", not carried on the save data in the situation ,and the system will give up this experimental the data and directly will enter "the consult picture".

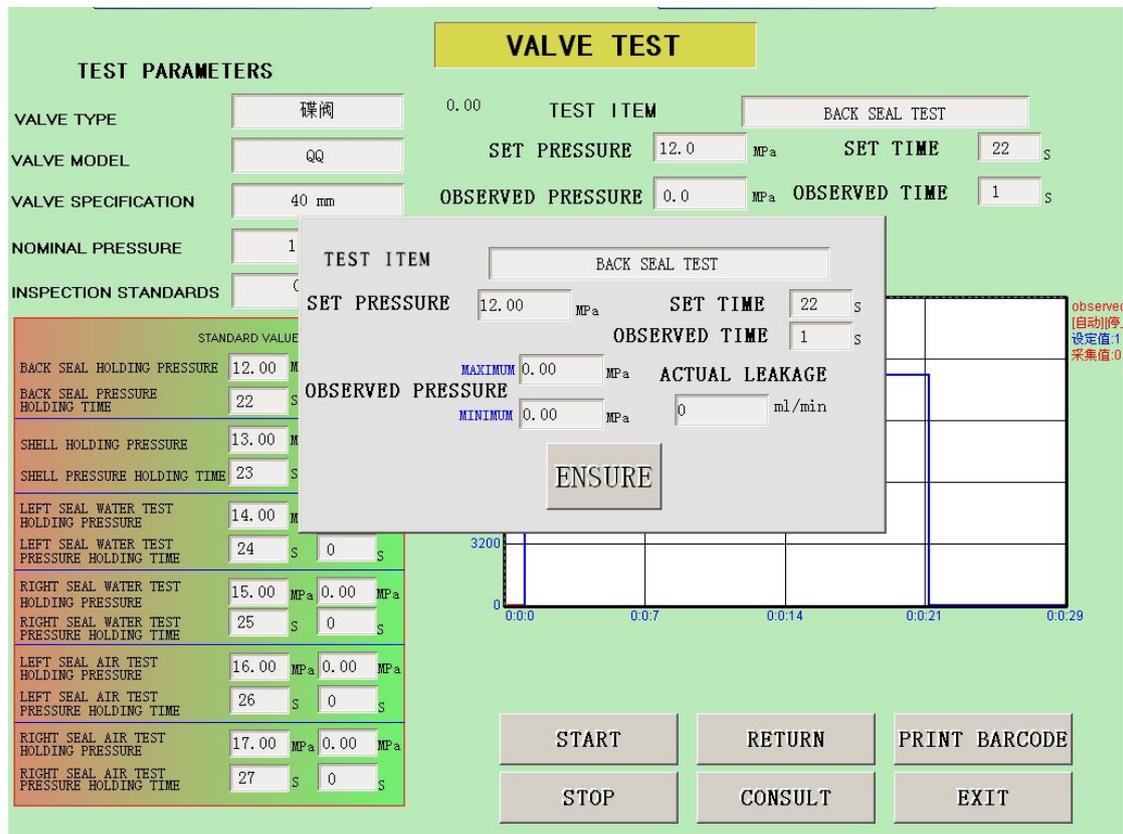


Figure 7

### 1.4 Consult picture

Touching "the data sheet" the button will pop-up "the data sheet picture", shown as chart 9. Has recorded all testing record in this table and the result is clear and convenience of consult. Touching "the preservation" the button , this table preservation may be the EXCEL electronic forms also may directly print. If wants to examine some detailed information and you need remember this record to leave the

plant the serial number. Returns to "the consult picture", in "leaves the plant the serial number" in the frame to input has existed leaves the plant the serial number, touch "the consult" the button and the system demonstrated will be supposed to leave the plant the serial number correspondence historic record. Through under pulls the frame to "the experimental project" the choice, may separately consult three experimental the historic records.

Touching "the printing", then jumps changes to the printing window and prints this record. If need print the examination curve and touches under the examination curve "the printing", then prints the examination diagram of curves. If need to revise this record the parameter, touches "the revision", springs "the user jurisdiction" the picture carries on the jurisdiction authentication (non- management jurisdiction can not amendment record).The jurisdiction confirmation through after, then carries on the revision operation and the activation other function buttons which hides, show as chart 8. Note: Under the revision condition, "leaves the plant the serial number" not to be possible to revise. After revises finished, if only is must print and straight contact "printing" button; If wants to revise the primary data and must touch "the preservation" the button to renews the primary data.

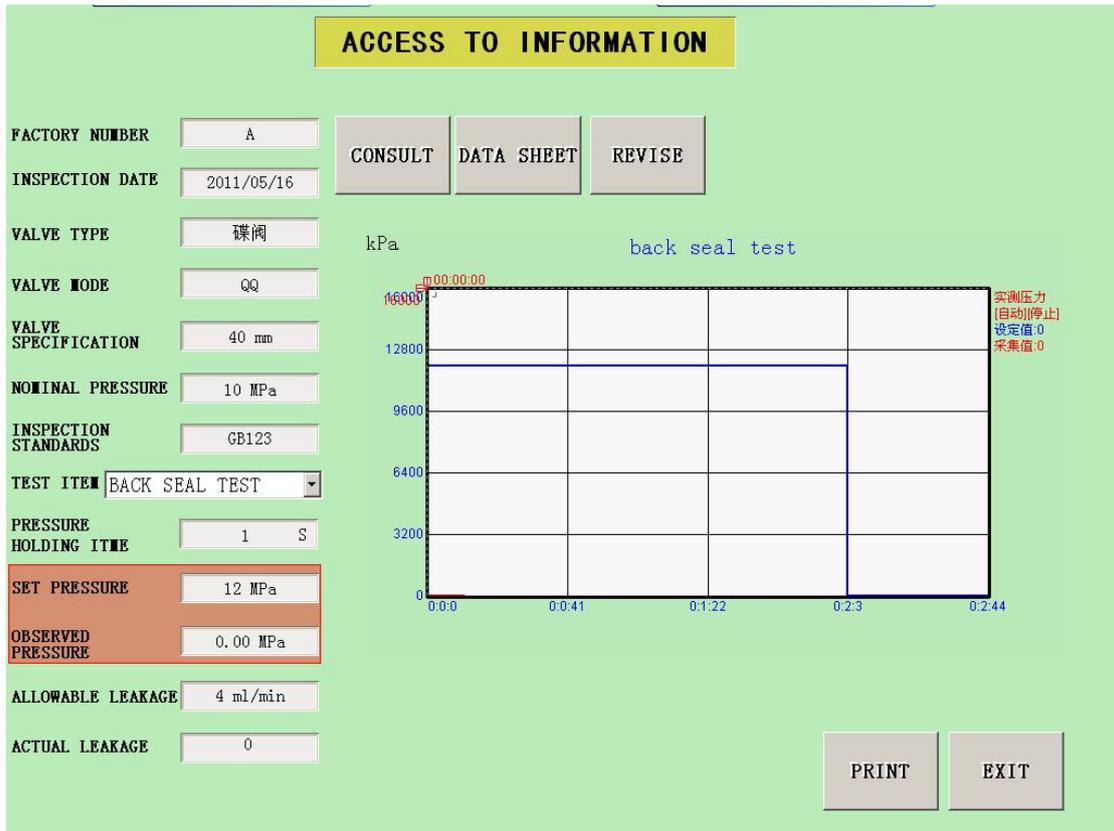


Figure 8

|   | A     | B          | C     | D     | E     | F    | G    | H     | I      | J            | K            | L          |
|---|-------|------------|-------|-------|-------|------|------|-------|--------|--------------|--------------|------------|
| 1 | TXMSN | JYRQ       | JYBZ  | SYTBH | JYYBH | FMLX | FMXH | FMGG  | GCYL   | SMFSYYL (BZ) | SMFSYYL (SC) | KTSYYL (C) |
| 2 | 22    |            |       |       |       |      |      |       |        |              | 8.00 MPa     |            |
| 3 | 223   | 2010/02/03 | GB123 |       |       | 碟阀   | QQ   | 40 mm | 10 MPa | 12 MPa       | 2.00 MPa     | 13 MPa     |
| 4 | 2CF   | 2010/02/03 | GB123 |       |       | 碟阀   | QQ   | 40 mm | 10 MPa | 12 MPa       | 9.00 MPa     | 13 MPa     |
| 5 | 3     | 2010/02/03 | GB123 |       |       | 碟阀   | QQ   | 40 mm | 10 MPa | 12 MPa       |              | 13 MPa     |
| 6 | 33C   | 2010/02/02 | GB123 |       |       | 碟阀   | QQ   | 40 mm | 10 MPa | 12 MPa       | 5.00 MPa     | 13 MPa     |
| 7 | A     | 2011/05/16 | GB123 |       |       | 碟阀   | QQ   | 40 mm | 10 MPa | 12 MPa       | 0.00 MPa     | 13 MPa     |

上海增欣机电设备制造有限公司

Export return

Figure 9

### 1.5 Printing form

Chooses some experimental project in "the consult picture", touching "the printing" can direct production "valve sighting shot".

This form support data revises, directly touches the unit standard which must revise then to revise. After revises ,touching "the printing" will carry on looks at inadavance and after satisfaction will print and the paper size is A4.Touching "derives" may lead the form the EXCEL electronic forms and facilitates the management.

| shanghai zengxing      |                         |                  |              |            |               |
|------------------------|-------------------------|------------------|--------------|------------|---------------|
| VALVE INSPECTION SHEET |                         |                  |              |            |               |
| INSPECTION DATE        | 2011/05/16              | FACTORY NUMBER   | A            |            |               |
| INSPECTION STANDARDS   | GB123                   | VALVE MODEL      | QQ           |            |               |
| VALVE TYPE             | 球阀                      | NOMINAL PRESSURE | 10 MPa       |            |               |
| VALVE SPECIFICATION    | 40 mm                   |                  |              |            |               |
| TEST DATA              |                         |                  |              |            |               |
| TEST ITEM              | TEST MEDIA              | STANDARD VALUE   | ACTUAL VALUE | CONCLUSION |               |
| BACK SEAL TEST         | TEST PRESSURE           | 12 MPa           |              |            | not qualified |
|                        | PRESSURE HOLDING TIME S | 22               | 1            |            |               |
|                        | LEAKAGE VOLUME          | 4 ml/min         | 0 ml/min     |            |               |
| BODY TEST              | TEST PRESSURE           | 13 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 23               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 5 ml/min         | 0.00         |            |               |
| LEFT SEAL WATER TEST   | TEST PRESSURE           | 14 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 24               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 6 ml/min         | 0.00         |            |               |
| RIGHT SEAL WATER TEST  | TEST PRESSURE           | 15 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 25               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 7 ml/min         | 0.00         |            |               |
| LEFT SEAL WATER TEST   | TEST PRESSURE           | 16 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 26               | 0            |            |               |

Print  
Export  
Exit

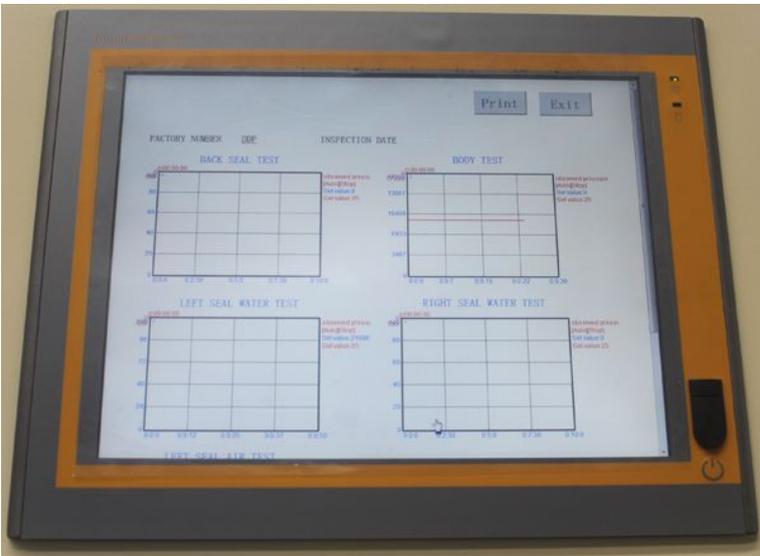
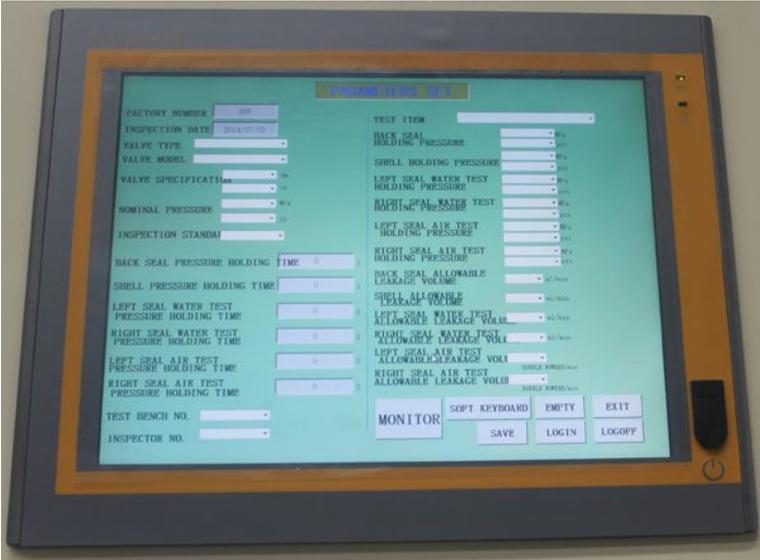
Figure 10

| shanghai zengxing      |                         |                  |              |            |               |
|------------------------|-------------------------|------------------|--------------|------------|---------------|
| VALVE INSPECTION SHEET |                         |                  |              |            |               |
| INSPECTION DATE        | 2011/05/16              | FACTORY NUMBER   | A            |            |               |
| INSPECTION STANDARDS   | GB123                   | VALVE MODEL      | QQ           |            |               |
| VALVE TYPE             | 球阀                      | NOMINAL PRESSURE | 10 MPa       |            |               |
| VALVE SPECIFICATION    | 40 mm                   |                  |              |            |               |
| TEST DATA              |                         |                  |              |            |               |
| TEST ITEM              | TEST MEDIA              | STANDARD VALUE   | ACTUAL VALUE | CONCLUSION |               |
| BACK SEAL TEST         | TEST PRESSURE           | 12 MPa           |              |            | not qualified |
|                        | PRESSURE HOLDING TIME S | 22               | 1            |            |               |
|                        | LEAKAGE VOLUME          | 4 ml/min         | 0 ml/min     |            |               |
| BODY TEST              | TEST PRESSURE           | 13 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 23               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 5 ml/min         | 0.00         |            |               |
| LEFT SEAL WATER TEST   | TEST PRESSURE           | 14 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 24               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 6 ml/min         | 0.00         |            |               |
| RIGHT SEAL WATER TEST  | TEST PRESSURE           | 15 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 25               | 0            |            |               |
|                        | LEAKAGE VOLUME          | 7 ml/min         | 0.00         |            |               |
| LEFT SEAL WATER TEST   | TEST PRESSURE           | 16 MPa           |              |            | no this       |
|                        | PRESSURE HOLDING TIME S | 26               | 0            |            |               |

Print  
Export  
Exit

Figure 11

Main Interface show:



Foreign Trade Manager: Ben Pan

Skype: benqpan

Http://www.valvestest.com ; Email: benqpan@gmail.com ;