Safety Instructions

In order to prevent your PANRAN products from being damaged or to avoid injury to you or others, please finish reading these following safety instructions before you operate this instrument. And put the safety instructions within reach, please .

The consequences which may be caused by not following the precautions we enumerate in this chapter are marked with the following symbols.

The symbol indicates a warning which requests you to read the information before using the product to prevent possible damage.

Warning

Please press the button"reset" quickly in the process of verification when abnormal situation encounters. (PR9120Y、PR9120Q Only)

Please press the button" reset" on the side of the chassis quickly in the process of pressure rising and falling when abnormal situation encounters(for example: abnormal sound,uncontrolled motor, high over-voltage) .

You must tighten up the joint to avoid pressure leaking when it is joined up to the gauge to be tested.

You can use a spanner to help tighten up to the gauge to be tested when necessary.

The oil(water) in the oil(water) cup must not exceed the mark (PR9120Y Only).

It may spill over out of the the pressure outlet,if there is too much oil.

Do remember to turn off the power after turning off the controlling computer.

Do remember to cut off the outer power after the computer are turned off.Or the main parts of the instrument are still in Power.

The outer power cord must be plugged into a grounded outlet correctly.

Notice

- The content of the manual attached to the instrument mustn't be reprinted or disseminated in any way without prior written permission from PANRAN company.
- Our company reserves the right to amend the information of the manual at any time without prior notice.
- We refuse to take any responsibility for the damage of using the product .
- We must do everything in our power to ensure accuracy and perfection of the manual information, if you find any mistake or omission, please call our customer service staff and we will be indeed very grateful.

After sales special line:17662527586

E-mail: pryl@panran.com

Catalogue

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I.Function description

PR9120Y/Q/W automatic pressure generator, which adopts high speed AD,high performance servo motor and controller, has been researched and developed by software control technology combined with the latest algorithm . It has stable pressure and fast speed, and its control precision can reach one in ten thousand which very much meet the needs of enterprise's periodic mass repetitive measuring calibration work. Full automatic control,14 inches touch screen,software layout design with comprehensive functions does not make verification of pressure gauge difficult any more but brings you to enjoy the relaxation and pleasure brought by high -tech equipment.

II .Application

It is used to verify or calibrate general pressure gauges,precision pressure gauges,electric contact pressure gauges,pressure switches ,pressure transmitter and some other pressure related instruments.

III.Features

1.The speed controlling is fast .The pressure reaches the set point for less than 30 seconds.

2.The pressure is fast and stable,which conforms to the verification regulation of relevant pressure instruments.

3.The host machine can change multi range PR9111 or PR9112 intelligent pressure calibrator to improve the measurement accuracy and periodic verification convenience.

4.The instrument with 14 inches touch screen, built in control software can get more stable operation and support remote maintenance and software upgrade.

5.The device can print the certificate with the printer directly .

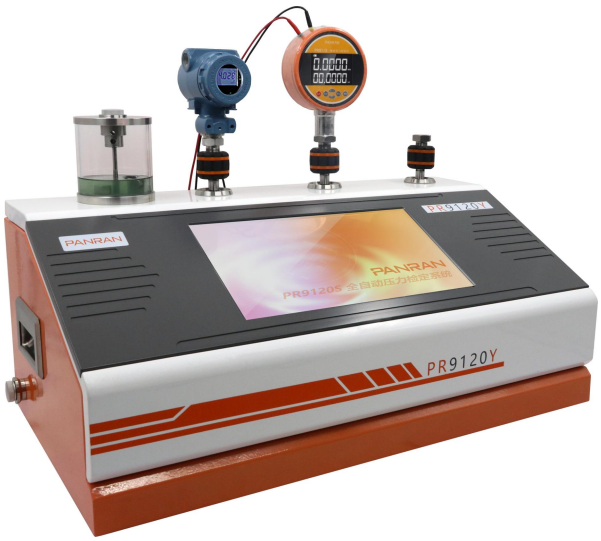
6.With wireless module,it can support remote assistance after networking and remote upgrade management ,etc.

7.It can change certificate template and support certificate exporting according to customer requirements. (PDF format).

IV Technical parameters

PR9120Q parameters and composition

- Pressure range：（-95~600）kPa
- Working medium:Air
- Pressure control fluctuation<0.005%F.S
- Overall dimension: 545mm×370mm×350mm
- Weight:20kg



PR9120Y parameters and composition

- Pressure range :（-0.04~0~60）MPa
- Working medium: transformer oil ,purified water
- Pressure control fluctuation <0.005%F.S
- Overall dimension: 660mm×370mm×410mm
- Weight：30kg

PR9120W parameters and composition

- Pressure range：（-40~40）kPa
- Working medium:Air
- Pressure control fluctuation<0.005%F.S
- Overall dimension: 545mm×370mm×350mm
- Weight:13kg

V.Introductions

1.Power on

Access to 220 v power supply ,turn on the switch on the power socket and the device will start and enter loginnig interface automatically;

User name : admin,password: admin (you can change it in the management of inspectors)

2.Introductions of software interface

2.1 “green”indicates the current running state;

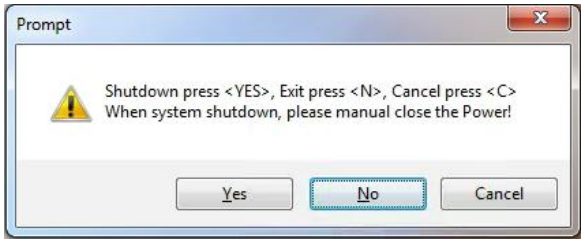
2.2 External standard device (PR9111 or PR9112) for synchronous data display;

2.3 Set target pressure value, use your finger or the mouse to click the digital part ,the interface of value will appear;

2.4 Information of external standard instrument;

2.5 Click to close the system;

A prompt will appear:

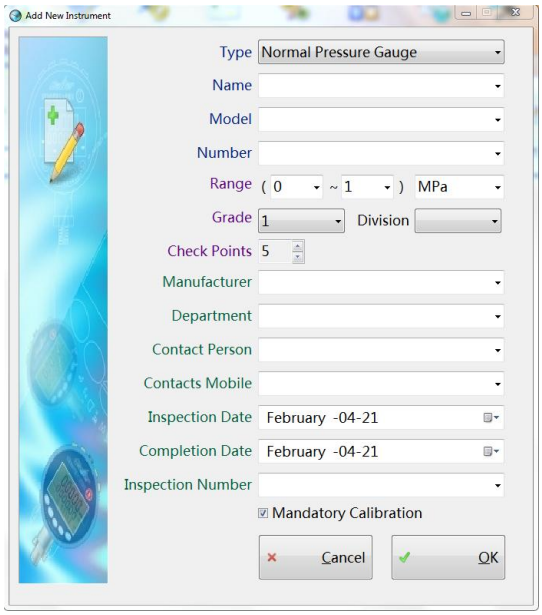


1)“Yes”:exit from the software and turn off the computer at the same time.and then shut off the host engine by hand;

2)“No”:return to the computer desktop,you can enter administration software once again through the shortcut icon of the desktop software;

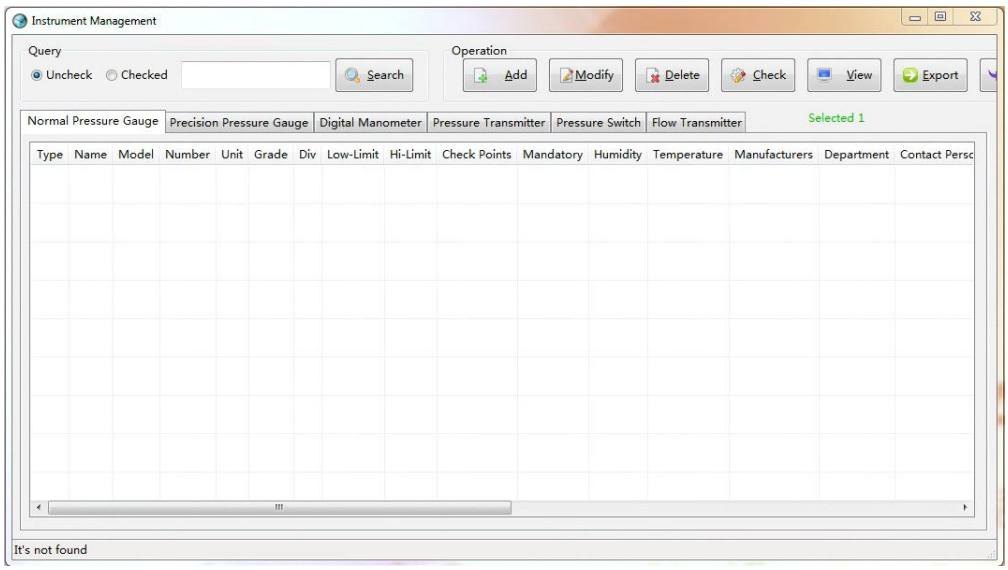
2.6 Function option menu;

2.6.1 New verification



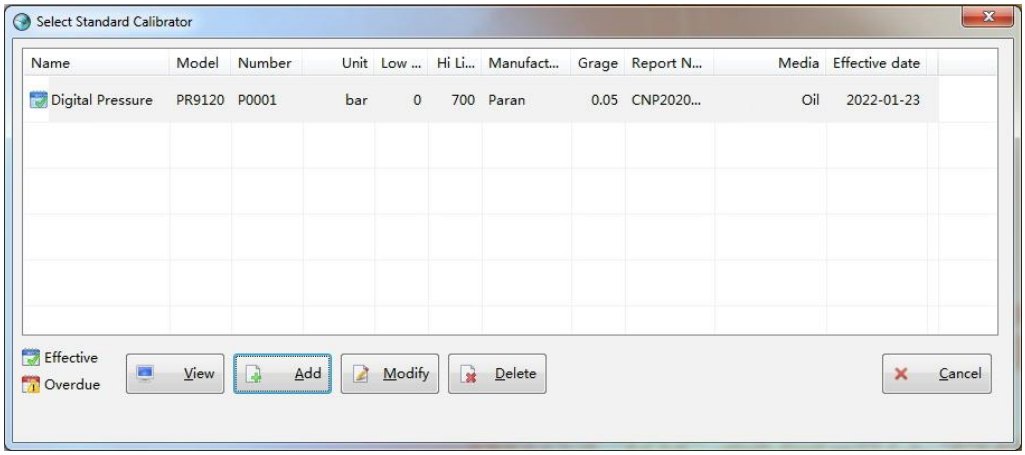
Input the detailed information of the pressure gauge to be tested;

2.6.2 Instrument management



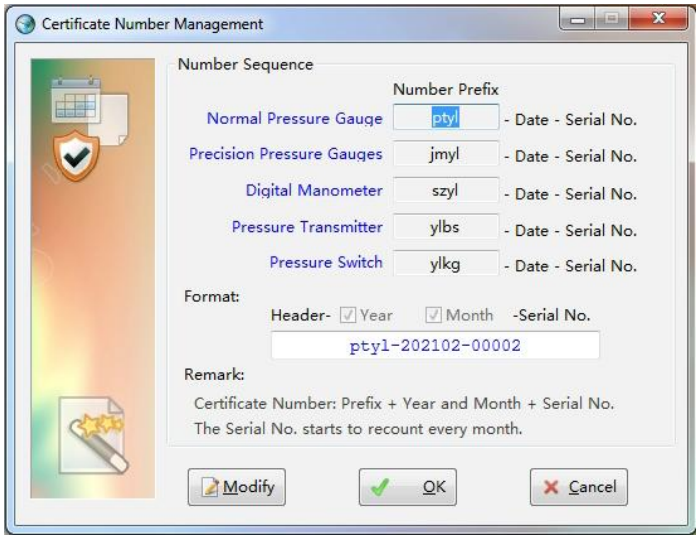
Query the information of pressure gauge not checked and checked（It can be retrieved based on information such as the customer company, range, name, number, manufacturer and other information of the gauge to be tested） ,and you can modify ,delete ,test or preview it at the same time;

2.6.3 Management of standard instrument



You can add,modify or delete something with the standard instrument;

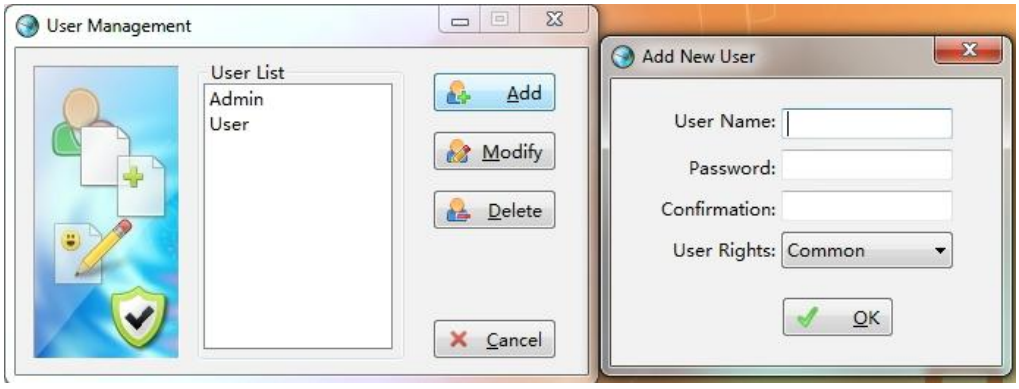
2.6.4 Management of certificate codes



1)Select "Custom Certificate Number", you need to manually enter the certificate number in the pressure verification interface;

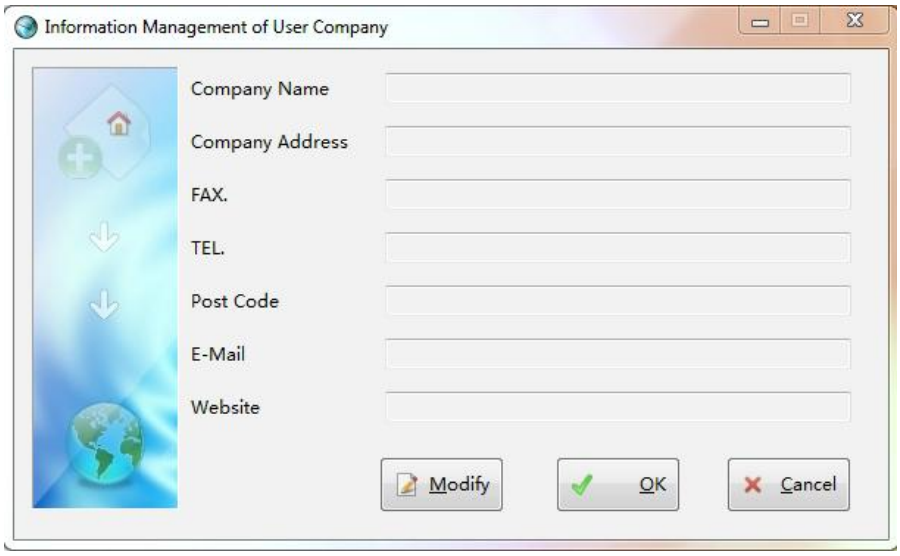
2)Click "Edit" to edit the certificate number prefix and certificate number format.

2.6.5 Management of inspectors



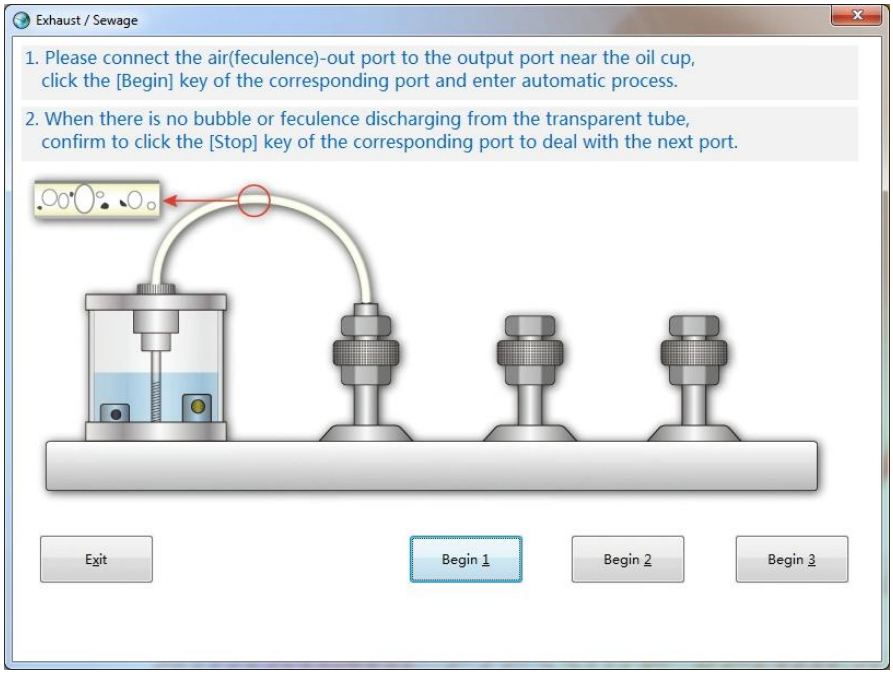
Set a new inspector and the permissions;

2.6.6 Unit information



Click “modify”to input unit information;

2.6.7 System maintenance(only for PR9120Y automatic pressure generator)

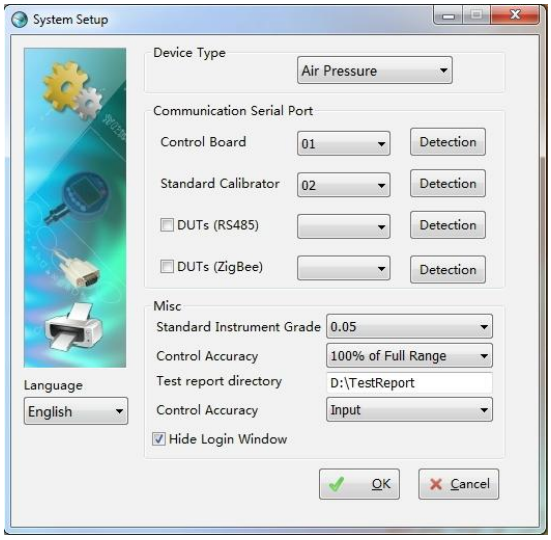


1)When the device appears "cannot pressurize" or "pressurize slowly" and it needs to exhaust air, please connect according to the requirements of this figure, connect the hose to the oil cup, and click Start;

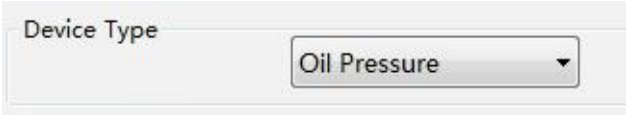
2)When the pressure output port is blocked or the system needs to be drained, please connect according to the requirements of this figure, connect the hose to the container, discharge the contaminated medium, and click Start;

3)After exiting, remember to remove the hose, connect the plug or the gauge to be tested, and click the "reset" button in the lower left corner of the interface, otherwise the system will not work normally.

2.6.8 System setting



1)Instrument types:



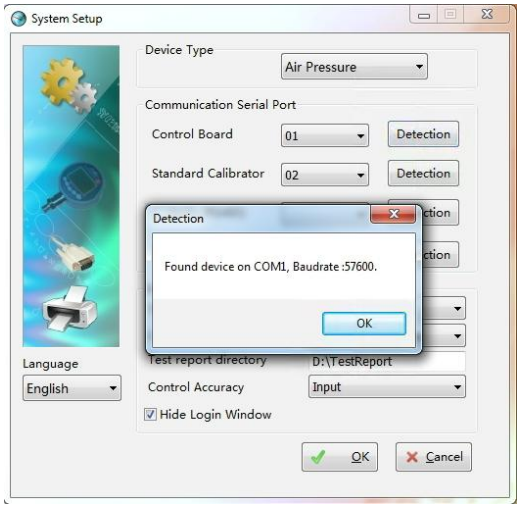
PR9120Q:choose “air pressure”

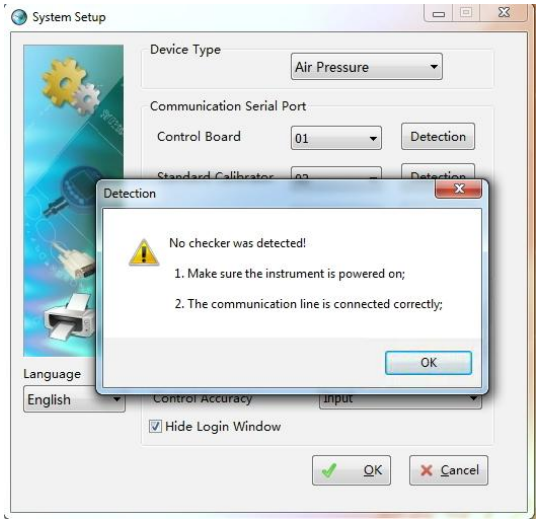
PR9120Y: choose “oil pressure"

PR9120W: choose “micro pressure"

2)Communication serial ports designating:

Click and choose corresponding options “test”,and it will seek "communication serial ports” automatically. The tested result is following:





3)"Interface language": "Chinese, English" can be selected;

4) "Standard device level", according to the equipment equipped with "standard gauge (PR9111 or PR9112)" accuracy level selection, there are 0.02, 0.05, 0.1, 0.2, 0.5;

5)”Pressure controlling accuracy” can be chosen as “full scale accuracy 100%,75%,50%,25%”,the smaller the numerical value is ,the higher the pressure controlling accuracy is ,the longer the stabilization time is;

6) "Test report directory", storage report path;

7)Manual input mode: Optional keyboard, selection items

(The keyboard is a numeric keyboard input mode, and the selection item is the pointer position selection input mode)

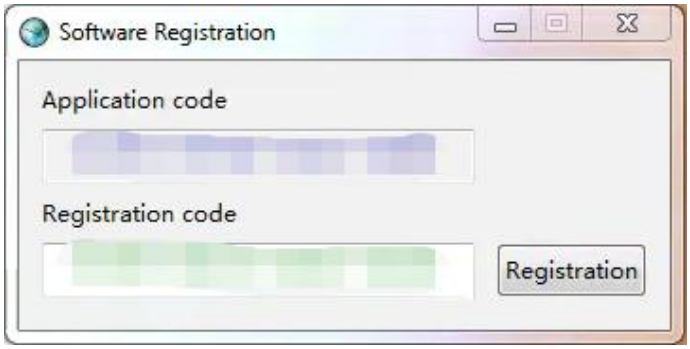
8)Check "Hide login window" and log in directly without entering a password;

2.6.9 Report catalogue

Open the storage certificate and record folder, you can search for files based on the year, month, and certificate name.

2.6.10 Using help

1)"Software registration": Enter the registration code to extend the use time (under normal use, you can't click "register" at will, otherwise the time will be cleared and the software function will be locked);



2)About": Open the software introduction;

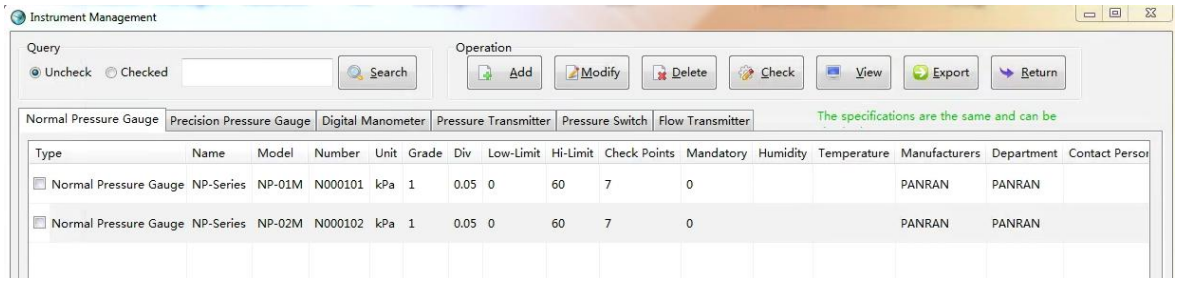
3)"Help": open the device manual;

4)"Verification Regulations": general pressure gauges, precision pressure gauges, digital pressure gauges, pressure transmitters, pressure controller electronic version verification regulations.

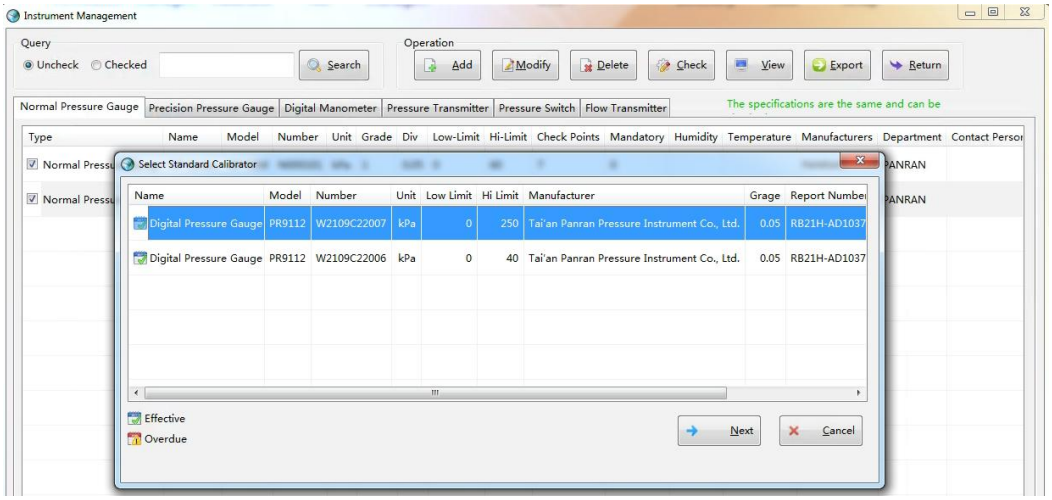
VI.Verification operation

Eg1:Verification of ordinary pressure gauge(the operating method is the same as that of accuracy pressure gauge and digital pressure gauge)

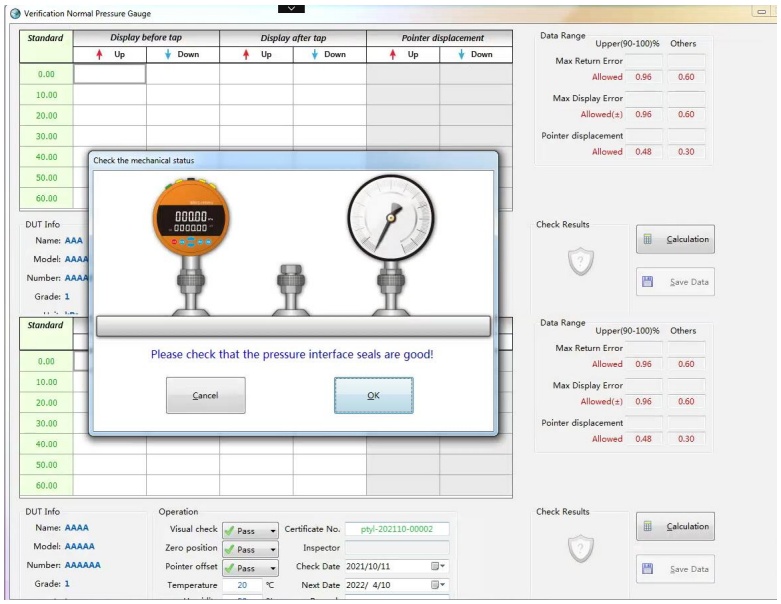
1)Click “gauge management”and choose”ordinary pressure gauge”;



2)Choose the gauge to be tested (the software can test two gauges in the same range at the same time)and click”calibration”;



3)Choose the standard gauge to be used (note that the range of the selected standard gauge must be consistent with the range of the currently installed standard gauge).click “next”;



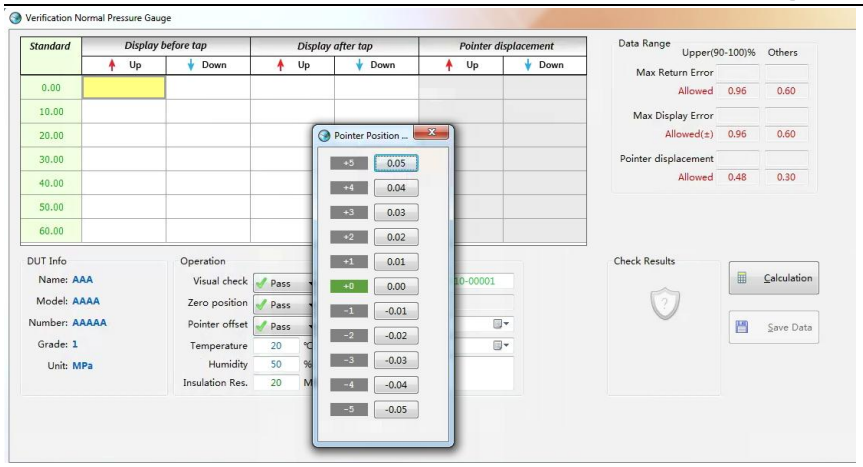
4)Test system status,and click “ok”after confirmation;

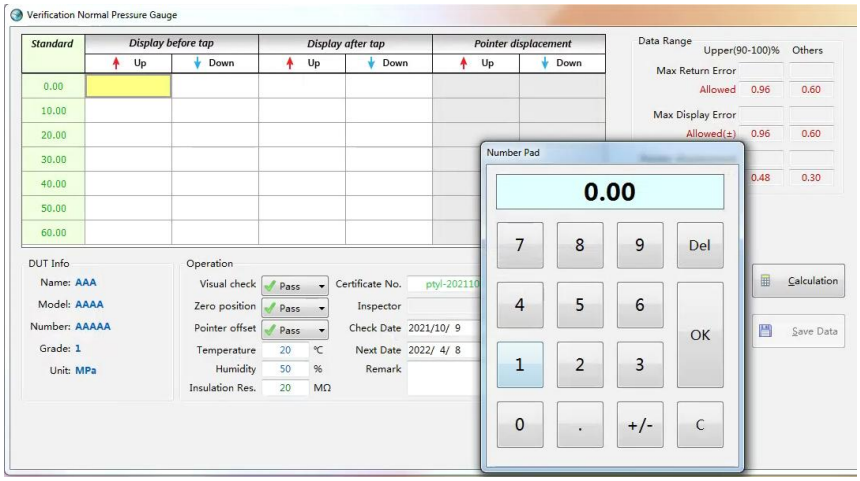
5)Wait for about 10 seconds, the pressure is displayed as a non-zero state, click the "clear" button of the standard device (PR9111 or PR9112);

6)After the device prompts that it is stable, enter the data of the gauge to be tested in the "displayed value before tapping" form;

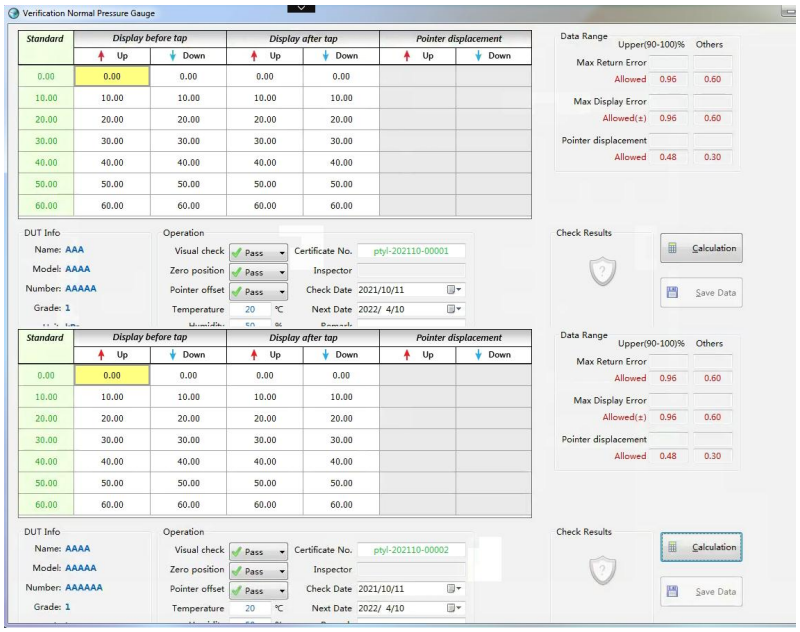
a)Click the first blank cell on the left side of the boost to display "pointer position selection" or "numerical keyboard", and enter data;

b)Then tap the gauge to be tested, enter the gauge to be tested data in the "Tap Value" form, the device will automatically jump to the next verification point and automatically increase the pressure (the following verification points have the same operation);





7)After the verification of the indication value,the software will count the datas automatically and determine whether the tesed gauge is qualified or not.(while testing ,if there are any data inputting errors,you can modify them by hand.and then click “calculation”to determine whether the tested gauge is qualified or not);

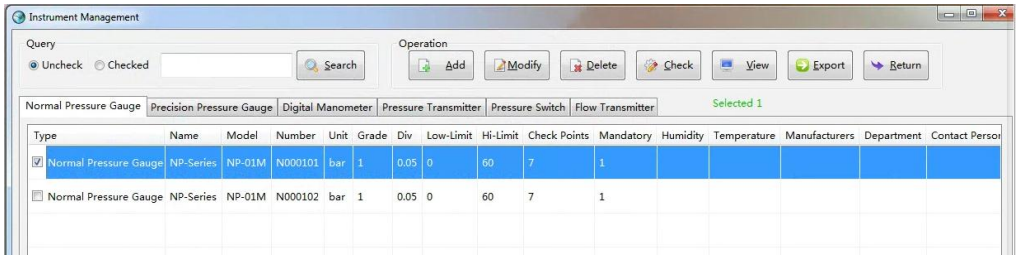


8)After verification of indication value ,you need to input the appearance inspection, zero position,pointer offset stability, ambient temperature, relative humidity, verification date and next date for verification of the tested gauge in the interface of operation;

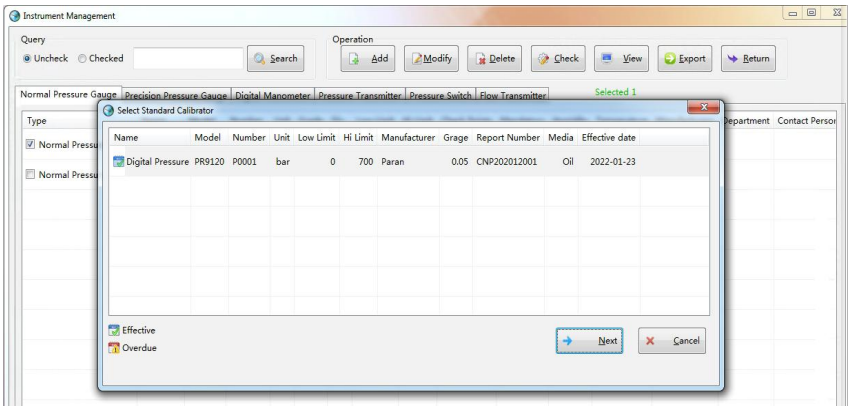
9)Click “save date”, you can save the datas of the verification into the computer;

Eg2:Verification of pressure transmitter (same as flow transmitter)

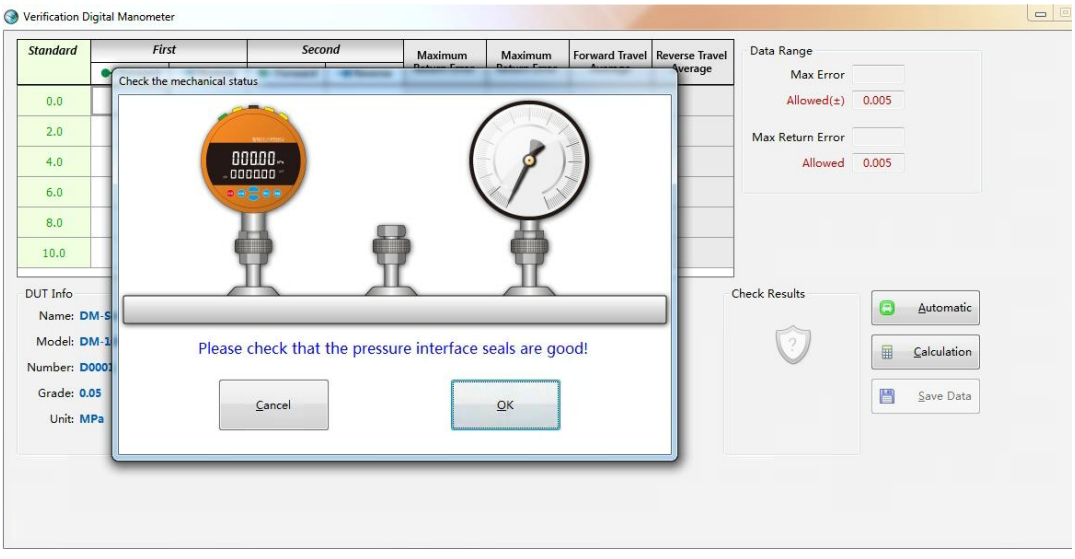
1)Click “gauge management” and choose “pressure transmitter";



2)Choose the pressure transmitter to be tested,click “calibration”;

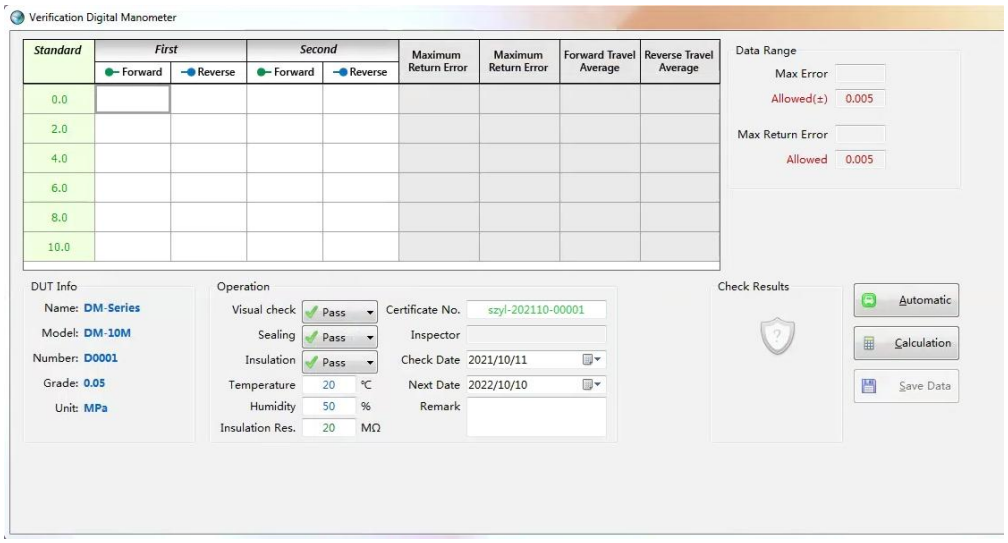


3)Choose the standard gauge to be used(note that range of the selected standard gauge must be consistent with that of the currently installed standard gauge).click “next”;

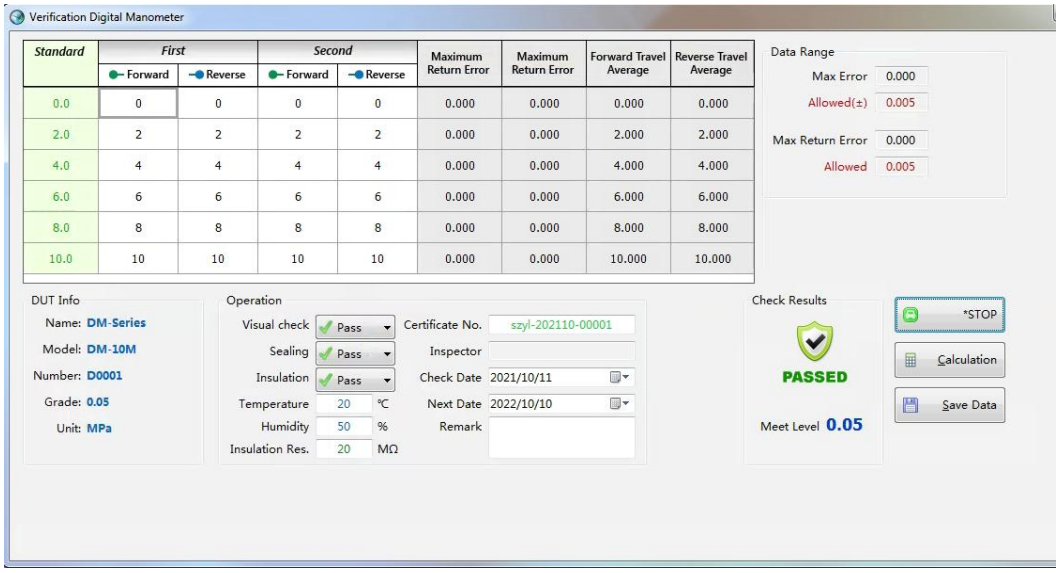


4)Test system status,and click ok after confirmation;

5)Wait for about 10 seconds, the pressure is displayed as a non-zero state, click the "clear" button of the standard device (PR9111 or PR9112);



6)Click”test automatically”the instrument pressure will rise automatically and it will record the actual output value of the tested transmitter automatically.then the following interface will appear:



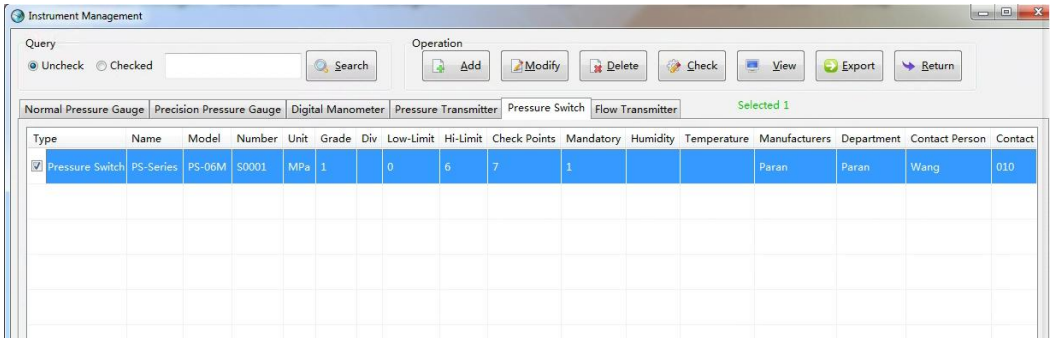
7)After verification of indication value, you need to input something into the interface of operation,like appearance inspection,tightness,insulation strength,ambient temperature,relative humidity, insulation resistance ,verification date and next date for verification of the tested gauge;

8)Click “save date”,you can save the datas of the verification into the computer;

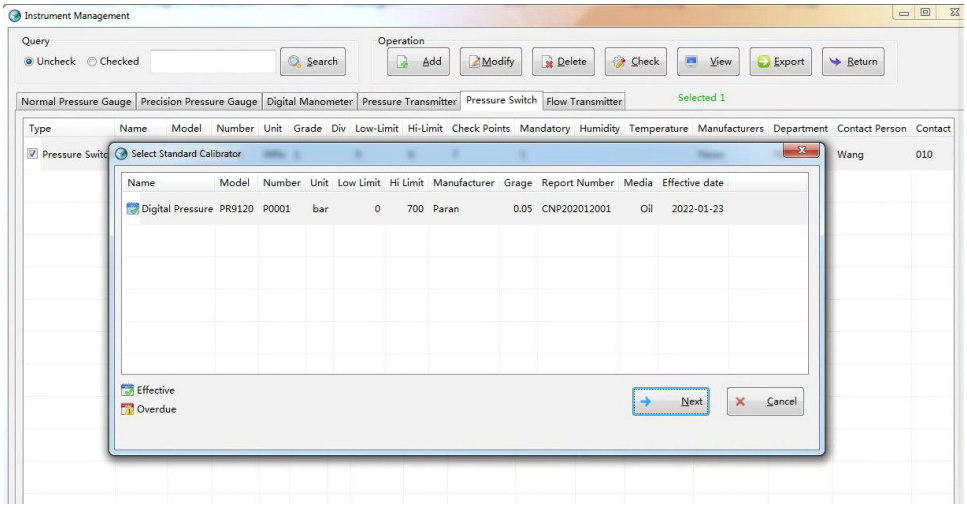
Eg3:Calibration of pressure switches(electric connection point pressure gauge)

1) First connect the pressure switch to the SW,COM joints of the PR9112 intelligent pressure calibrator;

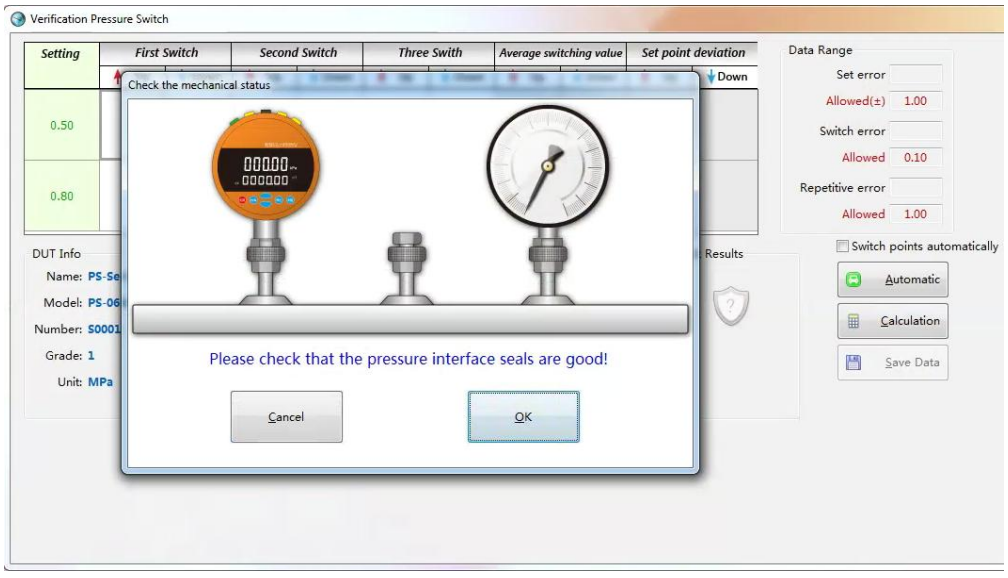
2)Click"gauge management", and then choose "pressure switch";



3)Choose the pressure switch to be tested and then click"test";



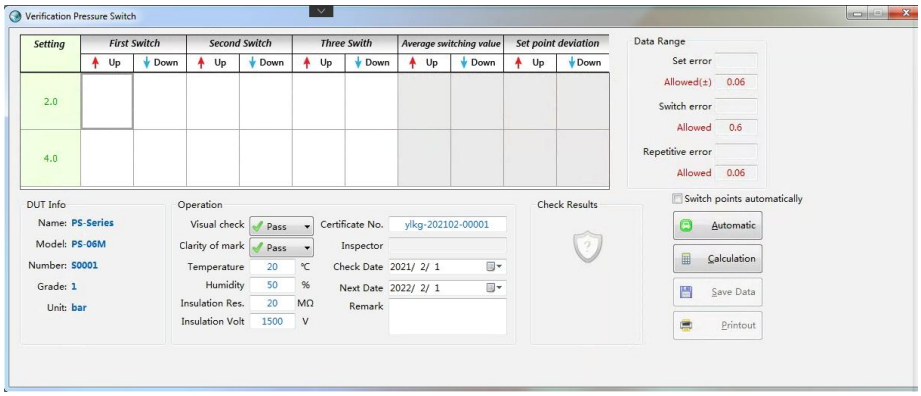
4)Choose the standard gauge to be used (note that the range of the selected standard gauge must be consistent with the range of the currently installed standard gauge).click "next";



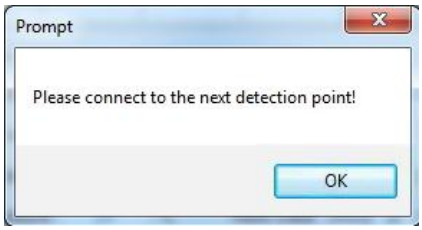
5)Test system status,and click ok after confirmation;

6)Wait for about 10 seconds, the pressure is displayed as a non-zero state, click the "clear" button of the standard device (PR9111 or PR9112);

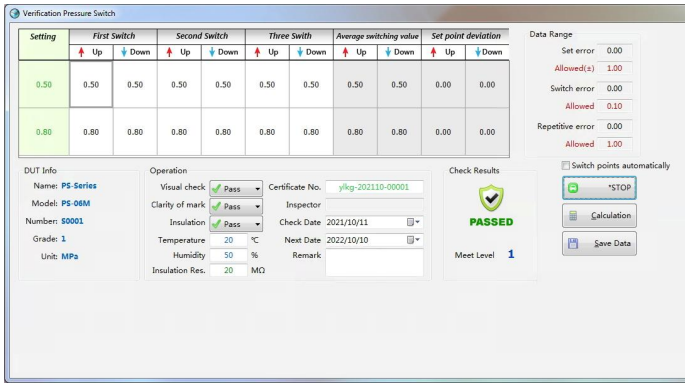
7)After the instrument prompts" stable"， click "test automatically";



8)After one point is tested,there will be a prompt for next one,you can go on by hand;



9) After verification,the following interface will appear ;



10)After verification ,you need to input the appearance inspection, whether the logo clear or not ,insulation strength,ambient temperature,relative humidity, insulation resistance ,verification date and next date for verification of the tested gauge into the interface of operation;

11)Click “save date”,you can save the datas of the verification into the computer;

VII.Routine maintenance

1.Oil pressure

1) Pay attention to the screen cleaning, clean up if it gets oily;

2) If the pressure outlet sealing ring is found to be damaged, it should be replaced in time;

3) The oil (water) cup will remain the impurities left during the verification of the meter being inspected. When the medium is turbid or there are too many impurities, clean the oil (water) cup in time and replace with a new working medium;

4) The liquid level of the oil (water) cup is below the lower limit, and new working medium should be added in time;

5) The pre-pressurization is repeatedly pressurized during pressurization, indicating that the equipment connecting pipes are all air, and the sewage and exhaust operations should be carried out;

6) The equipment should be operated at least 2-3 weeks to ensure the circulation of the medium.

2.Air pressure / micro pressure

1) If the pressure outlet sealing ring is found to be damaged, it should be replaced in time;

2) The equipment should be operated at least 2-3 weeks to ensure the normal operation of the equipment.