



LTT - Single Use Test Cabinet







The Single Use Test Cabinet is designed to test various Single Use designs / assembly's with a large range of tube connectors or fittings.

The Single Use Test Cabinet has, in this example, 8 different couplings, each coupling is designed to clamp and close of a tube connector.

We have standard couplings in our range, but we can also design a coupling for a different tube connector or hose coupling.

Leak Test Unit

The test cabinet has to be connected to a Zeltwanger leak test unit, a ZEDeco or ZEDBase+/ZEDcore. These units are DAkks calibrated ISO 17025.





Each tube connector is placed in its own type of coupling, clamped and closed off, so that there is no leakage between the connector of the design and the coupling of the test cabinet.

When all tubes are connected to the cabinet the integrity test of the design can start.

There is no end assembly of the design needed after the integrity test. No hoses must be clamped of before the Integrity test, it is a poke yoke solution. In this way the assembly, including all connectors and connections, is in 1 go integrity tested.

The various menu's with settings (pressure drop or flow) for each design can be individually set. With a program selector the various menus can be selected and started, an barcode scanner is also available as an option.



If a design passes the test the green light will go on.

If a design does not pass the test the red light will go on.

This is also shown on the screen of the ZEDeco leak tester, with the belonging test results as pressure drop and flow.

The connectors are fixed/hold in medical grade silicone rings, and the couplings and ventils are off course Stainless Steel.

The measuring air which flows into the Single Use design/assembly is filtered through a medical grade $0.2 \mu m$ filter.

The number of couplings can vary for each Single Use Test Cabinet, in this example there are 8, couplings.

All data and menus are stored on the leak testing machine, ZEDeco or ZEDBase+/ZEDcore. Via a USB or network connection they can be downloaded.

With a digital pressure sensor the air supply is checked, if this is outside the set limits, to low or too high, the Single Use Test Cabinet will not function, to prevent damage to the hose connectors, or not properly closing them off.





There is also a range of stoppers available for the couplings, to perform a red/green test on the Single Use Test Cabinet.

The SUTC comes with its own fixed leak*, for machine testing. A wide range of fixed leaks is available to quickly connect onto the machine.

*Fixed Leak is produced from medical stainless steel using medical USP 6-class sealings.





LTT Calibration, Service & Revision

The ZEDeco is standard calibrated by the strictest requirements of the DAkkS / ISO 17025 regulations.

L.T.T.-Europe can provide a yearly calibrated & service contract for the SUTC and measuring unit.

Optionally we can check the unit & ZEDeco measuring cell, replace the medical filter and silicone rings, ultrasonic clean the couplings, and test the flow of the unit.

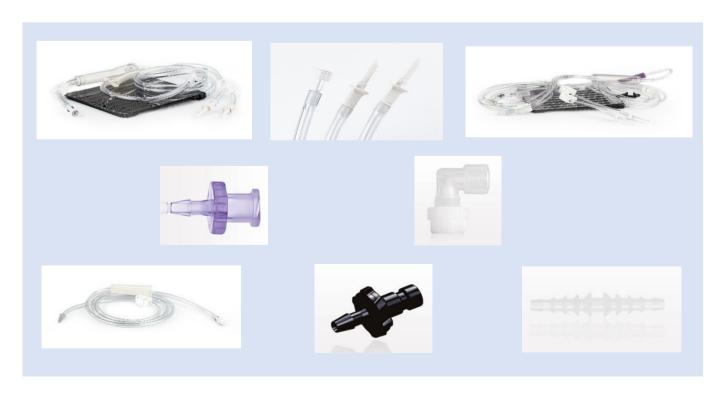
If the result values are outside it standard operation window, the parameters will be adjusted, or parts will be replaced.

The test report with certificate from the unit and the fixed leak will be send to the customer.

In this way your secured of the highest quality of your products.

Various connector types where we have couplings for

Luers, barbed, stepped, straight, flare, funnel, large bore, shielded, compression & bayonet fittings, etc.







Specifications

- Wide range of couplings for all kind off hose connectors
- Number off couplings can vary, from 1 to ...
- Can be used together with leak testing equipment from Zeltwanger
- Can be used on various single use designs/assemblies
- FDA approved materials
- USP class 6 materials
- Stainless Steel couplings and ventils
- Table model, 370 x 370 x 330 mm. (with 8 couplings), with 2 carrying handles
- Test pressure range from 0 ... 700 mbar
- The size of the leak that can be found is depending on various factors, but can vary between $5 \dots 250 \mu m$
- Measuring device ZEDcore standard calibrated by DAkks / ISO 17025

The Single Use Test Cabinet is used for

- Mainly Food and Life Science industry
- It is suitable for overpressure, vacuum and flow testing

For more information, or a demonstration contact LTT Europe

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LTT Rental - Lease

At L.T.T.-Europe it is also possible to rent or (short) lease test equipment. We have various units available for rent, this could be for instance a ZEDbase+, and/or other Zeltwanger machine's. Also this FBITU is available for rent of lease.

No investment is needed, equipment is relative quickly available. Also possible to purchase the equipment during / after rental/lease period.

In the rental or lease contract the service, calibration and maintenance of the unit is included. Also the requested number of fixed leaks can be included.

There is also the possibility to view the leak test measuring units in our showroom or to use them for testing purposes. An on-site demonstration is also possible.

LTT Support

During the installation we give training of the unit. Additional training for operators, also with process description and in class room set-up is available upon request.

For all units, lease of buying, we can also offer support with validation of the process/products. We can also assist you with setting up of the process around integrity testing.

Support for audits is also available, from one of our specialist leak test engineers in the Life science branche.

LTT Experience

At L.T.T.-Europe we have various engineers who have experiences in various branches all over the world, automation, machinery, Life Science, Food and Beverage.

With our wide range of experience LTT can support you on-site all over the world, especially in the Life Science branches where everything has to be done according approved process and standards. We have day or week prices available for our service engineers.

Prices and terms are available on request. Contact us to make an appointment.



Examples of our products available for the Life Science Industry



LTT Fixed leaks

Range from 2 ... 1.500 $\mu m\text{,}$ stainless steel with USP class sealings and certificate

LTT Flexible Bag Integrity Test Unit for 3D bags

For open air integrity testing of various designs and large bags up to 10.000 liter





LTT Leak test cabinet for assembly's

Test cabinet for integrity testing of assembly's and designs, with various connectors and fittings

LTT Flexible Bag Integrity Test Unit-2D

For testing between restraining plates of 2D bags and open air test of designs and 3D bags up to 200 liter.



LTT Stainless Steel air valves

Including USP seals with medical grade.

