



**Absolute hermetically sealed – testero helium.**  
Helium Leak Detection Systems for High Quality Assurance.

ixmation



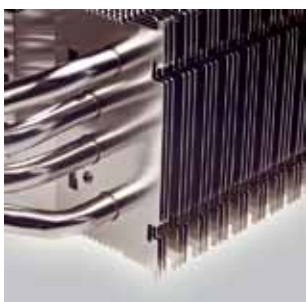
**Introduction**

ixmation provides high-quality tailored solutions, with full operations capabilities and service support that covers every need and is available at all ixmation facilities world wide. The values of the testero helium system build in assembly line, as standalone unit, considering customer specifications lead to faster test and assembly cycles and higher quality levels.

We offer several handling methods to connect your production lines reliable to the testero helium leak detection chambers as full or semi-automated version or as a manual/batch version. ixmation testero helium leak detecting systems are leading directly to higher process reliability which transfers to improved product quality.

**Branches & Applications**

- └ Pharmaceutical Industry
- └ Medical products
- └ Medical Packaging
- └ Automotive Industry
- └ HVAC-Systems  
(Heating, Ventilation, Air Conditioning)
- └ Complex die casts
- └ Tube blockage detection
- └ Solar Industry
- └ Frit tube sealing
- └ Refrigeration and air conditioning



*HVAC Products*



*Gear Boxes*



*Die Casts*



*Pumps and Filters*

## Reliable manufacturing flow. Integrated leak detection systems. By ixmation.

- └ Totally dry test method - no bubble residue or water droplets to dry
- └ Helium detects small leaks faster than water or air molecules
- └ Custom tailored lines - build on robust, reliable standard designs

### ixmation – your partner for Leak Detecting Systems.

Helium Leak Detection System (HLDS) is the best combination of all advance features. Without sacrificing its industrial flexibility and durability in production for high vacuum applications detecting fine leaks.

The HLDS testero helium successfully covers a wide range in leak testing requirements in almost every industries moving from automotive, air condition, medical and semiconductors.



*Pressure Gadgets*



*Bottles & Containers*



*Medical Products*



*Frit Tubes*

- ✔ **Faster testing and assembly cycles**
- ✔ **Easy to operate because of the single key operation**
- ✔ **Global footprint for your international projects in HLDS**

### **Hard Vacuum Global Test**

Single chamber with standard system control and programming interface for full auto test cycles, auto de-pollution and one touch calibration. The PLC of the hard vacuum test chamber calculates the leak rate of the tube automatically.

### **ixmation HLDS testero helium inline version**

As inline version we integrate testero helium in your assembly production line. Rejected parts of a batch will be sorted out, collected by a work piece carrier and returned to the reject area.

At a separate sniffing station size and localization of the leak is identified.

The reworked good parts go back on the work piece carrier where a second test verifies the pressure tightness of the parts.



*Tube testing*

### **ixmation HLDS testero helium stand-alone-version**

The stand alone version convinces by its compact design. The floor saving layout of the testero helium allows manual sniffing tests in the back of the chamber, connected to the same helium supply. The rejected parts, placed on work piece carrier, get transferred to the sniffing station in the back of the HLDS. After the parts have been reworked they can be returned to the process.



*Glass frit tube testing for Solar systems*

### **ixmation product proposal**

- ✔ Pressure decay for gross leaks
- ✔ Helium mass spectrometers
- ✔ Flexible sniffing device for quick tests
- ✔ Sniffing nozzles connected to a local sniffing station
- ✔ HLDS-Software with E-Diagnostic
- ✔ High end products for vacuum technology
- ✔ Quick connectors and sealings
- ✔ Custom tailored HLDS for manually, semi- and full automated tests
- ✔ Full integrated HLDS into production lines
- ✔ Stand alone versions for batch testing

# Facilities worldwide. HLDS turnkey solutions. From ixmation.

## Selfcleaning systems and the recovery of up to 90% helium gas

An integrated PLC- System starts the cleaning cycle if the helium pollution exceeds the defined background level of the chamber. Nitrogen will be injected to the chamber and withdrawn by suction to the recovery unit together with helium.

The recovery system is directly connected to the vacuum chamber. The helium is recirculated after the test cycle to the system and contributes considerably to helium costs savings and minimizes the detrimental influence to the environment.



Single chamber with helium recovery system recycling up to 90% of tracer gas

## Take benefit worldwide network

The ixmation E-Diagnostic tools support customers in the first steps of trouble shooting. The after sales service offers operator trainings for maintenance and trouble shooting for your shop floor crew. The world wide ixmation service network assures that we are always close to our customers.



Testero helium Duo – space saving double face solution for HVACs

## Our Process Portfolio

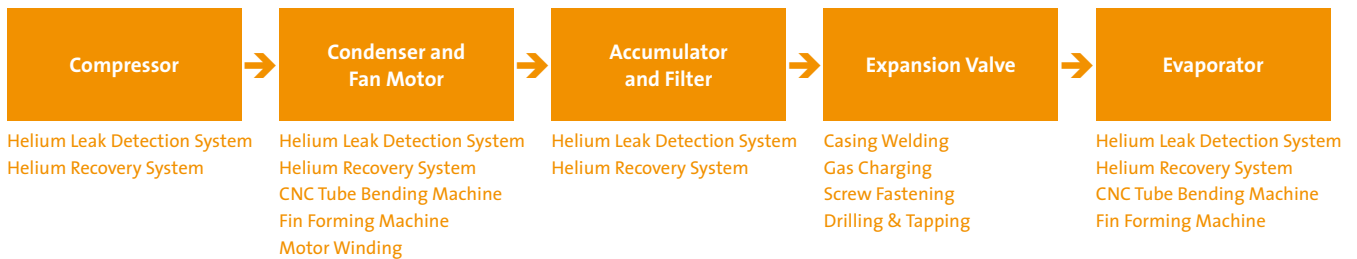
- Tracer gas charging & reclaim
- Tracer gas purity check
- Filling and Dispensing System
- Helium Leak Detection System (HLDS)
- Helium Recovery System
- Helium Sniffing System
- Material Conveying and Handling
- Proof Test System
- Pressure Decay Leak Test System
- Tube Blockage Detection System



Fully Automated HLD-Process Monitoring



Chamber Monitoring



**Test parts**

ixmation testero helium double chamber helium leak detection systems perform leak check on condenser, evaporator, receiver, dryer, compressor, casting parts and etc. The high output of the testing system is based of an integrated conveyor system.

**Test methods**

Air and HLD are the combined common method for gross leak and fine leak tests. ixmation also offers Pressure Decay-Tester, Vacuum Degassing Systems for semiconductor industries and Tube Blockage Detection System for medical and automotive industries. Pressure Fatigue Test Equipment for pipe and hose assembly in automotive industries.

**Experience**

From vast experience in helium mass spectrometers-, vacuum technologies and leak testing equipment ixmation provides technical consulting, engineering production support, after sales and services supporting customers with global projects for industrial HLDS-Systems.



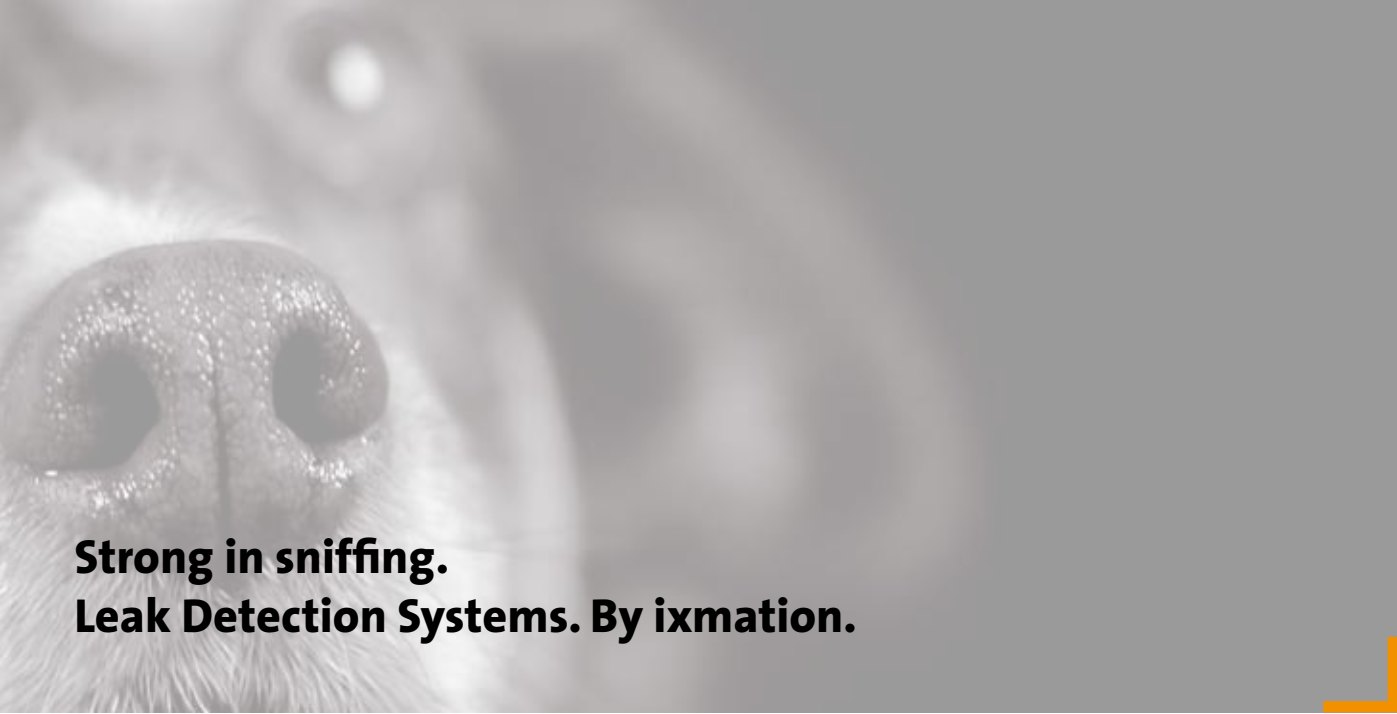
Single Chamber



Double Chamber



Triple Chamber



# Strong in sniffing. Leak Detection Systems. By ixmation.

Test Method		Approximate Leak Detection Ranges													
		10	10 <sup>0</sup>	10 <sup>-1</sup>	10 <sup>-2</sup>	10 <sup>-3</sup>	10 <sup>-4</sup>	10 <sup>-5</sup>	10 <sup>-6</sup>	10 <sup>-7</sup>	10 <sup>-8</sup>	10 <sup>-9</sup>	10 <sup>-10</sup>	10 <sup>-11</sup>	10 <sup>-12</sup>
Helium Leak Test		[Range: 10 to 10 <sup>-12</sup> ]													
Acoustic		[Range: 10 to 10 <sup>-3</sup> ]													
Bubble Testing		[Range: 10 to 10 <sup>-4</sup> ]													
Pressure Decay		[Range: 10 to 10 <sup>-5</sup> ]													
Halogen Sniffer		[Range: 10 <sup>-1</sup> to 10 <sup>-6</sup> ]													
<b>Medical</b>	Pacemakers Catheters														
<b>Research</b>	Nuclear Fusion Particle Accelerators														
<b>Aerospace</b>	Engines Antennas														
<b>Electrical</b>	Bulbs Circuit Breakers														
<b>Semi Conductors</b>	Vacuum Systems Gas lines														
<b>Aircraft</b>	Hydraulic Components Wings														
<b>Food Packaging</b>	Blisters														
<b>Automotive</b>	HVAC Units Die Cast Housings														

Leak rate in Atmosphere: cm<sup>3</sup>/second or mbar.l/s



testero helium for small parts



Helium Sniffing System



Helium Recovery System

**Europe**

**ixmation AG**

info@ixmation.com

www.ixmation.com

**North America**

**ixmation Inc.**

info@ixmation.us

www.ixmation.us

**Malaysia**

**ixmation (Asia) Sdn. Bhd.**

info@ixmation.my

www.ixmation.my

**China**

**ixmation (Suzhou) Co., Ltd.**

info@ixmation.cn

www.ixmation.cn

**ixmation (Tianjin) Co., Ltd.**

tianjin@ixmation.cn

www.ixmation.cn

We can be contacted worldwide through representatives or dedicated branches. Contact us.