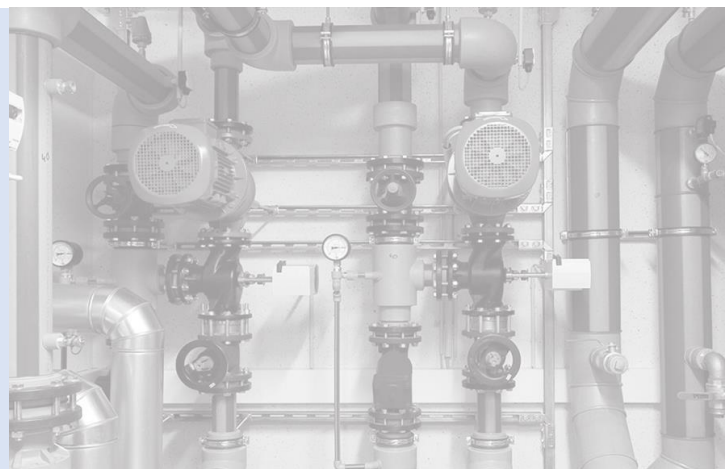


# VALVE TEST BENCHES DATASHEET



Specialists in Manufacturing, Supplying and  
Renting Hydraulic Equipment

## Company Profile

GD Hydraulics are a manufacturer who specialise in sale, service, rental and repair of Hydraulic and Gas Pressure Testing, Flushing & Control Systems.

G-D Hydraulics offer equipment which includes:

- **Air Operated Tensioner Pumps**
- **Air Operated Hydraulic Power Packs (HPUs)**
- **Hose Test Rigs**
- **Cycle Test Rigs**
- **Valve Test Benches**
- **Flushing Rigs**
- **Hydraulic Power Units – Electric Driven**
- **Hydraulic Control Panels**
- **Pressure Logging Equipment**
- **Manifolds**
- **Hose Reels & Hoses**

Our standard products are relevant over numerous industry sectors and can be used for a wide number of applications. We also offer a custom built manufacture service for those jobs that need specific and bespoke requirements.

Our manufacturing facility in Manchester allows us to build and test all equipment to ensure it reaches our customers in top quality condition.

We are committed to manufacturing the best equipment possible to allow our customers operations to run as smoothly as possible.

## Specialists in Manufacturing, Supplying and Renting Hydraulic Equipment

### Company Information:

#### **GD Hydraulics**

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## VALVE TEST BENCHES

GD Hydraulics manufacture a range of valve test benches that are suitable for all valve testing requirements and budgets. We offer solutions for testing with liquid or gas and our 3 ranges of test benches all allow for testing at pressures of up to 14,500 psi. A wide range of optional extras are also available, giving the opportunity to select a bespoke solution from a standard range.

### Save Money, Increase Efficiency and Reduce Plant Downtime!

Having an effective solution to test valves onsite, reduces the time any system needs to be shutdown, leading to a more efficient plant and increasing productivity.



Manual Range



Eco Range



Hydraulic Clamping Range

## MANUAL VALVE TEST BENCH RANGE

Manual Valve Test Benches can be used to test valves up to 12 inches in the enclosure and any size externally. Ideal for low volume pressure testing with both water and gas at pressures up to 14,500 psi (1,000 Bar). 2 test bench configurations are available: Relief Valve Test Bench and Universal Valve Test Bench.

### Features and Benefits

- ✓ Cost effective solution for low volume testing of valves
- ✓ Available in both Relief Valve and Universal Valve Test Bench configurations
- ✓ Liquid, Gas or Combined test medium options available

Optional Extra's Available:

Data logging feature	<input type="checkbox"/>	Bespoke Adaptors	<input type="checkbox"/>
Safety Interlocked Compartment	<input type="checkbox"/>	ATEX Certification	<input type="checkbox"/>
Test Gauges	<input type="checkbox"/>	DNV 2.7-1	<input type="checkbox"/>
Electronic Bubble Counter	<input type="checkbox"/>		



## MANUAL VALVE TEST BENCH RANGE

The Relief Valve Test Benches can be used for testing, setting and adjusting pressure relief/safety valves at pressures up to 14,500psi at sizes up to 12" in the test compartment, with larger sizes being able to be tested externally.

Type	Model	Maximum Test	Pressure
		Bar	psi
Liquid Test Only	M-RVTB-25-L	172	2,500
	M-RVTB-60-L	414	6,000
	M-RVTB-100-L	690	10,000
	M-RVTB-145-L	1,000	14,500
Gas Test Only	M-RVTB-25-G	172	2,500
	M-RVTB-60-G	414	6,000
	M-RVTB-100-G	690	10,000
	M-RVTB-145-G	1,000	14,500
Liquid & Gas Test	M-RVTB-25-LG	172	2,500
	M-RVTB-60-LG	414	6,000
	M-RVTB-100-LG	690	10,000
	M-RVTB-145-LG	1,000	14,500



Type	Model	Maximum Test	Pressure
		Bar	psi
Liquid Test Only	M-VTB-25-L	172	2,500
	M-VTB-60-L	414	6,000
	M-VTB-100-L	690	10,000
	M-VTB-145-L	1,000	14,500
Gas Test Only	M-VTB-25-G	172	2,500
	M-VTB-60-G	414	6,000
	M-VTB-100-G	690	10,000
	M-VTB-145-G	1,000	14,500
Liquid & Gas Test	M-VTB-25-LG	172	2,500
	M-VTB-60-LG	414	6,000
	M-VTB-100-LG	690	10,000
	M-VTB-145-LG	1,000	14,500

## ECO VALVE TEST BENCH RANGE

ECO Valve Test Benches incorporate an innovative design which replaces tightening bolts manually, using an O-ring to seal the valve on test using a hand pump. The design allows for a quicker test set up to the manual range, so is ideal for higher volumes. Test pressures of up to 10,000 psi (690 Bar) can be reached using liquid as the test medium. The range includes 3 models which allow for relief/safety and shut off valves to be tested. As standard the hydraulic cylinder is rated to 100 tons. The below chart shows the valve sizes which are suitable for the ECO range test bench.

Suitable Valve Sizes:

Valve ANSI Class	Shell Test Pressure		Valve Size					
	Bar	psi	< 3"	4"	6"	8"	10"	12"
150	31	450	●	●	●	●	●	●
300	78	1,125	●	●	●	●	●	
600	154	2,225	●	●	●	●		
900	385	5,575	●	●	●			
1500	385	5,575	●	●				
2500	640	9,275	●					

### Available Models:

#### Relief/Safety Valve Test Bench

The Relief Valve Test Benches are ideally suited to setting and adjusting, testing seat tightness and general performance of safety valves.

#### Shut Off Valve Test Bench

The Shut Off Test Units are suitable for testing the integrity and performance of any gate-, globe-, plug-, ball-, check-, slide-, and butterfly valve both upstream and downstream.

#### Universal Valve Test Bench

The Universal Valve Test Bench is ideal for setting and adjusting, testing seat tightness and general performance of safety valves. Furthermore it will allow for shell and seat tightness testing on shut off valves including gate-, globe-, plug-, ball-, check-, slide-, and butterfly valve both upstream and downstream.



### Optional Extras Available:

Test Gauges	●	Digital Pressure Gauge	●
Data Acquisition System	●	Screwed Valve Adaptors	●
Bubble Pot (API 527)	●	Electronic Bubble Counter (API 527)	●
Enclosed Test Compartment	●	Prefill Pump	●



## ECO VALVE TEST BENCH RANGE

### Relief/Safety Valve Test Bench

The Relief Valve Test Benches are ideally suited to setting and adjusting, testing seat tightness and general performance of safety valves.

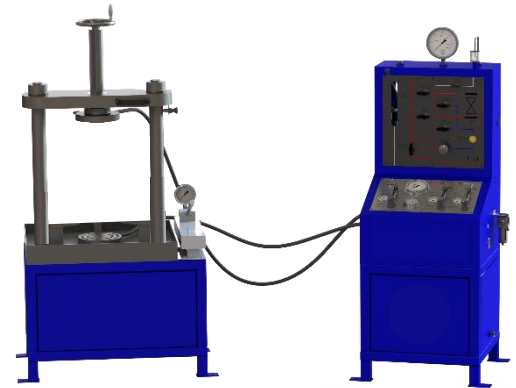
Type	Model	Maximum Test	Pressure
		Bar	psi
Liquid Test Only	ECO-RVTB-10-L	69	1,000
	ECO-RVTB-25-L	172	2,500
	ECO-RVTB-60-L	414	6,000
	ECO-RVTB-100-L	690	10,000



### Shut Off Valve Test Bench

The Shut Off Test Units are suitable for testing the integrity and performance of any gate-, globe-, plug-, ball-, check-, slide-, and butterfly valve both upstream and downstream.

Type	Model	Maximum Test	Pressure
		Bar	psi
Liquid Test Only	ECO-VTB-10-L	69	1,000
	ECO-VTB-25-L	172	2,500
	ECO-VTB-60-L	414	6,000
	ECO-VTB-100-L	690	10,000



### Universal Valve Test Bench

The Universal Valve Test Bench is ideal for setting and adjusting, testing seat tightness and general performance of safety valves. Furthermore it will allow for shell and seat tightness testing on shut off valves including gate-, globe-, plug-, ball-, check-, slide-, and butterfly valve both upstream and downstream.

Type	Model	Maximum Test	Pressure
		Bar	psi
Liquid Test Only	ECO-UVTB-10-L	69	1,000
	ECO-UVTB-30-L	172	2,500
	ECO-UVTB-60-L	414	6,000
	ECO-UVTB-100-L	690	10,000





## HYDRAULIC CLAMPING TEST BENCH RANGE

The Hydraulic Clamping Relief Valve Test Benches are an industry recognised design. The integrated PLC informs the operator of the clamp force and test pressure required for any given size or class of valve. Until the correct clamp pressure is reached test pressure cannot be generated providing an excellent safety feature. Benches can be supplied at test pressures of up to 14,500 psi (1,000 Bar) using Gas, fluid or combined test mediums as standard. The hydraulic cylinders are rated to 100 tons. The below chart shows the valve sizes which are suitable for the PLC range test bench:

Suitable Valve Sizes:

Valve ANSI Class	Shell Test Pressure		Valve Size					
	Bar	psi	< 3"	4"	6"	8"	10"	12"
150	31	450	●	●	●	●	●	●
300	78	1,125	●	●	●	●	●	
600	154	2,225	●	●	●	●		
900	385	5,575	●	●	●			
1500	385	5,575	●	●				
2500	640	9,275	●					

### Relief/Safety Valve Test Bench

The Relief Valve Test Benches are ideally suited to setting and adjusting, testing seat tightness and general performance of safety valves.

The range is ideal for high volume testing.

### Features and Benefits

- ✓ Hydraulic Clamping allows for efficient, high volume testing
- ✓ Safety Interlock feature as standard
- ✓ Touch Screen HMI as standard
- ✓ Test Valves at pressures up to 14,500 psi (1,000 Bar)
- ✓ Liquid, Gas and Combination test medium models available



### Optional Extras Available:

Test Gauges	●	Digital Pressure Gauge	●
Data Acquisition System	●	Screwed Valve Adaptors	●
Bubble Pot (API 527)	●	Electronic Bubble Counter (API 527)	●
Enclosed Test Compartment	●	Prefill Pump	●



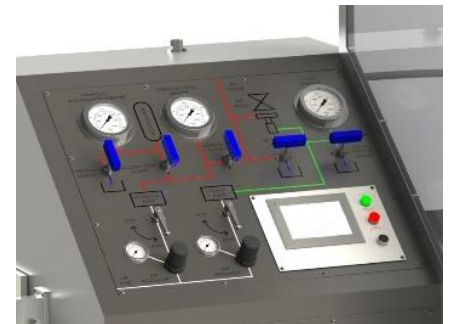
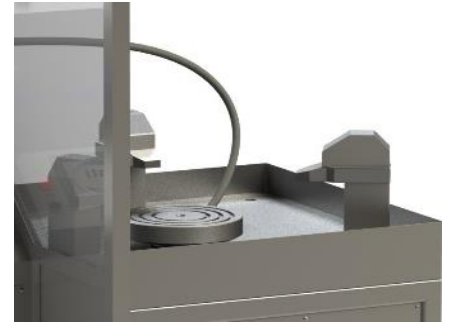


# HYDRAULIC CLAMPING TEST BENCH RANGE

The Relief Valve Test Bench models listed can be used for testing, setting and adjusting pressure relief/safety valves at pressures up to 14,500psi at sizes up to 12" using both water and gas as the test medium. The valves are sealed using a hydraulic clamping mechanism.

Model Numbers:

Type	Model	Maximum Test Pressure	
		Bar	psi
Liquid Test Only	HC-RVTB-25-L	172	2,500
	HC-RVTB-60-L	414	6,000
	HC-RVTB-100-L	690	10,000
	HC-RVTB-145-L	1,000	14,500
Gas Test Only	HC-RVTB-25-G	172	2,500
	HC-RVTB-60-G	414	6,000
	HC-RVTB-100-G	690	10,000
	HC-RVTB-145-G	1,000	14,500
Liquid & Gas Test	HC-RVTB-25-LG	172	2,500
	HC-RVTB-60-LG	414	6,000
	HC-RVTB-100-LG	690	10,000
	HC-RVTB-145-LG	1,000	14,500



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# GD HYDRAULICS PRODUCT RANGE

Scan the QR Code for more information on our products:



Air Operated Tensioner Pumps



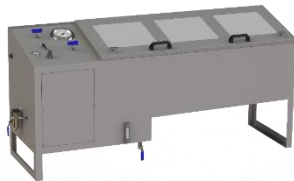
Hydraulic Power Units – Electric Supply



Air Operated HPU



Hydraulic Control Panels



Hose & Cycle Test Rigs



Pressure Logging Equipment



Valve Test Benches



Manifolds



Flushing Rigs



Hose Reels & Hoses



# GD Hydraulics

Testing & Control

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