

TEST UNIT FOR TANK RELIEF VALVES



MODEL: CT800-T4

RANGE: 2 – 24" / DN50 – 600 mm.

VENTIL - NLPolakweg 6 - 2288 GE
Rijswijk – The Netherlands
T.: +31 88 1130900
E.: info@ventil.nl**VENTIL USA INC.**906 Gemini Street
Houston TX 77058 - USA
T.: +1 281 2800141
E.: info@ventil-usa.com**VENTIL MIDDLE EAST FZC**SAIF Zone, Unit Q4-267
Sharjah, United Arab Emirates
T.: +971 506260955
E.: info@ventil-me.com**VENTIL RUSSIA**ул. Врубеля 8, офис 2
125080 МОСКВА
T.: +7 499 728 1550
E.: info@ventil-rus.ru

CT800-T4 Test Unit

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-T4 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 standards, as API2000. The design and configuration is based on many years of experience in safety valve testing and repair. The test unit is fully built in-house and only first class components are used. The CT800 is delivered ready for use

Control Panel

Clear, ergonomically designed control panel for operating the clamping system and controlling the test systems. The stainless steel control panel is provided with tag plates to identify all operation parts / devices and equipment.

Test Station

The CT800 clamping station is developed for quick and safe clamping of the wide variety of tank relief valve shapes and sizes up to 24" The unit is completed with a dedicated set of sealing plates to seal the valve at the test station.

Test Systems

Vacuum – Air Test System	-500 mBar – 10 Bar / -7 – 145 PSI.
Seat Leakage Test System	0 – 10 nl/min / 20 SCFH

Seat leakage detection and measurement 0- 10 nl /min - 0-20 SCFH

The CT800 is completed with a digital flow measuring system for detecting and accurately measuring the seat leakage in both vacuum and pressure conditions. The accurate system has a range of 0-20 SCFH for testing tank relief valves up to 24" according to API2000. The seat leakage is shown at the computer screen. Tank relief valves, like for example breather valves often have exotic shapes which do not allow leak detection / measuring via the outlet. Therefore the seat leakage (flow) measuring instrument is fully embedded in the test system. This allows the application on any type and shape, but also prevents that the flow meter can be damaged by pollution coming from the test object.

Computer Registration System.

The Ventil Computer Registration System (CRS) exist of a laptop computer, a set of accurate pressure transducers, A/D conversion unit and in house developed PSV test software. The main purposes are:

- Digital reading of test pressure, test time etc.
- Verifying found test results against test standards (ASME, API) or other (client) programmed tolerance.
- Storing and printing customized test report of test certificate.

Working in Native Language

The CRS is can be set in a variety of languages. If a language is not standard installed, a translation function can be used to adapt the program text.

Support and Trouble shooting

Need help, an upgrade or additional function, the Ventil IT service department is available for answering questions. The remote access over internet allows efficient and quick service anytime, anywhere.

Customized Test Report / Certificate

The Ventil CRS is completed with report generator function to design a customized certificate lay-out. This includes add texts, adapting the language and placing company logo and other details at the report.

System Configuration

- State of the art Laptop Computer system (windows 7 pro).
- CRS test software, ready for use.
- Pressure transmitters, full range.
- A/D converter.



General.

Test Unit Maintenance.

The CT800-T4 requires minimum maintenance. Generally the test unit only has to be kept clean to ensure a safe and reliable performance. Periodical maintenance, testing and calibration instructions are described in the test unit manual

Certification.

At Ventil we only use first class instruments to ensure that the best possible and reliable test results are achieved. The following documents are included to ensure the machine meets the highest levels of accuracy and compliance;

- Test- and calibration certificates for all installed test pressure gauges, sensors and flow meters (if applicable).
- Factory acceptance test (FAT) report and a test-and safety report of acceptance according to EN 10204:2004 and Directive 2006/42/EC for test units.

Testing and inspection.

Testing will be done according our QC plan against a project related inspection plan and inspection procedure. Following tests are foreseen:

- Performance and functional tests at our works.
- NDE test at maximum working pressure.
- Visual inspection.
- Drawing and documents verification.

Datasheet

Range	2 – 24" / DN50 – 600 mm.
Test Station Operation.	Manual clamping
Vacuum - Air Test System.	-500 – 7,000 mbar / -7 – 100 PSI.
System	Accurate Regulator with two Needle Valves
Digital Pressure Measurement	Pressure Transmitter 1) -500 – 1000 mbar / -7 –14.5 PSI.
	Pressure Transmitter 2) 0 – 10 bar / 0 – 450 PSI.
Digital Leakage Measurement	Flow transmitter 0.01 – 0.5 nl / min / 0.02- 1 SCFH
	Flow transmitter 0.2 – 10 nl/ min / 0.4 - 21 SCFH
Test Procedures according to common test standards.	Set Point in both vacuum as pressure range.
	Seat leakage according to API2000 in both vacuum as pressure range.
Universal sealing plates	Vulcolan Universal sealing plates 2"-24"
Clamping Force (maximum).	10 metric tons
Clamping Table	790 x 790 mm. / 31.1 x 31.1 Inch.
Clamping Table Material.	CS
Dimensions / weight	1230 x 800 x 1000 mm – 600 kg / 48.4 x 31.5 x 39.4 / 1325 lbs
Required connections	Electricity : 230 V 50 Hz. (Please advise for other requirements)
	Air : utility air 7 bar / 100 PSI
Delivery	Ready for use (see optional features)