

# AUTOMATIC LEAK TESTING ON HEAT EXCHANGER FOR AIR CONDITIONING AND REFRIGERATION



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HeTECH

## INTRODUCTION

Leak test is an essential phase of the production process. Thanks to Marposs' measurement solutions of test and inspection, any security standards and warranties can be guaranteed.

The test is performed by using the technique of the global test by trace gas under vacuum chamber.

The tracing gas is a mixture of helium and nitrogen which can be recovered through an integrated recovery system, this allows to minimize the cost of helium consuming.

## DESCRIPTION

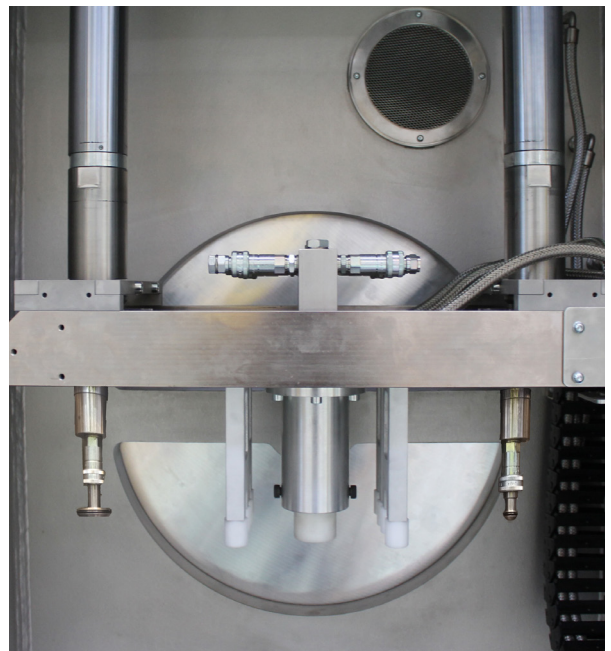
A modular solution provides the required capacity of BHE (Braze Heat Exchanger) production (1, 2 or more test chambers).

The chambers vacuum and analysis systems are shared to improve efficiency and reduce costs. A large range of BHE dimensions can be loaded, an easy & quick retooling for upper and lower coupling device is provided. Traceability is ensured by barcode identifications and automatic test recipe loading; cross checking of BHE model, test input parameters and proper retooling is done thanks to an entrance laser system measuring the BHE height.

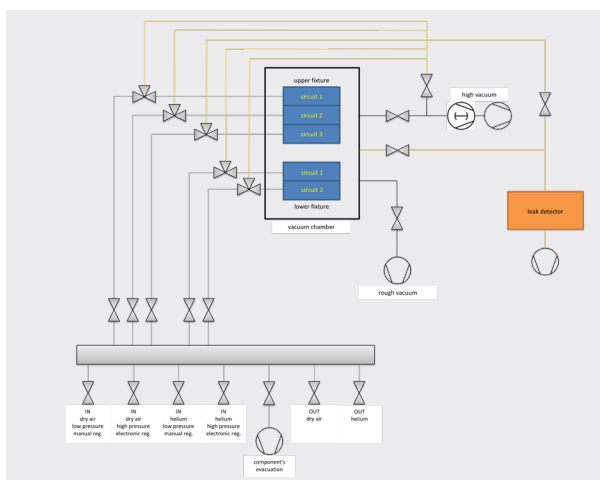


## TECHNICAL SPECIFICATIONS

Component to be tested	Braze Heat Exchangers
Min/max dimensions LxWxH	L: 310mm, 770mm W: 90mm, 300mm H: 15mm, 660mm
Loading and unloading	Manual
Connections	Automatic
Working cycle	Automatic
Principle of measurement	Leak detection through mass spectrometer
Reject threshold	1,3E-05 mbar*/l/sec
Circuits per components	2 / 3 / 5
Min/max Volume one circuit	0,05L, 36L
Leak detection	External / Internal
Air burst test pressure	Up to 100 bar
He leak test pressure	Up to 50 bar



## PROCESS LAYOUT



## MAIN FEATURES

- Modular design – Multiple test chambers – Scalable productivity
- Designed both for pressure test and for leak test of BHE
- Suitable for a wide range of part dimensions, 100% inspection
- Testing up to 5 internal circuits per part
- Reliable detection of external and internal leakages, for a higher efficiency of BHE
- Integrated helium recovery system and production cost saving

**For a full list of address locations, please consult the Marposs official website**

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