

Safety Valve Calibration Bench

Product Manual



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Shandong Hailaitaide Machinery Co., Ltd.

ABOUT US

Company introduction

JINAN ODMT FLUID CONTROL EQUIPMENT CO.,LTD as a professional provider in the field of fluid control,serves for petroleum,chemical,shipbuilding,automobile,aviation,marine,military etc.industries and related laboratories in univer-sities andresearch institutes.ODMT has all kinds of fluid conveying equipment and pressure test and control equipment.

We specialize in high-pressure system engineering consulting,design manufacture,installation,debugging and mainte-nance services.We adopt advanced pressurization technology in the world,with hydraulic pressure up to 640 MPa and pneumatic pressure up to 210 MPa.

Company introduction

ODMT company is the manufacturer of auto hose test machine.Its main products include: auto hose pulse test bench,hose flexibility test machine,hose burst test machine,hose pressure withstand test machine and other auto parts pressure test machines.

ODMT oil-free lubrication gas boosters include air boosters,nitrogen bosster,oxygen booster,helium booster,hydrogen booster,argon booster,stc

According to customers' requirements,the following can be ordered:air tightness pressure test system, hydraulic pressure test system,hydraulic hoses,joints,valves,pipe fittings,cylinders,pres-sure vessels, sensors,instrument pressure test system,hydraulic hoses,joints,valves,pipe fittings,cylinders,pres-sure vessels,sensors,instrument pressure test system,pressure test and monitoring system and pressure data collecting and processing system.

Company introduction

ODMT company has always adhered to the concept of high-quality service, with an agile, efficient, experienced and dynamic team.Odimet people regard the quality of products as their life, and regard products as their own character,through continuous R & D and innovation, the product system is more mature and perfect.

ODMT company introduces foreign advanced product technology, combines with the current situation of China's pressure detection industry to improve products. most of the equipment parts are imported products, It has established long-term cooperation with FESTO, IFM, Schneider and ASTON, these world leading famous brands provide high quality accessories for odmt, so that the company's products have a reliable quality assurance.

ODMT company has been focusing on the cultivation and development of professionals, with a high-quality professional team, From product development, mechanical design, equipment testing, technical services are completed by professional and technical personnel,Established a complete after-sales service system, so that customers buy products, there is no worry.

We always put customer satisfaction in the first place, accumulated years of rich experience, professional product R & D team, high-quality brand image construction, and reasonable organizational structure are the reasons why customers choose us.

Manual control safety valves test bench MAQ-200/10-3-N

Brief Introduction

The manual control safety valve test bench MAQ-200/10-3-N adopts an hydraulic clamping device with adjustable clamping force, It is equipped with a pressure gauge to display the corresponding clamping force. It provides a pressure and clamping force comparison table, which facilitates operators to choose the appropriate clamping force based on the safety valve test pressure and diameter; The experimental process is manually operated and data is recorded manually; One testing seat, including one clamping unit, used for DN15~DN200 testing; Equipped with multiple testing fixtures to meet the testing requirements of various series of safety valves.



*Scope of application: Suitable for performance testing of setting pressure, , and sealing performance of direct load and pilot operated safety valves.

*Reference standards:TSGZF001-2006、GB-T12242-2005 、GB-T12241-2005 、GB-T12243-2005

Function and Features	
testing medium	nitrogen or clean air
Maximum diameter	DN200mm
Maximum test pressure	Maximum test pressure 10MPa
testing accuracy	±0.4%
material	The valves, fittings, and joints used in the equipment material are all made of stainless steel

Manual Control Safety valves test bench MAQ-400/40-6-BN



Brief Introduction

1. Adopting hydraulic clamping device, the clamping force is adjustable and equipped with a pressure gauge to display the corresponding clamping force, providing a pressure and clamping force comparison table for convenience

The operator selects the appropriate clamping force based on the testing pressure and valves diameter.

2. test bench can be customized according to customer required size, pressure, and medium.

Function and Features	
testing medium	nitrogen or clean air or water
Maximum diameter	DN400mm
Maximum test pressure	Gas pressure :40MPa; water pressure :80MPa
testing accuracy	±0.4%
material	When the medium pressure is lower than the required pressure and not less than 3MPa, use 0.3-0.8MPa compressed air as the driving pressure source, and pressurize the medium into the high-pressure tank through a gas booster pump

Computer record(control) safety valve test bench

Product features



- (1) testing medium: nitrogen or clean air or water;
- 2) max. Diameter:DN400mm
- 3) max.testing pressure : gas 400bar, water:800bar
- 4), testing accuracy: $\pm 0.4\%$;
- 5), Adopting hydraulic clamping device, the clamping force is adjustable and equipped with a pressure gauge to display the corresponding clamping force. A pressure and clamping force comparison table is provided to facilitate operators to select the appropriate clamping force based on the safety valve testing pressure and diameter.

6) Gas testing: When the medium pressure is lower than the required pressure and not less than 30bar, 3-8bar compressed air is used as the driving pressure source, and the medium gas will be pressurized into the high-pressure tank for testing purposes.

7) The testing process is automatically controlled, and the pressure boosting system outputs high-pressure gas to fill into the tested safety valve. The pressure of the tested safety valve reaches the set point The pressure is activated and then judged as qualified, otherwise it is considered unqualified;

(8) The pressure calibration of the tested safety valve is manually operated, and the opening pressure of the tested safety valve is manually adjusted;

(9) Using a computer control system, the test pressure can be set within a certain range as needed;

(10) Using Labview software from NI Corporation in the United States, it has dynamic display and automatic recording to save the pressure curve of the safety valve calibration time, which can be directly printed test reports and curves;

(11) The booster pump is independently processed and produced by our company, and its internal seals are imported from Italy;

(12) All valves, fittings, and joints used are made of stainless steel;

(13) We can provide testing fixtures according to customer needs to meet their safety valves testing requirements .

(14) During the experiment, if there is a leak or high pressure, it can automatically shut down and sound an alarm buzzer;

(15) The test bench is equipped with an emergency button, which can immediately stop the test in case of an emergency event.

(16) The verification process is intelligently controlled, and the set pressure measurement is automatically controlled;

(17) Can be equipped with marking machines and scanning devices to achieve corresponding matching of barcodes and QR codes for safety valves to be verified, facilitating quick processing of subsequent work;

(18) Can be designed according to customer needs, automatically printing safety valve calibration orders, safety valve calibration reports, calibration fee documents, etc. The layout format can be customized according to customer requirements Request customization;

(19) Remote auditing, issuance, and review of the verification process can be achieved, and relevant personnel can obtain real-time test data from relevant experiments;

(20) All verification data is stored on the server, and users within the network can share and categorize relevant verification data after obtaining corresponding permissions;

(21) Equipment can be customized according to customer's size, pressure, and medium.

Portable /Mobile Safety valves test bench

1.testing medium: nitrogen or clean air or water;

2. Maximum diameter: DN200mm

3. Maximum test pressure: Gas: 400Bar Water pressure: 1400Bar

4. testing accuracy: $\pm 0.4\%$

5. Dual gauge configuration, using a quick twist pressure gauge structure

6. Equipment can be customized according to customer required size, pressure and medium



Anti-explosion Safety valve online test bench OD-DL-2S-10T

Product features

- 1) with high-precision force sensors, which improves the accuracy of the safety valve opening curve;
- (2) Full process curve monitoring, which truly reflects the entire process of safety valve popping. The computer automatically determines the opening point to avoid the error caused by human selection;
- (3) The data acquisition system is powered by a computer system and does not require external batteries to ensure the consistency of system voltage;
- (4) Sensors can be dynamically calibrated with data acquisition and processing systems to achieve higher accuracy;
- (5) The system can achieve zero point system compensation function and accurately select the starting point of the curve process.



2, Easy to operate

- (1) The entire detection process only requires turning the switch to start the detection;
- (2) The detection results are automatically judged by the computer based on the judgment criteria;
- (3) Single and fast plug, easy to plug and unplug

3. Database management

- (1) Powerful and reliable database management functions that facilitate retrieval, storage, and report generation;
- (2) The database management software system can automatically display error rates, and users can set error ranges, execution standards, report number descriptions, tag numbers, and lead seal markings through the software system;
- (3) Printable curve reports, standard reports (required by national regulations), original records, batch reports:

4. testing report:

- (1) Print the original curve of the spring characteristics of the safety valve in the verification report, which truly reflects the pressure characteristics during the opening process of the safety valve;

- (2) Record all raw data and calibration process curves of the safety valve in the verification report;
- (3) The verification report can be printed in the form of images and viewed on any computer;
- (4) Verify and audit paperless electronic signatures;
- (5) Can achieve data sharing within the local area network;
- (6) No need to import data through intermediate devices, data can be directly detected and managed through laptops.

5, Feature parameters

- 1) Opening pressure error size: $\leq 2\%$;
- 2) lifting Force sensors: 200kg, 500kg, 1000kg, 2000kg, 5000kg, 10000kg;;
- 3) Maximum lifting force 10Ton
- 4) Pressure measurement range: 0-60Mpa;

safety valve lapping tool

manual lapping tool OMG-150

Function and features:

- (1) Can achieve high precision that electric grinders cannot achieve;
- (2) Convenient to carry and suitable for on-site operations;
- (3) This set of tools consists of a grinding head, a grinding plate, and fixed auxiliary tools;
- (4) The maximum grinding diameter can reach 250
- (5) Suitable for maintenance of various types of safety valves.



Electric lapping tool M-100

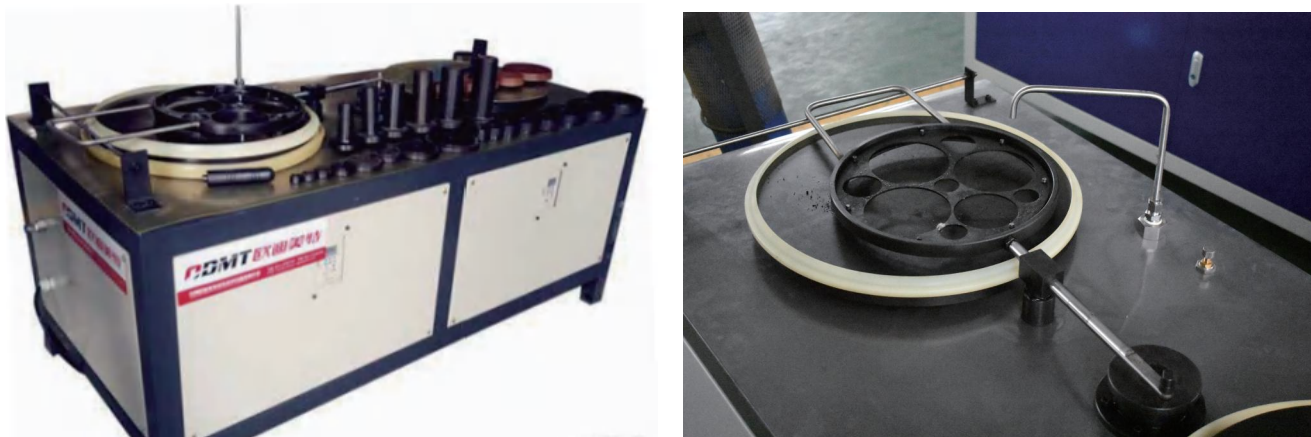


The M-100 portable valve grinder is a new generation product developed to adapt to on-site valve maintenance. This product has the characteristics of reducing labor intensity, improving labor efficiency, and reducing maintenance costs. Completely replacing imported products. Widely used in petroleum, chemical, metallurgical, power and other enterprises.

Brief Introduction

- (1) Small size, light weight, and easy to carry.
- (2) Easy to install. The product is a modular structure that is easy to disassemble and assemble.
- (3) Easy to operate.
- (4) High efficiency and good grinding quality.
- (5) Suitable for on-site maintenance in complex environments, eliminating valve disassembly and assembly work

auto lapping machine Model: OYM-150T



Function and Features:

- (1) Dynamic grinding of valve seat: The valve body rotates and is ground with a handheld mold to maintain alignment, retaining the advantages of manual grinding and overcoming manual labor. The disadvantage of low grinding efficiency.
- (2) Multi track grinding of valve disc.
- (3) Efficient and high-quality: easy to clamp and change specifications, low labor intensity, and no need for specialized training.
- (4) Widely applicable, with various specifications of positioning heads and porous plates, suitable for various diameters, safety valves, and other flat metal shapes within the specifications. Surface grinding.
- (5) Adjustable automatic grinding agent (oil) device.
- (6) Single phase 220V civilian electric drive.

Atmospheric pressure tank truck safety accessories test bench

Product introduction

1. Subsea valve (emergency shut-off valve) test bench MAT-125/06A

Subsea valve, also known as emergency shut-off valve, is composed of valve body, valve core, spring, piston, cylinder opening mechanism and seal, etc., and mainly relies on spring and cylinder to achieve sealing. Subsea valve is used under the tank of various refueling trucks and oil tankers to realize the oil loading and unloading function of the tank. When the oil in the tank needs to be discharged, the pressure gas source pushes the piston to compress the spring, thereby pushing the valve core away from the seal, opening the valve, and the oil in the tank flows out. Subsea valve is the most critical component of oil tankers and refueling trucks, which directly affects the quality of the vehicle, so the quality inspection of subsea valve is very important.

Our company's subsea valve test bench can test the sealing of subsea valve cylinder, subsea valve structure sealing and reverse sealing. It has the advantages of simple structure, convenient operation and easy maintenance. It is a very efficient professional detection equipment for subsea valves.



MAT series subsea valve test device parameters

1. Relevant standards: GB18564.1-2019 Road Transport of Liquid Dangerous Goods Tank Vehicles Part 1, API 6DSS Underwater Pipeline Valves, API 17D Underwater Wellhead Equipment Specifications, QC/T 932-2012 "Emergency Shut-off Valve for Road Transport of Liquid Dangerous Goods Tank Vehicles"
 2. Test items: two air inlet air sealing test, air opening test (control port test);
 3. Test medium: compressed air;
 4. Test pressure: 0.4~0.6MPa
 5. The equipment adopts an integrated structure of clamping device and control cabinet, and the clamping device is fully pneumatically controlled;
 6. For different valve structures, matching tooling plugs need to be configured for sealing to carry out various tests;
 7. This series of test devices can perform multiple tests with one device, with simple structure and easy operation.
- If there are special valves, non-standard customization is available. Please consult our company for details.

Atmospheric pressure tank truck comprehensive test bench MBVT-100-GR-W-A



Comprehensive test bench function

1	External breathing valve inspection	Can test two different specifications of thread and flange
2	Vacuum valve inspection	Can test two different specifications of thread and flange
3	Safety valve inspection	Can test two different specifications of thread and flange
4	Discharging hose water pressure and air pressure inspection	Can test water pressure and air pressure of discharge hose
5	Internal breathing valve inspection	Can test pressure of built-in breathing valve
6	Emergency relief device inspection	Can test pressure of emergency relief device

Portable atmospheric pressure tank truck safety accessories test bench Product introduction

Portable subsea valve test bench MAT-125/06B

The subsea valve is composed of valve body, valve core, spring, piston, cylinder opening mechanism and seal, etc., and is mainly sealed by spring and cylinder. Subsea valves are used under the tanks of various refueling trucks and oil tankers to realize the oil loading and unloading functions of the tanks. When the oil in the tank needs to be discharged, the pressure gas source pushes the piston to compress the spring, thereby pushing the valve core away from the seal, opening the valve, and the oil in the tank flows out. The subsea valve is the most critical component of the oil tanker and refueling truck, which directly affects the quality of the vehicle, so the quality inspection of the subsea valve is very important.

Our company's portable subsea valve test bench can test the sealing of the subsea valve cylinder, the sealing of the subsea valve structure and the reverse sealing. It has the advantages of simple structure, convenient operation and easy maintenance. It is a very efficient professional detection equipment for subsea valves.



Portable atmospheric pressure tank truck breathing valve test bench MBVT-G-B2



External breathing valve test:
Test tank truck external flange and threaded breathing valve

Vacuum valve test:
Test tank truck vacuum valve

Portable atmospheric tank truck emergency relief device and built-in breathing valve detection MRVT-GR-B



Built-in breathing valve detection:
Can detect the opening pressure of the built-in breathing valve



Emergency relief device detection:
Can detect the pressure of the emergency relief device

Discharge hose test bench MDHT-50/150-C

The discharge hose test bench is suitable for the hydraulic pressure test, air tightness test and static conductivity performance test of the discharge hose of the tank truck, manual installation, valve control during the test process.

The discharge hose test bench is mainly composed of an operating test box, a cylinder, a drain valve, a ball valve, an ohmmeter, a needle valve, a steering valve, a pressure gauge, a male end connector, etc.



This equipment is used for the performance test of the discharge hose. Through the air intake system and the water intake system, the discharge hose is subjected to a certain pressure value, and the air tightness and pressure resistance performance of the discharge hose are detected by observing whether there is air leakage or water leakage; through the digital display of the ohm value of the resistance test instrument, the resistance value between the two ends of the discharge hose is directly detected, thereby completing the static conductivity test function of the discharge hose..

NO	Project requirements	Performance indicators	Notes
1	Test subjects	Discharge hose	
2	Related standards	GB18564.1-2019	
3	Air tightness test	Nominal pressure of hose	Gas test
4	Pressure resistance test	1.5 times the nominal pressure of hose	water
5	Static conductivity test	Less than or equal to 5Ω	

Oil tank breathing valve, hydraulic safety valve, flame arrester comprehensive test bench

1. MST-250-G-TX-S-G

This equipment is made according to SY/T0511.1-2010 SY/T0511.2-2010 GB5908-2005 standards and meets the review requirements. It can test the opening pressure, ventilation volume and leakage volume of DN50-DN250 breathing valves and hydraulic safety valves.



2. Portable oil tank breathing valve, hydraulic safety valve, flame arrester comprehensive test bench MST-250-G-TX-S-Q

Devices description:

Mobile oil tank accessories testing device, also known as oil tank breathing valve test bench, oil tank liquid safety valve test bench, oil tank flame arrester test bench, is a comprehensive test bench for performance testing of oil tank accessories such as breathing valves, liquid safety valves, flame arresters, etc., to determine whether the accessories are qualified. This device can be used to test DN50-DN250mm diameter oil tank accessories. The main parameters of the test include: opening pressure, ventilation volume, ventilation pressure difference and pressure loss, etc.

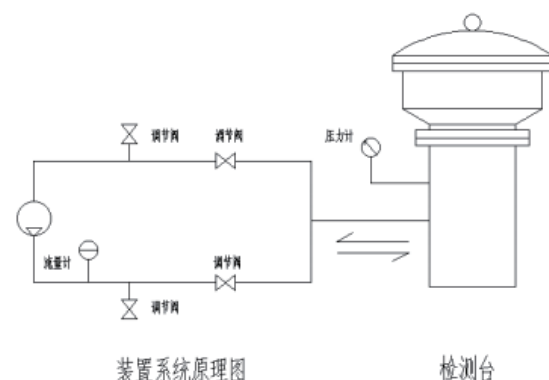
Based on standards:

Q/SY 08007-2017 Technical Specifications for Testing of Petroleum Storage Tank Accessories;

GB5908-2005 Petroleum Storage Tank Accessories Flame Arrester

SY/T0511.1-2010 Petroleum Storage Tank Accessories Breathing Valve

SY/T0511.2-2010 Petroleum Storage Tank Accessories Hydraulic Safety Valve



This equipment is made according to the QSY08007-2017 China Petroleum Enterprise Standard; it can detect the opening pressure, ventilation volume, pressure difference, and pressure loss of DN50-DN250 breathing valves and hydraulic safety valves;

The device is mainly composed of a power system provided by an air source fan, a guide system, a control system, and detection instruments. The test bench is easy to move and can be transported to the oil tank site by car to test the accessories. After the inspection is completed, leave the site. This kind of home-service test bench is very popular with end customers.

Main technical parameters:

1	Pressure measurement range	±5KPa
2	Pressure measurement accuracy	Level 0.1
3	Maximum power	9KW
4	Flow adjustment resolution	0.2%
5	Weight	465KG
6	Power supply voltage	AC380V
7	Detection accessory diameter range	DN50~DN250mm
8	Flow measurement accuracy	Level 1.0
9	Flow measurement range	Positive pressure: 50~2800nm ³ /h, negative pressure: 50~2300nm ³ /h

1. Test the specifications and rated ventilation volume of breathing valves, hydraulic safety valves and flame arresters:

Specifications (DN), mm	50	81	100	150	200	250
Specifications (DN), mm	150	300	500	1000	1800	2800

Note: The ventilation volume in this table is the rated ventilation volume during exhalation. The rated ventilation volume during inhalation is 0.5 times that during exhalation.

Opening pressure level:

The opening pressure level of the test breathing valve :

Grade	Opening pressure Ps,Pa	Grade code
1	+355, -295	A
2	+655, -295	B
3	+980, -295	C
4	+1375, -295	D
5	+1765, -295	E

Note 1: The positive sign indicates the opening pressure during exhalation, and the negative sign indicates the opening pressure during inhalation.

Note 2: Allowable deviation: positive pressure is -20Pa-0Pa, and negative pressure is 0Pa-20Pa.

Test the opening pressure level of the hydraulic safety valve:

Grade	Opening pressure Ps,Pa	Grade code
1	+550, -490	A
2	+860, -490	B
3	+1176, -490	C
4	+1570, -490	D
5	+1960, -490	E

Note 1: The positive sign indicates the opening pressure during exhalation, and the negative sign indicates the opening pressure during inhalation.

Note 2: Allowable deviation: positive pressure is 49Pa-0Pa, negative pressure is 0Pa-49Pa.

Testing the pressure loss of the flame arrester:

Pressure inside the tank, Pa	295	540	800	980	1300	1765	2000
Pressure loss, Pa	10	11	16	20	26	35	35

Note:

If you need to test the breathing valve test bench with a diameter greater than 250mm, it can be customized.

You can also add a computer system to record the test data and generate a test report.

Valve test bench (butterfly valve, gate valve, ball valve) Product Introduction



Valve test bench MHV-B300/40-S type (manual button type)

MHV-B300-S type hydraulic valve test bench is based on our company's many years of production of valve testing equipment technology and is strictly managed and produced in accordance with the ISO9001 quality management system. The product complies with relevant standards such as GB/T13927-2008 "General Valve Pressure Test", GB/T26480-2011 "Valve Testing and Inspection" and AP1598 American Standard.

The hydraulic valve test bench integrates hydraulic, mechanical, electrical and medium storage and circulation. It has the advantages of reasonable structure, complete functions, stable performance and high degree of automation. It is widely used in the high, medium and low pressure sealing and strength performance tests of straight-through flange valves with a nominal diameter of DN50-300mm. It is the most ideal valve test and inspection equipment for valve manufacturing, petroleum and petrochemical, natural gas, water supply and drainage engineering, power plants, valve maintenance stations and other industries.

Main technical parameters

- (1) Test valve type: straight-through flange gate valve, ball valve, stop valve, check valve.
- (2) Clamping method: the jaws clamp the back of the flange, and there is no external force on the valve body.
- (3) Valve and blind plate sealing method: end face O-ring seal, the leakage position can be observed.
- (4) Test pressure medium: water or 4-7bar low-pressure gas (air or nitrogen).
- (5) Test range: DN50-300mm, see the test pressure range table for details.
- (6) Test valve structure length: 203-750mm.
- (7) Test valve flange diameter: $\phi 190-520\text{mm}$.
- (8) Test valve flange thickness: 20-83mm.
- (9) The right working plate can be turned 90°, and the left movable frame can move left and right.
- (10) Working plate spacing: 250-1100mm.
- (11) Left and right clamping cylinders: 3X $\phi 140\text{mm}$.
- (12) Maximum clamping force: 100 tons.

Computer control valve test bench MHV-B300/40-C type

MHV-B300-C computer control hydraulic valve test bench is produced by our company based on many years of production of valve testing equipment technology and is strictly managed and produced in accordance with the ISO9001 quality management system. The product complies with relevant standards such as GB/T13927-2008 "General Valve Pressure Test", GB/T26480-2011 "Valve Testing and Inspection" and AP1598 American Standard.

The computer control hydraulic valve test bench integrates hydraulics, machinery, computers and medium storage and circulation. It has the advantages of reasonable structure, complete functions, stable performance and high degree of automation. It is widely used in the high, medium and low pressure sealing and strength performance tests of straight-through flange valves with a nominal diameter of DN50-300mm. It automatically records test data, automatically generates pressure-time curves, automatically determines whether the test is qualified, automatically generates test reports, and automatically saves test data. It is the most ideal valve testing and inspection equipment for valve manufacturing, petroleum and petrochemical, natural gas, water supply and drainage engineering, power plants, valve maintenance stations and other industries.



Manual Control Safety valves test bench MAQ-400/40-6-BN

Brief Introduction

- (1) Test valve type: straight-through flange gate valve, ball valve, stop valve, check valve.
- (2) Clamping method: The jaws clamp the back of the flange, and there is no external force on the valve body.
- (3) Valve and blind plate sealing method: end face O-ring seal, the leakage position can be observed.
- (4) Test pressure medium: water or 4-7bar low-pressure gas (air or nitrogen).
- (5) Test range: DN50-300, see the test pressure range table.
- (6) Test valve structure length: 203-750mm.
- (7) Test valve flange diameter: $\phi 190-520\text{mm}$.
- (8) Test valve flange thickness: 20-83mm.
- (9) Working disk spacing: 250-1100mm.
- (10) Left and right clamping cylinders: 3X $\phi 140\text{mm}$.
- (11) Maximum clamping force: 100 tons
- (12) Data acquisition software is LABVEIW program, pressure sensor uses German IFM, acquisition card uses American NI.

Pressure test range: Meets DN50-300 straight-through flange gate valve, ball valve, stop valve, check valve

MHV-B600/15-S Hydraulic Valve Test Bench

Product Introduction

MHV-B600 hydraulic valve test bench is produced by our company based on many years of valve testing equipment technology and is strictly managed and produced in accordance with ISO9001 quality management system. It integrates hydraulic, mechanical, electrical and medium storage and circulation, and has the advantages of reasonable structure, complete functions, stable performance and high degree of automation. It is widely used in the high, medium and low pressure sealing and strength performance tests of straight-through flange valves with a nominal diameter of DN250-600mm. It is the most ideal valve test and inspection equipment for valve manufacturing, petroleum and petrochemical, natural gas, water supply and drainage engineering, power plants, valve maintenance stations and other industries.

MHV-B600/15 hydraulic valve test bench consists of hydraulic system, electrical control system, high and low pressure water pump pressure supply device system, oil pressure, water and gas pressure instrument system, control valve system, clamping workbench system and hydraulic medium storage and circulation water tank. The test process and results meet the relevant regulations and requirements.

MHV-D600 (DN50-600) sleeve hydraulic butterfly valve test bench

Product introduction



1. The MHV-D600 sleeve hydraulic butterfly valve test bench consists of a hydraulic system, an electrical control system, a high and low pressure water pump pressure supply device system, an oil pressure, water and air pressure instrument system, a control valve system, a clamping workbench system and a hydraulic medium storage circulating water tank. The test process and results comply with relevant regulations and requirements.
2. Working process: adjust the cylinder clamping pressure according to the nominal diameter and pressure of the butterfly valve (refer to the pressure comparison table) - clamp the workpiece - turn on the low pressure water pump to quickly inject water - turn on the high pressure water pump - keep the pressure timing - release the pressure and reset.
3. It is suitable for 1.1 times the nominal pressure high pressure water sealing test of flanged butterfly valves and wafer-type butterfly valves, 1.5 times the nominal pressure high pressure water shell test, and 4-7bar low pressure air tightness test.

Main technical parameters

- (1) Test butterfly valve type: straight-through flange type or wafer butterfly valve;
- (2) Clamping method: the claws clamp the opposite side of the flange, the clamping force is adjustable, and the external force has little influence.
- (3) Sealing method of butterfly valve and blind plate: end face O-ring seal, which can observe the leakage position.
- (4) Test pressure medium: water or 4-7bar low-pressure gas (air or nitrogen).
- (5) Test range: DN50-DN600mm

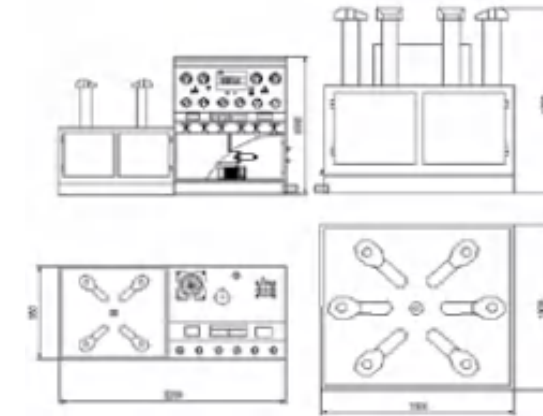
Left workbench:

- (6) Test range: DN50-250, see the test pressure range table for details.
- (7) Test butterfly valve structure length: 43-250mm
- (8) Test butterfly valve flange diameter: $\phi 165-425\text{mm}$.
- (9) Claw plate spacing: 200-400mm.
- (10) Clamping cylinder: $3\times\phi 100\text{mm}$, piston rod: $3\times\phi 60\text{mm}$.
- (11) Maximum clamping force: 40 tons.

Right workbench:

- (12) Test range: DN250-600.
- (13) Test butterfly valve structure length: 165-390mm.
- (14) Test butterfly valve flange diameter: $\phi 405-845\text{mm}$.
- (15) Claw plate spacing: 480-800mm.
- (16) Clamping cylinder: $4\times\phi 160\text{mm}$, piston rod: $4\times\phi 90\text{mm}$.
- (17) Maximum clamping force: 40 tons.

MHV-D1200 sleeve hydraulic butterfly valve test bench



ODMT-D1200 sleeve hydraulic butterfly valve test bench integrates hydraulic, mechanical, electrical and medium storage and circulation. It has the advantages of reasonable structure, complete functions, stable performance and high degree of automation. It is widely used in the sealing and strength performance tests of straight-through flange or wafer butterfly valves with a nominal diameter of DN250-1200mm. It is the most ideal valve test and inspection equipment for valve manufacturing, petroleum and petrochemical, natural gas, water supply and drainage engineering, power plants, valve maintenance stations and other industries.