



特力得高压流体
TELiDE HIGH PRESSURE FLUID

Telide Valve and Vessel Test Benches

Pioneer in China's High-Pressure Safety Valve Test Benches

👍 Reliable

🛡️ Durable

🔄 Built to last

深圳市特力得流体系统有限公司

TELiDE SHENZHEN HIGH PRESSURE FLUID SYSTEMS CO., LTD.

www.valvestest.com; Email: info@valvestest.com



满足客户需求 助力客户发展

Meeting Needs. Driving Growth.



CORE
MISSION

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COMPANY PROFILE



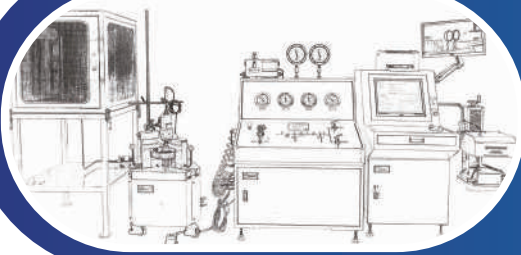
Since its establishment in 2001, Telide Shenzhen High Pressure Fluid Systems Co.,Ltd. has been deeply rooted in the field of high-pressure water, gas, oil, and other fluid technologies, serving as a pioneer with over 25 years of industry experience. Telide initially gained insights into global cutting-edge technologies by representing internationally leading high-pressure fluid components. Leveraging its profound expertise in fluid transmission and control, Telide successfully developed and delivered the first high-pressure gas safety valve test bench with new technology for a special inspection client in China in 2004. This equipment, renowned for its outstanding performance, has earned high client acclaim and remains in stable operation to this day.

Thanks to long-term trust and support from clients, Telide has continued to innovate over the past two decades. In addition to safety valve test benches, we have now developed a full range of valve test benches. Our products not only serve numerous domestic clients but have also successfully entered international markets, with high repeat purchase rates.

In recent years, Telide has significantly increased investment in R&D for high-pressure fluid core components, achieving remarkable results. Telide has established a robust development path—from core components to complete equipment, technological innovation to quality assurance, and efficient delivery to comprehensive services—all under independent control.

Amidst global changes, Telide upholds the spirit of Shenzhen's Special Economic Zone: "Dare to explore, pioneer, and work diligently." Adhering to the principle of "sharing development achievements," the company welcomes talents. With "Meeting Needs and Driving Growth" as our core mission, we look forward to collaborating with partners to create a new future for the industry!

CORE COMPETENCE



DESIGN

Having a stable and high-level design team

MACHINING

Equipped with first-class equipment such as Mazak lathes and HAAS mills



INSPECTION

Equipped with CMM and spectrometer, etc.



AFTER-SALES

Professional and efficient service





Safety Valve Test Benches

01

Safety Valve Test Benches

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Custom Safety Valve Test Benches

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Portable Safety Valve Test Benches

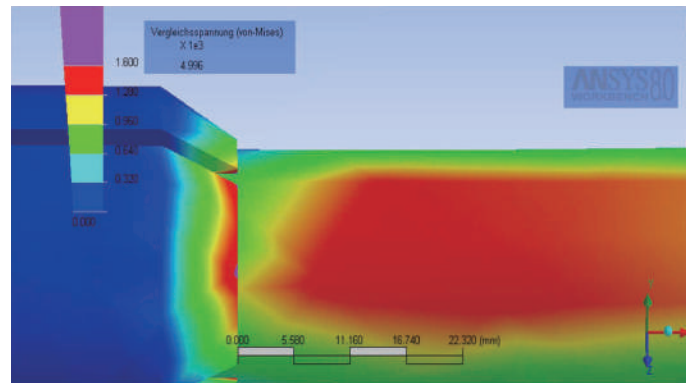
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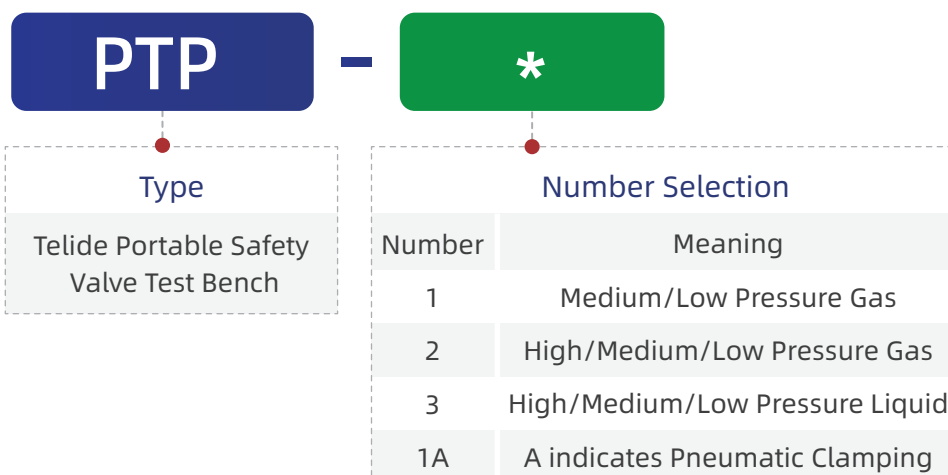
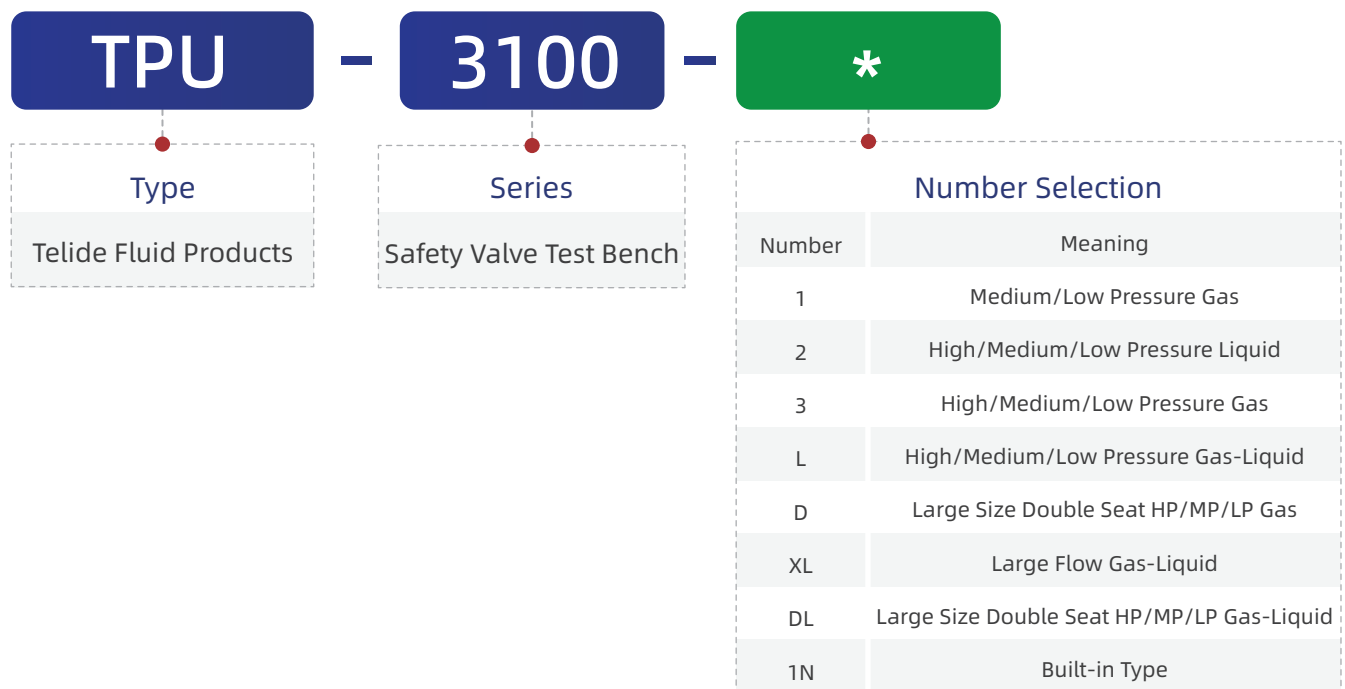
Safety Valve Grinding Machines

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Safety Valve Test Bench Selection



★ Refer to P17 for Custom Safety Valve Test Benches.

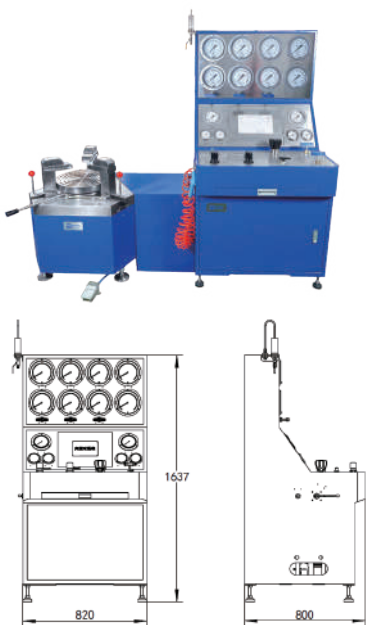

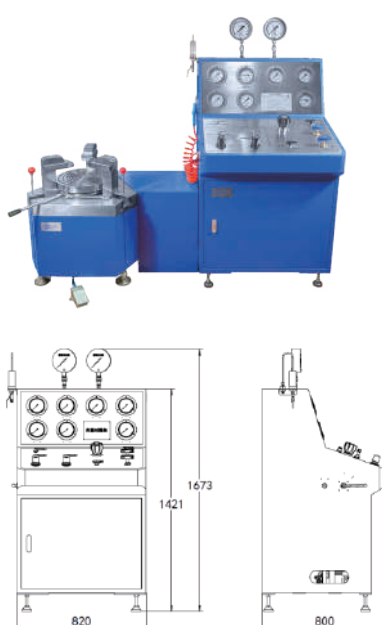
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Safety Valve Test Bench Selection

Table 1: Test Bench Selection

Model	Clamping Force (Ton)	Control Console (Choose One of Three)	Valve Size		Test Medium			
					Gas (bar)		Liquid (bar)	
TPU-3100-1/11	11	Select per Table 2	DN15-DN200		150		None	
TPU-3100-1/20	20		DN15-DN200		150			
TPU-3100-3/20	20		DN15-DN200		400	680		
TPU-3100-3/30	30		DN15-DN300	DN15-DN250	400	680		
TPU-3100-3/40	40		DN15-DN400	DN15-DN300	400	680		
TPU-3100-L/20	20		DN15-DN200		400	680	400	680
TPU-3100-L/30	30		DN15-DN300	DN15-DN250	400	680	400	680
TPU-3100-L/40	40		DN15-DN400	DN15-DN300	400	680	400	680
TPU-3100-L/60	60		DN15-DN300		400		400	
★ Note: 1. TPU-3100-1/11 uses pneumatic clamping. 2. Colored rows indicate first choice.								

Table 2: Control Console Selection

1	2	3
Precision Gauge Panel Mount, Computer Expandable	Precision Gauge Panel and Top Mount, with Computer	Precision Gauge Panel and Top Mount, Computer Addable
		

★ Note: All test bench models can choose one of the above three control consoles.

TPU-3100-3

High/Medium/Low Pressure Gas Safety Valve Test Bench



► Features

- ★ 3-claw moving system for easy and fast clamping; includes seat tightness system;
- ★ Axial precision gauges of different ranges are panel-mounted. Low-range gauges include manual shut-off and overpressure protection valves;
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping, allowing a single person to quickly complete the test.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
400bar	DN15-300	30 tons (other clamping forces available)

TPU-3100-3

High/Medium/Low Pressure Gas Safety Valve Test Bench



► Features

- ★ 3-claw moving system for easy and fast clamping; includes seat tightness system;
- ★ Equipped with high-pressure gas regulator, output pressure steplessly adjustable;
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping; equipped with Telide Test System Software (TSS).

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
680bar	DN15-400	40 tons

TPU-3100-L

High/Medium/Low Pressure Gas-Liquid Safety Valve Test Bench



► Features

- ★ 3-claw moving system for easy and fast clamping; includes seat tightness system;
- ★ Four radial precision gauges (e.g., 600bar range) are provided, each equipped with rapid connector for easy replacement and calibration;
- ★ Capable of both fast liquid filling and slow pressure increase.

► Parameters

Max. Test Pressure	Test Size	Clamping Force
Gas 400bar, Liquid 400bar	DN15-300	30 tons

TPU-3100-1

Medium/Low Pressure Pneumatic Clamping Safety Valve Test Bench



► Features

- ★ 3-claw moving system for easy and fast clamping; includes seat tightness system;
- ★ Equipped with three sets of axial precision gauges of different ranges, all mounted on the panel;
- ★ Self-developed pneumatic clamping system, divided into high and low gear positions.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
150bar	DN15-200	Low gear ~3.3 tons, High gear ~11 tons

BC-03

Digital Bubble Counter



► Features

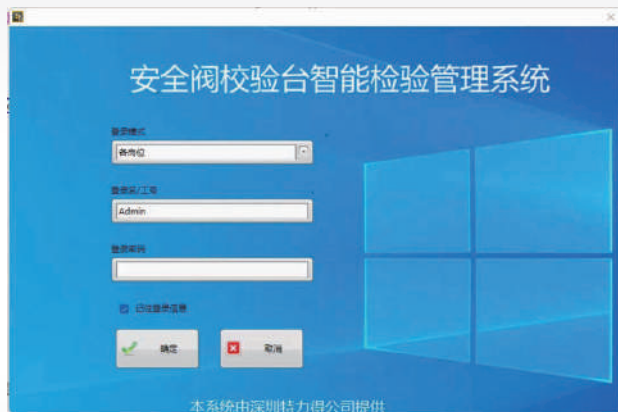
- ★ Can be used alone or with Telide Test System Software (TSS);
- ★ Automatic counting or manual counting;
- ★ Accurate results, lightweight, compact size, easy connection, suitable for all valve tests requiring bubble counting.

► Parameters

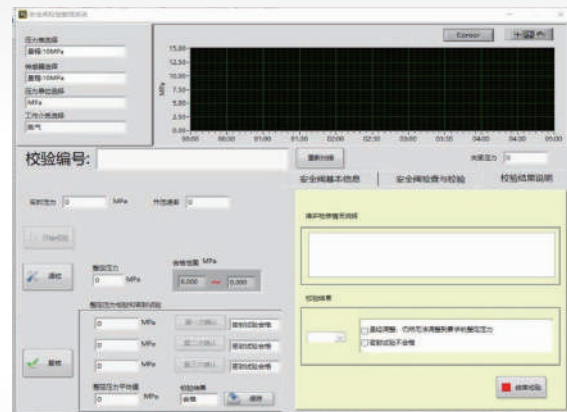
Medium	Pressure	Dimensions and Weight
Gas	Less than 10bar	L300 x W210 x H220 (mm), 6.5kg

TSS

Safety Valve Test System Software



Software Login Interface

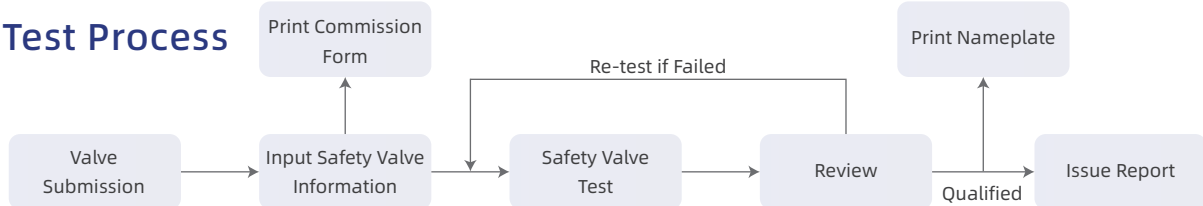


Safety Valve Test Interface

► Features

- ★ The software offers standalone, LAN, OA-integrated, and web-based versions;
- ★ Its network architecture and central database support QR code scanning, multi-terminal data sync, and online marking for efficient processing;
- ★ Clients can conveniently schedule inspections online and track valve status in real-time.

► Test Process



PTP-1A

Portable Automatic Clamping Gas Safety Valve Test Bench



► Features

- ★ Can use nitrogen gas cylinder as a single gas source for both clamping and testing;
- ★ Provides 2 precision gauges (0.4 grade, 160bar range), connected to the system via rapid connector;
- ★ Split design, standard with trolley case, compact and lightweight for easy transport by plane or train.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
150bar	DN15-150	3 tons, 6 tons (two gears freely selectable)

PTP-1

Portable Integrated Gas Safety Valve Test Bench



► Features

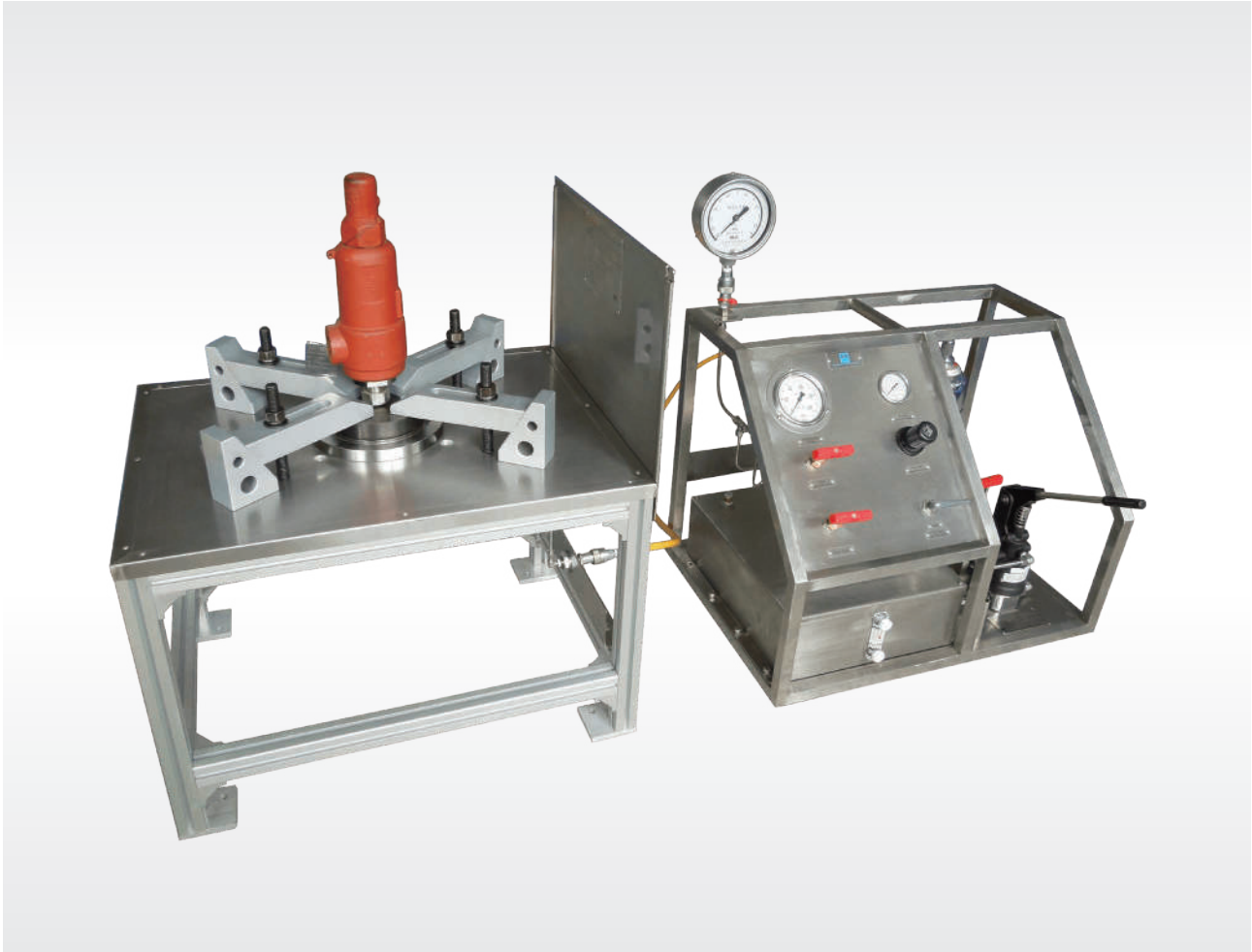
- ★ All components, including clamping and pressure control part, are integrated into a single portable case for lightweight, compact use;
- ★ The pressure source is supplied by high-pressure nitrogen gas or compressed air ($\leq 200\text{bar}$);
- ★ The panel-mounted regulator and shut-off valve are included, along with 2 precision gauges (0.4 grade, 160bar range).

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
150bar	DN15-150	6 tons

PTP-3

Portable High-Pressure Liquid Safety Valve Test Bench



► Features

- ★ Uses ZMAIT air-driven pump with both pneumatic and manual functions, offering fast pressurization and good pressure holding.;
- ★ Lightweight and portable, can be pressurized manually or pneumatically; the clamping and test tables are separable for easy transport;
- ★ The clamping and test tables are equipped with protective partitions for safety; the clamping table is also suitable for gas testing.

► Parameters

Max. Test Liquid Pressure	Test Size	Clamping Force
680bar	DN15-150	8 tons

TPU-3100-3

Computer Remote Control Ultra-High Pressure Gas Test Bench



► Features

- ★ Computer remote controls the entire testing process up to 1200bar gas pressure, automatically acquires set pressure and judges sealing performance;
- ★ Configured with audio and valve stem displacement judgment methods to evaluate and determine set pressure and sealing performance;
- ★ Output pressure steplessly adjustable, smooth and controllable, high testing accuracy.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
1200bar	DN15-200	20 tons

TPU-3100-D

80T Double Seat High-Pressure Gas Safety Valve Test Bench



► Features

- ★ Clamping force up to 80 tons, with a 6-claw design in the large clamping console for simultaneous 6-claw clamping, or 4, 3, or 2 claws;
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping, allowing a single person to quickly complete the test;
- ★ Large size and double seat design: the large seat supports big safety valve testing, while the small seat is for medium and small valves.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
420bar	Small Seat DN15-200 Large Seat DN200-400	Small Seat 40 tons, Large Seat 80 tons

TPU-3100-L

High/Medium/Low Pressure Gas-Liquid Safety Valve Test Bench



► Features

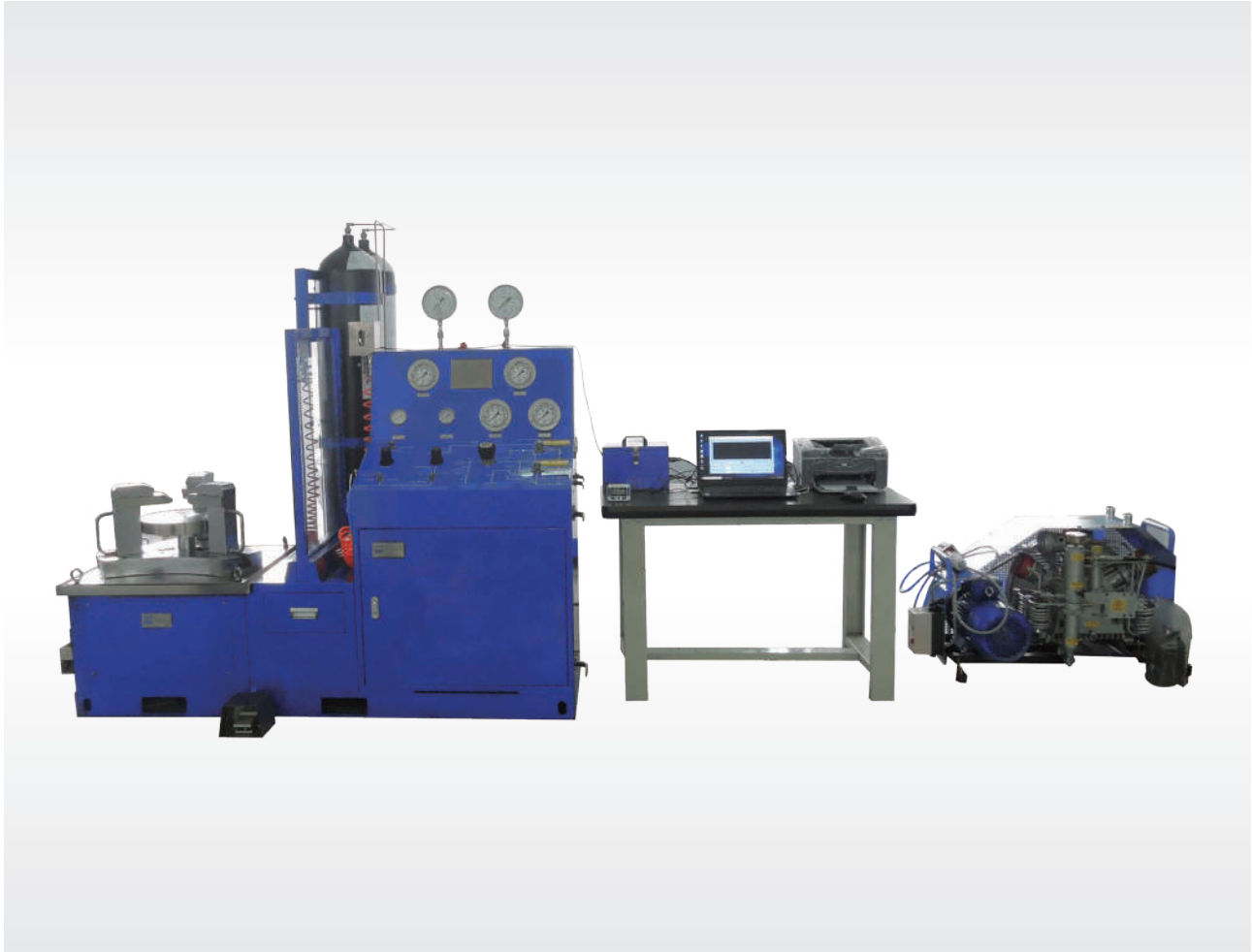
- ★ Equipped with Telide Test System Software (TSS);
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping, allowing a single person to quickly complete the test;
- ★ Independent water tank, large capacity.

► Parameters

Max. Test Pressure	Test Size	Clamping Force
Gas 400bar, Liquid 400bar	DN15-300	60 tons

TPU-3100-XL

Large Flow Gas-Liquid Safety Valve Test Bench



► Features

- ★ Integrated on a single skid plate; equipped with high-pressure air compressor;
- ★ Equipped with Telide Test System Software (TSS) and digital bubble counter;
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping, allowing a single person to quickly complete the test.

► Parameters

Max. Test Pressure	Test Size	Clamping Force
Gas 310bar, Liquid 310bar	DN15-300	40 tons

TPU-3100-DL

Large Size Double Seat Gas-Liquid High-Pressure Test Bench



► Features

- ★ Equipped with Telide Test System Software (TSS);
- ★ Hydraulic automatic clamping offers multiple modes like pre-clamping, precise, and rapid clamping, allowing a single person to quickly complete the test.
- ★ Large size and double seat design: the large seat supports big safety valve testing, while the small seat is for medium and small valves.

► Parameters

Max. Test Pressure	Test Size	Clamping Force
Gas 400bar, Liquid 680bar	Small seat DN15-200 Large Seat DN200-400	Small Seat 40 tons, Large Seat 40 tons

TPU-3100-1N

Built-in Safety Valve Test Bench



► Features

- ★ Hydraulic automatic clamping for safe and reliable operation, providing greater clamping force for valves of the same size;
- ★ Equipped with Telide Test System Software (TSS);
- ★ The machine features strong mechanical rigidity, a well-designed test circuit, and high-quality, reliable components for accurate testing.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
60bar	DN15-150	13 tons

TPU-3100-4

Mobile Safety Valve Test Shop



► Features

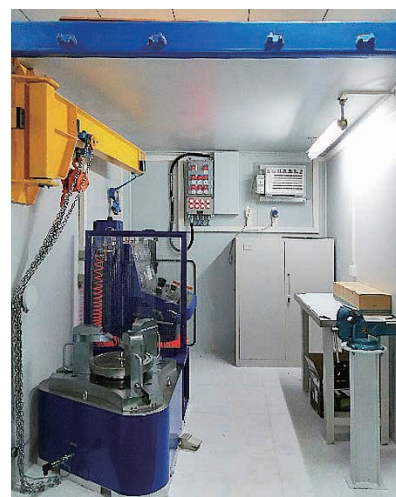
- ★ Evaluated by the State Scientific and Technological Commission: Fills a domestic gap; the first-generation product, developed with Zhejiang Special Inspection Institute, has been in use for over 10 years;
- ★ The test bench and vehicle employ multiple proprietary technologies;
- ★ Used by several special inspection institutes in China with positive feedback.

► Parameters

Max. Test Gas Pressure	Test Size	Clamping Force
400bar	DN15-300	40 tons

TPU-3100-LPC10

Containerized Safety Valve Test Workstation



► Features

- ★ 10-foot container design;
- ★ Equipped with lifting devices, air conditioning, and tools required for a mobile workshop;
- ★ Full-featured design with 20-foot container customization available.

► Parameters

Test Pressure	Test Size	Clamping Force
Gas 680bar, Water 680bar	DN15-400	40 tons

AT-30

Computer Recorder



► Features

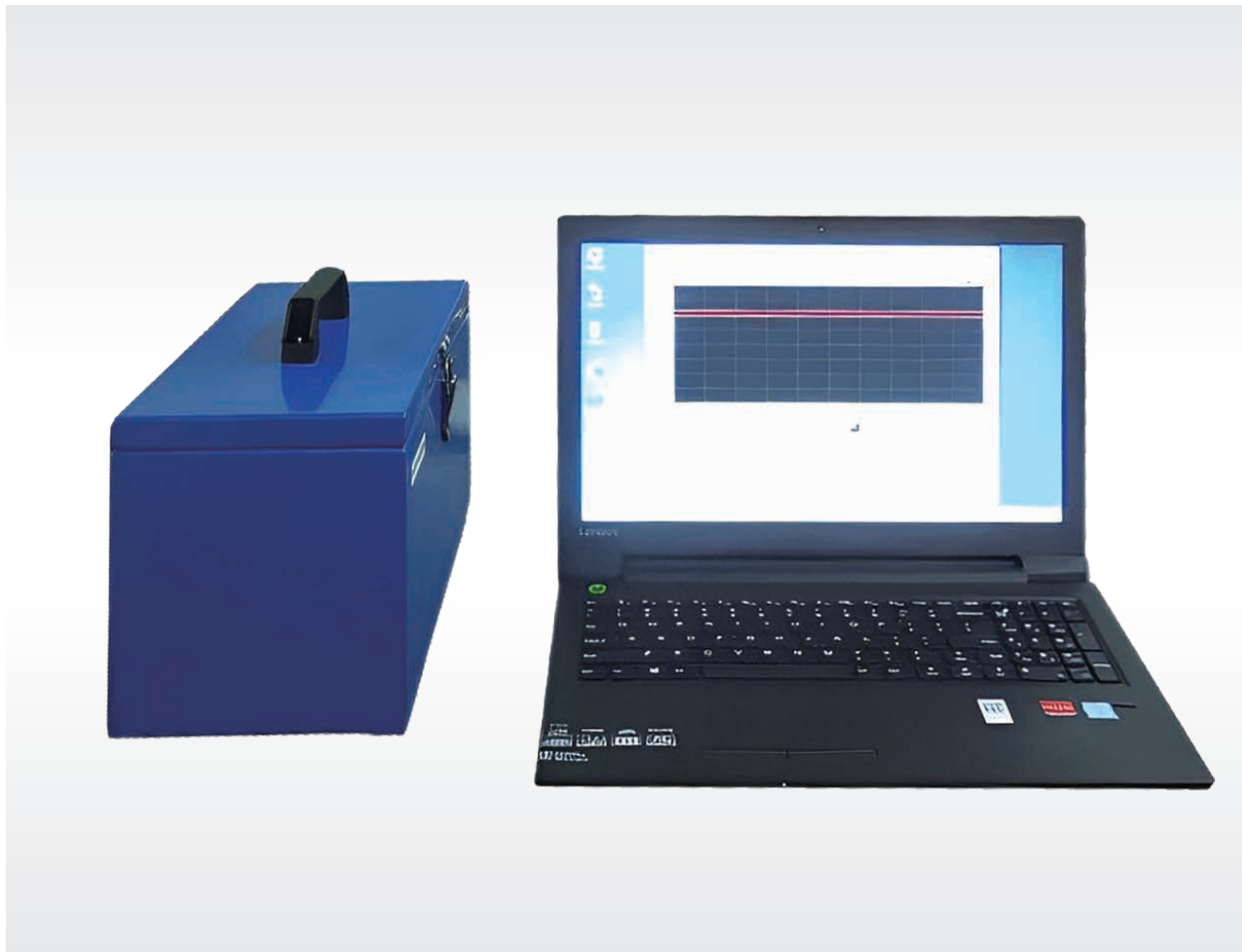
- ★ Equipped with Telide Test System Software (TSS);
- ★ Test data saved in Excel documents, convenient for review and storage;
- ★ Instantly generates test reports, with curves that can be zoomed in and pressure at any point captured.

► Parameters

Sampling Rate	Pressure Unit Conversion	Dimensions and Weight
Up to 1000 points per second	MPa-bar-psi	L630 x W800 x H1340 (mm), 107kg

AT-31

Portable Computer Recorder



► Features

- ★ Equipped with Telide Test System Software (TSS);
- ★ Test data saved in Excel documents, convenient for review and storage;
- ★ Instantly generates test reports, with curves that can be zoomed in and pressure at any point captured.

► Parameters

Sampling Rate	Pressure Unit Conversion	Electric Control Box Dimensions
Up to 1000 points per second	MPa-bar-psi	L280 x W225 x H170 (mm)

A-1

Safety Valve Sealing Surface Grinding Tool



► Features

- ★ The product consists of a handle, flat grinding head, guide sleeve, coarse plate, fine plate, grinding paste, screws, etc.;
- ★ The guide head is made of non-metallic material, preventing damage to the sealing surface;
- ★ Equipped with a rotating handle to reduce physical effort and improve grinding efficiency.

► Parameters

Suitable Size	Grinding Head	Grinding Plate
DN25 ~ 200mm	DN25、 32、 40、 50、 65、 80、 100、 150、 200mm	Coarse Plate: 300X300 mm Fine Plate: Φ270 mm

B-1

Portable Electric Valve Grinding Machine



► Features

- ★ Modular design for quick assembly, disassembly, and easy installation and operation;
- ★ Ideal for on-site maintenance and valve seat repair in complex environments, especially for welded valve seats;
- ★ Electric operation reduces labor intensity, improves efficiency, and provides high-quality grinding.

► Parameters

Suitable Size	Max. Grinding Depth	Rated Input Power
DN20~DN150	260mm	810W

TLD-380X

Small Plane Grinding Machine



► Features

- ★ Used for grinding the valve disc of safety valves and the sealing surfaces of flat hard-sealed valves;
- ★ Applicable to stainless steel, alloy steel, cemented carbide, cobalt-based alloy, sprayed tungsten carbide, babbitt alloy, carbon steel, cast iron, and copper alloys;
- ★ Features an automated control system for automatic grinding fluid distribution and shutdown after grinding. Includes a Disc Repair Machine for resurfacing grinding discs.

► Parameters

Grinding Disc Specification	Machined Flatness	Machined Roughness
$\Phi 380\text{mm} \times \Phi 100\text{mm} \times \text{Thickness}$ (12mm~15mm)	Diameter $\leq \Phi 10\text{mm}$: 0.002mm Diameter $\leq \Phi 50\text{mm}$: 0.003mm Diameter $\Phi 100\text{mm}$: 0.008mm	$\leq \text{Ra } 0.2\mu\text{m}$

Breathing Valve Test Benches

02

Breathing Valve
Test Benches



Portable Breathing
Valve Test Benches



TPU-3100-1H

Breathing Valve Test Bench



► Features

- ★ Positive and negative pressure tests are integrated in the same bench, with easy switching;
- ★ Automatically judges whether set pressure and leakage meet standards;
- ★ Uses automatic clamping, safe and reliable, saves time and effort.

► Parameters

Test Medium	Test Pressure	Test Size
Air	Positive 0~30kPa, Negative -0.5~0kPa Larger pressure test ranges available	DN50-250

TPU-3100-1HL

Flow-type Breathing Valve Test Bench



► Features

- ★ Automatic determination of set pressure and leakage;
- ★ A flowmeter tests breathing valve leakage during both exhalation and inhalation;
- ★ Includes AT-31 computer recorder with proprietary Telide Test System Software (TSS) for generating test reports.

► Parameters

Test Medium	Test Pressure	Test Size
Air	Positive +1.0~+103kPa, Negative -10~-0.7kPa Flow Test Range 0-15L/min	DN50-400 (Automatic Clamping)

PTP-4

Portable Breathing Valve Test Bench



► Features

- ★ Positive and negative pressure tests are integrated in the same bench, with easy switching;
- ★ Manual clamping with a four-claw structure, safe and reliable;
- ★ Flow testing functionality and pressure-flow testing software can be added.

► Parameters

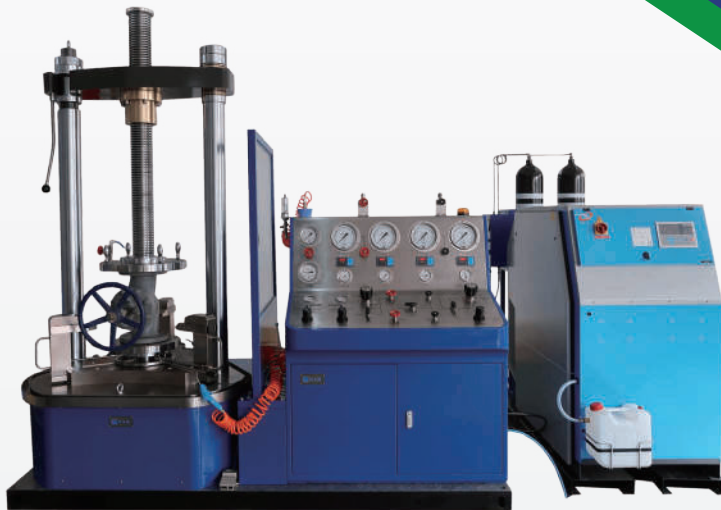
Test Medium	Test Pressure	Test Size
Air	Positive: 0.8 KPa~30KPa Negative: -0.28KPa~-0.5KPa	DN50-250

Universal Valve Test Benches

03

Vertical Universal Valve
Test Benches

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Horizontal Universal
Valve Test Benches

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TPU-3100-3U-SHAC

Gas Valve Test Bench



Digital Bubble Counter



Rubber Plugs



3-claw Moving System

► Features

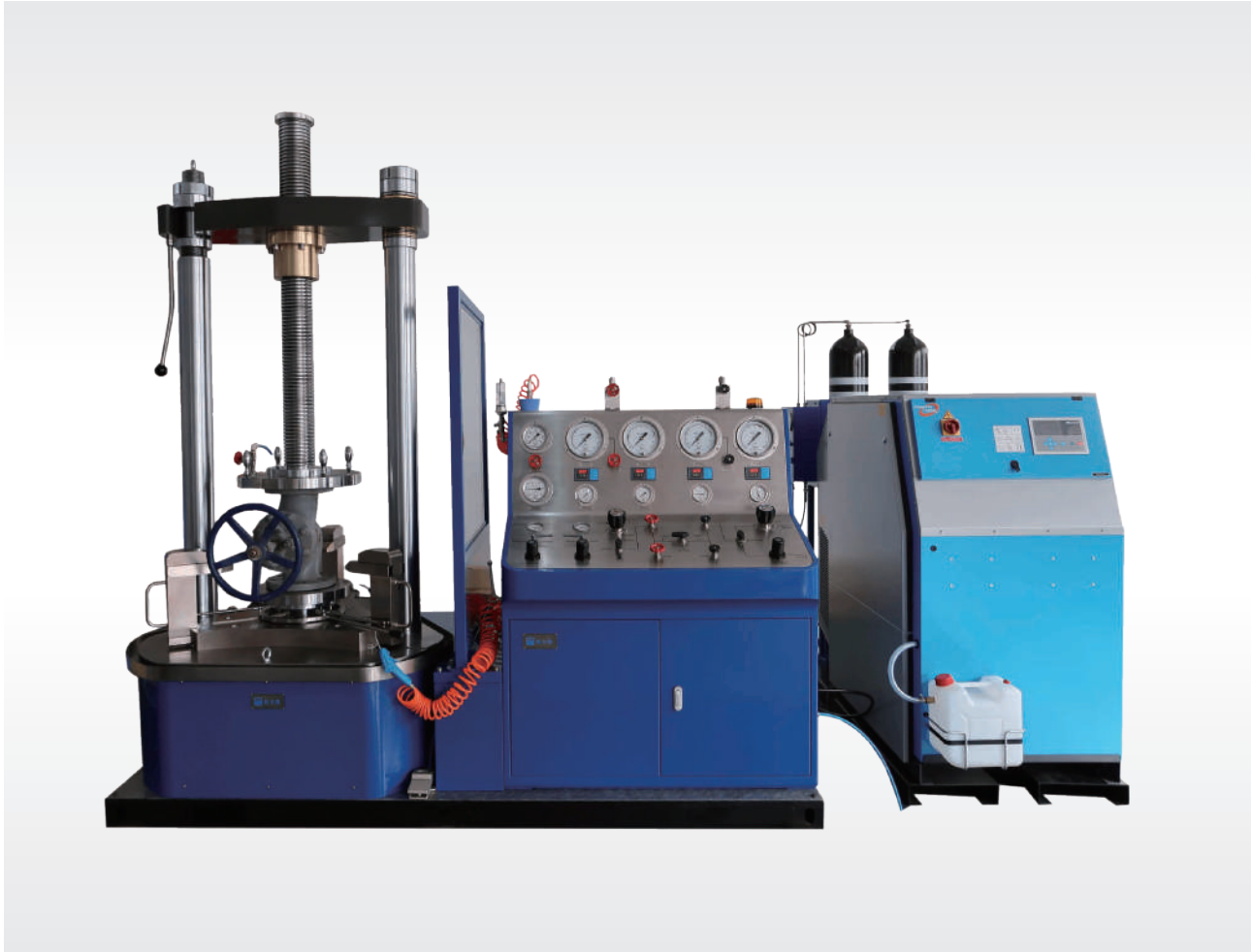
- ★ Independently designed, capable of testing safety valves and other valves such as shut-off valves;
- ★ High-pressure air compressor for test gas supply, equipped with two large-capacity air cylinders;
- ★ Provides Telida digital bubble counter, full set of rubber plugs, and three-claw moving system.

► Parameters

Test Pressure	Test Size	Clamping Force
Gas 300bar	DN15-250	15 tons

TPU-3100-LU-SHAC

Gas-Liquid Valve Test Bench



► Features

- ★ Independently designed, capable of testing safety valves and other valves such as shut-off valves;
- ★ High-pressure air compressor for test gas supply, equipped with two large-capacity air cylinders;
- ★ Vertical gantry clamping with self-locking function, equipped with a 3-claw moving system at the base for unilateral clamping.

► Parameters

Test Pressure	Test Size	Clamping Force
Gas 330bar, Liquid 350bar	DN15-400	30 tons

TC-10-1

Horizontal Universal Valve Test Bench



► Features

- ★ Capable of testing valve pressure, seat tightness, and wedge gate valve cavity sealing;
- ★ 60-ton clamping force with stepless adjustment and automatic proportional precise clamping;
- ★ Equipped with a computer recorder for automatic pressure testing.

► Parameters

Test Pressure	Test Size	Clamping Force
Gas 6.9bar, Liquid 300bar	DN15-250	60 tons



Hydrostatic Water Jacket
Cylinder Test Benches



Impulse Test Benches



04

Hydrostatic & Impulse Test Benches

HPU-1301V

Hydrostatic Water Jacket Cylinder Test Bench



► Features

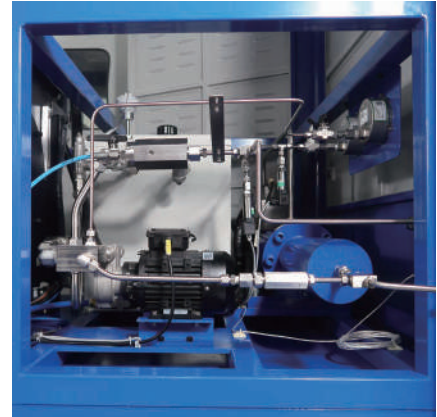
- ★ Measures cylinder deformation using both outside and inner methods, with accurate and cross-verifiable data;
- ★ Fast filling, pressure rise controlled by program, automatically calculates residual deformation;
- ★ One bench, with an optional burst chamber for measuring burst pressure; compatible with different water jackets.

► Parameters

Medium	Medium Temperature	Max. Output Fluid Pressure
Water, Oil, etc. (Liquid)	+10°C ~ +60°C	2300bar

HPU-1302

Water Impulse Test Bench



► Features

- ★ Telida's proprietary high-temperature, high-pressure cycling device meets standard requirements;
- ★ Pre-set pressure testing process before operation, including peak/valley pressure, impulse count, medium temperature, waveform, and other parameters;
- ★ Uses high-frequency acquisition cards and a control/software system with strong anti-interference.

► Parameters

Medium	Medium Temperature	Impulse Pressure Range
Clean Water	Water: +10°C~+80°C Oil: +10°C~+100°C Higher up to +150°C available	Peak: 50-700bar, adjustable Valley: below 400bar, adjustable

HPU-1302

Oil Impulse Test Bench



► Features

- ★ Pre-set pressure testing process before operation, including peak/valley pressure, impulse count, medium temperature, waveform, and other parameters;
- ★ Uses high-frequency acquisition cards and a control/software system with strong anti-interference.
- ★ Safety features: Emergency stop, liquid level and over-temperature alarms, and door-open stop during testing.

► Parameters

Medium	Medium Temperature	Impulse Pressure Range
Oil	Adjustable between 0°C and 65°C	20-700bar





特力得高压流体
TELiDE HIGH PRESSURE FLUID

TELiDE®

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