ACOUSTIC LEAK DETECTION

Pinpoint leaking valves without interruption of the production process saving energy and product.

Your challenge
20% of valves are responsible for 80% of internal leakages in a production process. These result in loss of product and increased downtime. Identifying which valve is responsible is a difficult and time consuming task which often relies on guess work when identifying the responsible valve.

Our Solution
Using acoustic emissions stork can quickly identify and quantify leaking valves. This technology measures closed valves whilst the production process can maintain undisturbed.

The results can be accessed quickly and easily, giving insight into your valve situation when needed. Using this information you can make a well-informed choice when selecting and prioritizing maintenance.

How does it work?
Using the Atex zone II certified PDA and measuring equipment a Stork technician measures five points on and around the valve. The measuring equipment uses acoustic emission to detect the vibrations a leak emits to as small as a tenth of liter a minute. The measured data does not only identify but also quantify the data depending on the intensity of the vibrations.

Measurements can be done at a swift pace, independent of brand, type or size. Due to the high speed of detection efficiency can be gained when identifying and quantifying leaking valves making this technology superior to traditional techniques.

How we add value
- Quick insight into which valve is leaking
- No disassembly required
- No loss of productivity
- Quick and easy results
- Focus your maintenance budget where it is needed
- Newest soft- & hardware
- Digital reports accessible 24/7 through online IRIS tool
- No nonsens solution
ACOUSTIC LEAK DETECTION

**Trending**
Besides identifying and quantifying leakages, regularly inspecting valves will create insight into the deterioration patterns of a valve. The software automatically creates a trend report providing clear insight into when to plan preventative maintenance actions. This results in a more effective maintenance plan where preventative maintenance has replaced corrective maintenance reducing downtime and cost resulting from leaking valves.

**Reporting**
The taken measurements are directly stored in the PDA. After measurements have been taken the PDA is linked to a laptop and all results are translated into reports and graphs. Using valve specifics the software can determine if maintenance is needed, a possibility or not required. This results in a clear overview, using a traffic light principle to identify what maintenance is needed. Using the both the overview report and the trending graphs corrective and preventative maintenance can be planned on the valves requiring this.

---

**Overview of measured valves**

The overview creates a clear overview using a traffic light principle to indicate which valves to service and which not. The software determines which valves need maintenance using valve specifics to calculate the intensity of a leak and comparing those to the set tolerances.

**Specifications:**
- Atex zone II
- Brand and type independent
- Lightweight and portable
- Battery driven
- Nondestructive test
- Surrounding temperature must be in the range -20 °C to +50 °C
- Contact temperature must be between -50 °C and +125 °C, higher temperatures require the use of a waveguide

---

**Trend report of a measured valve**

When regularly inspecting valves a trend report is created. The above image shows a leak in period 2 which was repaired before period 3. If comparing patterns it can be expected that in period 6 the valve will leak at the same severity it did in period 2. Using this prediction a preventative maintenance action can be planned minimizing downtime.

**Stork Valve Services:**

- Nederland | T: +31 (0) 88 089 1240 | E: valves.nl@stork.com
- België | T: +32(0) 4 86 13 08 10 | E: valves.be@stork.com

---

Stork Zuidoost Nederland
Business Park Stein 318
6181MC Elsloo

Stork West Nederland
Seggelant-west 7
3237MJ Vierpolders

Stork Noordoost Nederland
Oosterhorn 4
9936HD Farmsum

Stork België
Oosterweelsteenweg 57
2030 Antwerpen

---

WWW.STORK.COM