



We offer a field testing service for PHEs and shell & tube heat exchangers.



Heat Exchanger Integrity Testing

Why should I do integrity testing?

Integrity testing is a preventative field test used to identify microscopic cracks and material fatigue before they develop into harmful leaks. It offers more robust results with a greater level of detail than other standard testing methods. Ideal for plate heat exchangers (PHEs) and shell and tube models.

Convenient, Quick & Accurate

- No need to fully-drain the unit, remaining water will not affect test results
- No need to open plate packs
- Can be used on hard-to-access units
- Precision sensors pick up any gas discharge in as little as 15 min. per section
- No cleaning or other post-test procedures needed
- The hydrogen-nitrogen mix reveals flaws smaller than liquid can permeate
- The mixture has a lower probability of false positives than other tracer gases
- Automated detection system minimizes possibility of user error
- Identifies type of flaw: micro-crack, corrosion, gasket failure, etc. anywhere within your unit

Safe & Sustainable

- The 5-10% hydrogen-nitrogen mix is non-toxic, non-flammable, and approved for food industry use
- Process does not stress or corrode plates or gaskets
- Hydrogen and nitrogen are sustainable, non-scarce resources which can be used without environmental harm
- No helium needed (helium is a scarce, non-renewable energy source)

Integrity testing vs. other methods

Test Method:	Inspection Range:					
	Plate cracks	Micro cracks >30 µm	Micro cracks <30 µm	Corrosion	Fatigue	External gasket leakage
Water Pressure Test	✓					
Conductivity Test	✓					
Tracer Fluid Test	✓	✓				
Field Dye Test*	✓	✓	✓			
Field Helium Test**	✓	✓	✓			
Alfa Laval Integrity Test	✓	✓	✓	✓	✓	✓

* Introduces substance that requires cleaning of unit after testing.
 ** Requires vacuum and poses risk for background contamination.



Avoid unplanned shutdowns and unexpected downtime.



Avoid damaged product and product loss due to leaks.



Schedule service and maintenance to suit your business needs.



Proactive approach provides confidence in your equipment.



Need help with sizing?
We'll gladly step up to the plate!

KOSS
INDUSTRIAL, INC.

PHE Sizing & Service

Sizing plate heat exchangers? We got this!

In-house expertise

Are your thermodynamic equation skills a little rusty or even non-existent? Let us help! We are an Alfa Laval Master Distributor and our engineers are specially trained to help you find the optimal plate heat exchanger to meet your needs.

- We do sizing in house
- We work with you directly to determine and adjust variables
- We produce and revise quotes quickly
- No third party needed

In general, multiple heat exchanger models will work for a given application. But we take your unique specifications, your process, overall cost to purchase and operate, ease of maintenance, and future scalability into account when finding the optimal solution for you

Service & Maintenance

We have more than four decades of experience servicing, maintaining, reconditioning and repairing sanitary processing equipment and components. Our highly skilled service techs can perform a wide variety of heat exchanger services to keep you running at maximum efficiency.

- Sizing and selection
- Plate packs and gaskets
- Plate punching/cutting
- Regasketing and restreaming
- Documentation
- Modification, service and repair
- Service kits
- Large parts inventory (new and spare)
- Reconditioned stock
- Integrity testing



Our on-staff experts can handle all your PHE sizing, service and maintenance needs.



We proudly use and offer genuine Alfa Laval parts.



Contact us for a details!

1-800-844-6261 or inside.sales@kossindustrial.com