

#### **VENTIL VALVE TEST AND REPAIR EQUIPMENT**

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A complete range of tools and equipment, based on many years of experience in Shut-off valve, Safety valve and Control valve maintenance, testing and repair.

#### VENTIL ENGINEERED SOLUTIONS

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A complete range of special test equipment for;

- Full automatic 'CNC' series testing
- Cryogenic testing
- Fire safe testing
- Hyperbaric testing
- Fugitive Emission testing
- Clean room applications
- Performance and duration testing

The guide to understanding valves

**VENTIL VALVE ACADEMY** 

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**About Ventil** 

Being where the **customers** are, enables us to **produce** what the customer needs, wherever they need it with local **support**...



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## **Model: VCB**



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- Vertical clamping and testing of all common valves.
- Available up to 120" / DN 3,000 mm with clamping force up to 5,000 ton.
- Up to 200 ton with rotating bridge, larger models with rail system for quick and safe (un) loading.





## **Model: VCB**

Model	Range*	Maximum clamping force	Distance between columns	Distance between sealing adapters	Low pressure Gas test system	High pressure Liquid test system
VCB5	½ - 6" DN15 - 150 mm	5 ton	14" 350 mm	0 - 20" 0 - 500 mm		
VCB30-S	½ - 10" DN15 - 250 mm	30 ton	18" 460 mm	0 - 30" 0 - 750 mm		0 4001 45 000 861
VCB30-L	½ - 16" DN15 - 400 mm	30 ton	28" 720 mm	0 - 40" 0 - 1,000 mm	0 - 7 bar / 100 PSI	0 - 400 bar / 5,800 PSI
VCB50	1 - 16" DN25 - 400 mm	50 ton	28" 720 mm	0 - 40" 0 - 1,000 mm	Other Gas test systems up to	Other Liquid test systems up to
VCB100	2 - 24" DN50 - 600 mm	100 ton	40" 1,000 mm	0 - 44" 0 - 1,100 mm	1,000 bar / 14,500 PSI available on request	2,500 bar / 36,250 PSI available on request
VCB200	2 - 36" DN50 - 900 mm	200 ton	55" 1,400 mm	0 - 60" 0 - 1,500 mm		
VCB500	2 - 48" DN50 - 1,600 mm	500 ton	64" 1,600 mm	0 - 60" 0 - 1,500 mm		

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\*The range and mentioned dimensions can be adapted to the specific application.

# The Ventil test units are delivered 'ready for use' and can be completed with a variety of optional features;

- Test and operating systems for actuators and other controls.
- High pressure gas test system for Nitrogen / Helium testing.
- Full Safety Enclosure with interlock.
- Inner (Radial) sealing plugs for Butt or Socket weld ends.
- Fully automatic test sequence (CNC testing).



# **Model: HC**

Horizontal clamping and testing of all common valves.

Available up to 120" / DN3,000 with clamping force up to 5,000 ton.

Test Units for manufacturers





# **Model: HC**

Model	Range*	Maximum clamping force	Distance between columns	Distance between sealing adapters	Low pressure Gas test system	High pressure Liquid test system
HC5	½ - 6" DN15 - 150 mm	5 ton	14" 350 mm	0 - 20" 0 - 500 mm		
HC30-S	½ - 10" DN15 - 250 mm	30 ton	18" 460 mm	0 - 30" 0 - 750 mm		
HC30-L	½ - 16" DN15 - 400 mm	30 ton	28" 720 mm	0 - 40" 0 - 1,000 mm		
HC50-S	1 - 10" DN25 - 250 mm	50 ton	18" 460 mm	0 - 30" 0 - 750 mm		
HC50-L	½ - 16" DN15 - 400 mm	50 ton	28" 720 mm	0 - 40" 0 - 1,000 mm		
HC75	1 - 16" DN25 - 400 mm	75 ton	28" 720 mm	0 - 40" 0 - 1,000 mm		
HC100	2 - 24" DN50 - 600 mm	100 ton	40" 1,000 mm	0 - 44" 0 - 1,100 mm		
HC150	2 - 24" DN50 - 600 mm	150 ton	40" 1,000 mm	0 - 60" 0 - 1,500 mm	0 - 7 bar / 100 PSI	0 - 400 bar / 5,800 PSI
HC250	2 - 24" DN50 - 600 mm	250 ton	40" 1,000 mm	0 - 60" 0 - 1,500 mm	Other Gas test systems	Other Liquid test systems
HC400	2 - 32" DN50 - 800 mm	400 ton	48" 1,200 mm	0 - 67" 0 - 1,700 mm	up to 1,000 bar / 14,500 PSI available on request	up to 2,500 bar / 36,250 PSI available on request
HC600-S	DN 100 - 600 mm	600 ton	48" 1,200 mm	0 - 67" 0 - 1,700 mm	avaliable of request	avaliable on request
HC600-L	DN 100 - 900 mm	600 ton	56" 1,400 mm	0 - 80" 0 - 2,000 mm		
HC800	4 - 36" DN100 - 900 mm	800 ton	55" 1,400 mm	0 - 80" 0 - 2,000 mm		
HC1000	8 - 40" DN200 - 1,000 mm	1,000 ton	64" 1,600 mm	0 - 80" 0 - 2,000 mm		
HC1500	8 - 40" DN200 - 1,000 mm	1,500 ton	64" 1,600 mm	0 - 80" 0 - 2,000 mm		
HC2000	8 - 48" DN200 - 1,200 mm	2,000 ton	80" 2,000 mm	0 - 100" 0 - 2,500 mm		
HC3000	8 - 48" DN200 - 1,200 mm	3,000 ton	80" 2,000 mm	0 - 100" 0 - 2,500 mm		
HC4000	8 - 48" DN200 - 1,200 mm	4,000 ton	80" 2,000 mm	0 - 100" 0 - 2,500 mm		

<sup>\*</sup>The range and dimensions can be adapted to the specific application.

# **Model: HC Optional features**

The Ventil test units are delivered 'ready for use' and can be completed with a variety of optional features;

- Test and operating systems for actuators and other controls.
- Columns in an inclination angle for better access and easy (un)loading.
- High pressure gas test system for Nitrogen / Helium testing.
- $\oplus$ Full Safety Enclosure with interlock.
- Inner (Radial) sealing adapters for Butt or Socket weld ends.
- Fully automatic test sequence (CNC testing).



HD camera system for inspection from a safe distance.

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Test Units for Shut off valves

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# **Model: HVC**

Clamping the valve in horizontal position (valve stem vertical) and testing the valve in any position between 0 - 90°.

Hydraulic controlled tilting system with safety interlock.

Available for any valve type. 64" / DN1,600 with 1,000 ton clamping force available.

Test Units for manufacturers



# **Model: HVC**

Model	Range*	Maximum clamping force	Distance between columns	Distance between sealing adapters	Low pressure Gas test system	High pressure Liquid test system
HVC5	½ - 6" DN15 - 150 mm	5 ton	14" 350 mm	0 - 20" 0 - 500 mm		
HVC30-S	½ - 10" DN15 - 250 mm	30 ton	18" 460 mm	0 - 30" 0 - 750 mm		
HVC30-L	½ - 16" DN15 - 400 mm	30 ton	28" 720 mm	0 - 40" 0 - 1,000 mm		
HVC50-S	1 - 10" DN25 - 250 mm	50 ton	18" 460 mm	0 - 30" 0 - 750 mm		
HVC50-L	1 - 16" DN25 - 400 mm	50 ton	28" 720 mm	0 - 40" 0 - 1,000 mm	0 - 7 bar / 100 PSI	0 - 400 bar / 5,800 PSI
HVC75	1 - 16" DN25 - 400 mm	75 ton	28" 720 mm	0 - 40" 0 - 1,000 mm		Other Liquid test systems
HVC100	2 - 24" DN50 - 600 mm	100 ton	40" 1,000 mm	0 - 44" 0 - 1,100 mm	Other Gas test systems up to 1,000 bar / 14,500 PSI	up to 2,500 bar / 36,250 PSI
HVC150	2 - 24" DN50 - 600 mm	150 ton	40" 1,000 mm	0 - 60" 0 - 1,500 mm	available on request	available on request
HVC250	2 - 24" DN50 - 600 mm	250 ton	40" 1,000 mm	0 - 60" 0 - 1,500 mm		
HVC400	2 - 32" DN50 - 800 mm	400 ton	48" 1,200 mm	0 - 60" 0 - 1,500 mm		
HVC600-S	4 - 24" DN100- 600 mm	600 ton	48" 1,200 mm	0 - 67" 0 - 1,700 mm		
HVC600-L	4 - 24" DN100 - 600 mm	600 ton	56" 1,400 mm	0 - 80" 0 - 2,000 mm		
HVC800	4 - 36" DN100 - 900 mm	800 ton	55" 1,400 mm	0 - 80" 0 - 2,000 mm		

<sup>\*</sup>The range and dimensions can be adapted to the specific application.

## **Model: VC-SRV**



Test Units for manufacturers

- 0 Testing with both Gas and Liquid.
- Ridged design with high quality finish.
- Standard completed with the unique Ventil Computer Registration System.
- $\oplus$ According to all common international standards and directives.
- 0 Stainless steel control panel and liquid reservoir.

Standard safety features; Safety Closure, Safety interlock on clamping system, test system kill switch and pressure activated flash light.

	MODEL: VC25-SRV

Model	Range	Clamping force
VC25-SRV	1⁄2-10	25 ton
VC40-SRV	1⁄2-16	40 ton
VC70-SRV	1⁄2-16	70 ton



# Model: VC-SP-T4

Compact design for the use in Containers or other small workshops.

Ridged design with high quality finish.

Standard safety features; Safety screen, Safety interlock on clamping system and test system kill switch.

Model	Range	Clamping force
VC25-SP-T4	1/2-10	25 ton
VC40-SP-T4	1/2-16	40 ton

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## Model: CT800-T4

Fully equipped test unit for testing and (re)adjusting all common types of tank relief valves, like for example; Pressure/Vacuum ('breather') valves and emergency vacuum vents in the range 2-24".

The CT800 is completed with a dual range test system for testing in both pressure and vacuum conditions.

This test unit is specially designed to verify the settings and leak rates according to clean air and emission control acts and test standard API2000. The design and configuration is based on many years of experience in safety valve testing and repair.

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The test unit is fully built in-house and only first class components are used. The CT800 is delivered ready for use.

The CT800-T4 is available as stand-alone unit or as an optional module with other safety valve test units, shown on the previous pages.



# PreVenTest, In-Situ testing of PSV's

Ingenious designed system for testing all types of spring operated PSV's In-Situ, in process and under normal operating conditions. The portable system enables you to prove the correct working and performance or identify PSV's in need of repair without plant shut-down.

The PreVenTest system is available in 2 types;

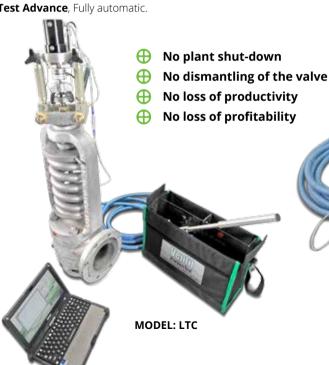
**PreVenTest LTC**, Light weight, hand controlled and battery driven.

PreVenTest Advance, Fully automatic.

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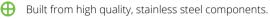
MODEL: ADVANCE

Both types are available as ATEX version for the use in explosive atmospheres.

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# **Orion LM portable liquid test systems**

The Ventil ORION portable Liquid test systems are used for pressure testing valves, pipes, vessels, cylinders, actuators and all other critical pressure equipment. The high quality 'plug and play' test systems are packed in a robuust carrying case / trolley and are therefore easy to use on-site or in-shop.



Fully pneumatic driven, safely used on-site.

Pressure isolation function for pressure drop/decay testing.

Accurate variable flow/pressure control.

Standard suitable for oil or potable water applications.

Robust carry case / trolley.

	Model	Range*	Test fluid	Pressure gauge**
	LM 100	0 - 100 bar 0 - 1,450 PSI	B	0 - 160 bar 0 - 2,300 PSI
	LM 500	0 - 500 bar 0 - 7,250 PSI	Potable water or	0 - 600 bar 0 - 8,700 PSI
	LM 1000	0 - 1,000 bar 0 - 14,500 PSI	hydraulic oil	0 - 1,600 bar 0 - 23,200 PSI
	LM 1500	0 - 1,500 bar 0 - 21,750 PSI		0 - 2,000 bar 0 - 30,000 PSI
ł		0 = 1,1 0 0 1 0 1		0 0 0 7 0











<sup>\*</sup>High pressure range available on request.
\*\*Case diameter 160 mm/6" Class 1, dual scale bar/PSI completed with safety glass and calibration certificate.

# **VenTrack Control valve diagnostics**

The universal and versatile Ventil VenTrack system enables you to test all critical valve controls which cause or at least, contribute to control loop performance problems. The VenTrack contains of an unique combination of instruments and inteligent software to identify and rectify control valve problems.



Laser Stroke Sensor



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Optional: HVC1 test and assembly clamp

**Transportable Workshops** 

**Model: CT** 



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Fully equipped test and repair facilities for on-site overhaul and testing of Shut-off valves, Safety valves and Control valves. The 10, 20 or 40 ft Containers feature all necessary tools and equipment for the standard recondition procedure, but can also be equipped for your specific application and environment / climate conditions.

Model	Application	Size
CT10-SRV	Test- and Repair Container for Safety Valves	10 ft
CT20-1	Test Container for PSV Testing - VC 25 CC	20 ft
CT20-2	Repair Container for Shut-Off-, Control- & Safety Valves	20 ft
CT20-3	Test Container for PSV Testing - VC 40 CC	20 ft
CT20-4	Test Container for Shut-Off-, Control- & Safety Valves	20 ft
CT40-1	Test- and Repair Container	40 ft



For off-shore applications, the new fabricated container is certified according to DNV 2.7 / EN 12079 and can optionally be prepared for the use in explosive (ATEX) atmospheres.

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## **TOOLS & ACCESSORIES**

Ventil offers a variety of tools and equipment used within the valve repair process;

- ① Inspection kits for checking the interior of the valve body.
- Tool set for removing gaskets and spindle packing rings.
- → Valve Brushing set for cleaning the valve body, spindle and components.
- U-RAT Transport Trolley for Safe transport of valves.







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## **POLIR**

The Ventil POLIR range of machines are designed for Grinding and Lapping flat seats inside the Shut-off or Safety valve body. The light weight battery or pneumatic drive unit, enables safe and efficient 'in-shop' and 'on-site' use. The POLIR machines are delivered ready for use, including all necessary tools, accessories, a large consumer quantity of abrasive 3M foil rings and are packed in robust carrying cases.



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The POLIR machine can be equipped with an attachment set for Grinding and Lapping conical (Control) valves seats. The C attachment is available for all sizes in seat angles 30/40/60/75/90 degrees.









# Test Units for Safety valves Control valve diagnostics

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## **ORBIT**

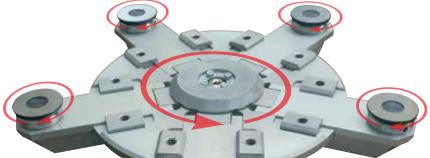
The Ventil ORBIT range of machines are designed for 'In-Situ' or 'In-Shop' valve repair.

The light weight, versatile machines are equipped with a variety of unique features, like for example the orbital, mechanical driven grinding head. This results in a very high material removal rate and the best flatness accuracy. The ball-joint and tilting construction makes the machine suitable for:

- Gate and Parallel slide valves.
- Check valves.
- Globe and Safety valves.

**MODEL: ORBIT 10** 







ORBIT UNIQUE FEATURES

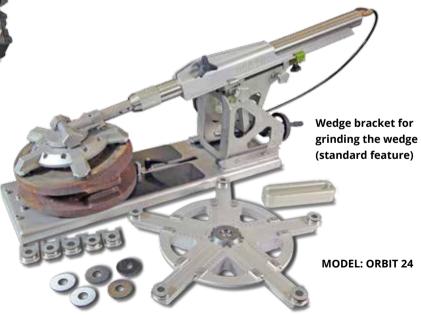
⊕ Universal tool for Gate-, Parallel Slide-, Globe and Safety valves.

Robust and light weight.

The unique orbital, - mechanical driven grinding and lapping system results in a very high material removal rate and extreme good flatness accuracy. The grinding heads are mechanically driven by an internal gear system that rotates the wheels at the same speed producing a perfect cross hatch pattern.

The ORBIT machines are delivered ready for use, including all necessary tools, accessories, a large consumer quantity of abrasive 3M foil rings, packed in robust carrying cases.

Model	Application
ORBIT 10	1½ - 10" / DN40 - 250 mm
ORBIT 24	6 - 24" / DN150 - 600 mm
ORBIT 40	6 - 40" / DN150 - 1000 mm
ORBIT 64	6 - 64" / DN150 - 1600 mm



## **PRO DUAL**

The Ventil PRO DUAL covers the full range of stationary machines for 'In-Shop' repair of valve seats. The ridged column machine is mounted on a strong work bench base with clamping table and drawers for the storage of all accessories, drive heads, tools and consumables. The tilting arrangement of the clamping table enables easy clamping and alignment of Gate valve bodies and wedges.

The PRO DUAL machines are completed with the unique orbital, mechanical driven grinding head for the highest material removal rate and the best flatness accuracy.

The PRO DUAL is suitable for any type of;

Gate and Parallel slide valves.

Check valves.

Globe and Safety valves.

	PRO DUAL 10	PRO DUAL 16	PRO DUAL 24	PRO DUAL 40
Range	1⁄4 - 10"	1⁄4 - 16"	1/4 - 24"	1/4 - 40"
	DN6 - 250 mm	DN6 - 400 mm	DN6 - 600 mm	DN6 - 1000 mm





## **TITAN**

The Ventil TITAN portable turning and facing machine is designed for 'In-Situ' repair and prefabbing sealing faces on the out and inside of valves, pumps, turbine houses, flanges and other pipe ends. The completely pneumatic driven TITAN can be used in any position, upside down and sideways, wherever you need to repair. This facing machine is completed with a universal base for easy mounting and alignment and has fine axial and radial feeds for accurate and high quality machining.



#### TITAN UNIQUE FEATURES

- (Re)facing/cutting sealing seats and flanges.
- (Re)cutting grooves for seals, O-rings etc.
- (Re)facing conical faces.
- Precision height and centre adjustment.
- Full-automatic radial and axial feed.

		Safety	
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	Titan 16	Titan 24	
Range	0 - 16"/ 0 - 400 mm	0 - 24"/ 0 - 600 mm	
Machine dimensions	1200 x 850 x 1510 mm	1200 x 1100 x 1900 mm	
Main drive motor	1,2 kW 5,59 kW		
Axial feed motor	0,09 kW	0,18 kW	
Air consumption	1620 [l/min] / 57,2 [scf/min]	6378 [l/min] / [225 scf/min]	
Speed Range	0 - 160 rpm	0 - 169 rpm	
Radial feed	0,05 - 0,20 mm / 0,002 - 0,008"	0,05 - 0,20 mm / 0,002 - 0,008"	
Axial feed (auto)	0 - 40 [mm/min] / 0 - 1,6 –inch/min]	0 - 40 [mm/min] / 0 - 1,6 - inch/min]	
Axial feed (manual)	4 mm / 0,16"	4,5 mm 0,18"	
Weight	250 kg	350 kg	

## **PROFILE**

The Ventil PROFILE high speed grinding machines is designed for precision finishing of flat and conical sealing faces. The pneumatic driven PROFILE can be used in any position, upside down and sideways, wherever you need to repair. This high speed grinder is completed with a universal base for easy mounting and alignment and has fine axial and radial feeds for fine finishing.

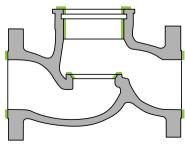
The machine is delivered ready for use, including a set of grinding cones for seat angles 30 / 40 / 60 / 75 / 90 degrees. The machines is packed in a robust transport trolley.

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Range	16"	24"	
	DN6 - 0/400 mm	DN6 – 0/600 mm	
Spindle Drive	400 W max. 14 Nm	400 W max. 14 Nm	
Grindingmotor	120 W max. 0,10 Nm	120 W max. 0,10 Nm	
Variable speed	0-60 RPM	0-60 RPM	
Required air supply	Air drive max 6 Bar	Air drive max 6 Bar	
Angle °	30°, 40°, 60°, 75°, 90°	30°, 40°, 60°, 75°, 90°	
Maximum insertion depth	650 mm	650 mm	
Average achievable roughness [Ra]	0,2 – 0,8 μm	0,2 – 0,8 µm	
Weight	70 kg	90 kg	





## **OPTIC**

The Ventil OPTIC open face, flat lapping and polishing machine is the complete solution for high precision finishing of safety valve seats, nozzles and mechanical seats. The OPTIC can be used to reach a flatness accuracy within 3 light bands ensuring the best seat tightness.

The fine finishing lapping machine is available in different sizes with a single or set of 3 conditioning rings. The machine features a robust structure, but is still equipped with fine controls, activation timer and an automatic liquid diamond and lubricate steering and dispensing system.

	OPTIC 15	OPTIC 24	OPTIC 36	OPTIC 60
Lapping plate diameter	380 mm. / 15"	610 mm. / 24"	900 mm / 36"	1500 mm / 60"



The OPTIC machine is delivered ready for use, including consumables, Monochromatic light and optical flats for checking the flatness accuracy.





## **BG-10**

The Ventil BG-10 Ball grinding and polishing machine is specially designed for repairing balls of floating ball valves or trunnion mounted ball valves in the range 2½ up to 10".

The simple but ingenious constructed BG-10 features (2) independently controlled drives, one rotating the ball and the other rotating the lapping bowl. The right-angled rotations of the ball and bowl results in fine cross hatch pattern finish. The BG-10 features very simple controls and is delivered ready for use, including a set of bowls and consumables.



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## **NR-10**

The Ventil NR-10 PSV work station is the complete solution for safe and efficient (dis)assembly of Pressure Safety Valves. The NR-10 exists of a ridged base structure with 3-Jaw Chuck for clamping a PSV on the inlet nozzle.

The versatile NR-10 work station is designed and equipped for two basic purposes;

The ridged fixation and base structure gives you full surrounding access for inspection and (dis)assembling of the PSV.

(Backbreaking' use of long pipe ends for (un)screwing the nozzle is no longer needed with the high torque drive system, connected to the Chuck.

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½ - 10" (larger sizes available on request)		
4200 Nm		
8400 Nm		
1540x895x1500 mm / 60x35x60 Inch		
700 kg (1550 Lbs)		



# **Ventil Engineered Solutions**

## Fit the right test equipment into your production chain

Successfully manufacturing valves means taking the right decisions. Having manufactured over 5000 valve testers, we know what it takes to size and fit right test equipment into your production chain. Ventil Engineered Solutions offers a complete range of special test equipment for;

Full automatic 'CNC' – series testing

Cryogenic testing

Fire safe testing

Hyperbaric testing

Hugitive Emission testing

Clean room testing

Performance and duration testing

Whether you are into 'exotic one-off valves or going for mass production, the Ventil Engineered Solutions team support offers;

Thoroughly studying your application, defining the test unit framework

• Verifying the applicable test procedures and test criteria

Recommending the best 'working practice'

⊕ Showing productivity vs. efficiency

Evaluate and prepare for future expansion and flexibility

Risk assessment



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# **CNC Valve Testing**



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#### Fully automatic test units for quick and efficient testing a larger series of valves.

Ventil IT specialists design smart software for controlling and monitoring the test sequence. The fully integrated computer system ensures a very quick and efficient operating procedure. The automatic test system controls the test procedure and a combination of accurate pressure and flow sensors detect / measure the leakage. The intelligent software compares the found test results with the programmed test standard and within seconds the system gives a 'pass' or 'fail' signal.



# **API 6A - PR2 Testing**

The API 6A PR2 test unit subjects the valve to extreme high and low temperatures whilst dynamically cycling it under various pressure conditions to prove the integrity and give absolute confidence that it can withstand the most arduos environments.

#### **COMMON FEATURES**

Proportionally controled clamping system.

Hully closed test chamber.

High pressure gas and liquid testing up to 2,000 bar / 29,000 PSI.

Digitally controlled temperature arrangement -60 to 180℃ / -76 to 356℃.

Automatic open/close and torque measuring system.

Camera inspection system.

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Ventil Valve Academy









# **Actuator testing**

Designed and equipped for testing electric-, pneumatic and hydraulic controlled actuators. The range of static (torque) performance testing, measured by calibrated sensors, runs from 0 – 500,000 Nm / 370,000 lbf. The dynamic test procedure subjects the actuator to a simulation of a torque resistance pattern of a quarter turn ball or butterfly valve. The touch screen operated control system offers flexible programming of the settings and test criteria.

About Ventil

Test Units for Shut off valve

Test Units for Safety valves

Control valve diagnosti

Transportable workshops

Tools & Accessorie

Ventil Lapping & Grinding

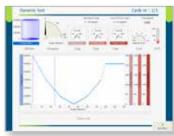
Test Units for manufacturers

Test Units for actuators

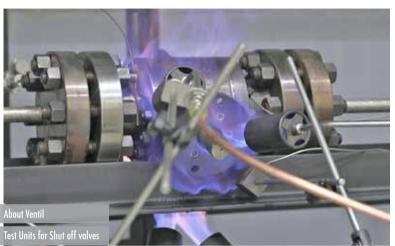
Modified atmospheres

Ventil Valve Academ





# 'Modified atmospheres'



Tost Units for Safety valves

Control valve diagnostic

Transportable workshop

Tools & Accessorie

Ventil Lapping & Grinding

Test Units for manufacturers

Test Units for actuator

Modified atmospheres

**Ventil Valve Academ** 

Maintenance and Repair

Custom build solutions for testing Shut-off valves, Safety valves and Control valves in any condition.

Cryogenic testing up to maximum -196°C / -324°F.

High temperature (fire safe) testing 1,500°C / 2,730°F.

Clean room test and inspection equipment.

Submerged gas testing.

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# **Ventil Valve Academy**

#### When our customers succeed, so do we!

Industrial valves and safety valves are final process elements and play a key role in the operation of a continuously generating (petro)chemical process or power plant. They either block the pressure, regulate the fluid or protect the process plant.

Still 50-60% of the fugitive emission of industrial process plants is caused by leaking valves. It is therefore obvious that the plant efficiency is directly affected by the non-performance of valves, either in terms of output or in terms of reliability and availability.

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Naintenance and Repair

The VENTIL VALVE ACADEMY is the guide to understanding valves, the process of selection, maintenance and repair. Our objectives;

- Provide the highest quality and brand neutral information, giving plant management assurance that they have the skilled people they need to maximize asset value.
- Provide instructor-led training in different levels and tailored for the specific application of the customer.
- Provide in-house courses, conducted at your company, anywhere in the world, within your schedule.

A complete overview with the available training courses is available on www.ventil.nl



# **Maintenance and Repair**

#### When our customers succeed, so do we.

The Ventil maintenance and support engineers provide individualized technical assistance worldwide. Our experts won't be satisfied until you are. Please feel free to contact our service department for;

Field service.

Service and maintenance contracts.

In-house repairs.

Technical support.

Spare part services.

Test unit operator training courses.

#### About Ventil

Test Units for manufacturers





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