Can a Risycor be used in any system?

The Risycor corrosion monitor was designed as an early warning in closed heating or cooling systems in mind. However, we often get asked if Risycor would also work in other types of system such as PWC or PWH (drinking water) or cooling tower condenser circuits or industrial cooling circuits for injection moulding machines or welding robots, to mention only a few.

In what system can Risycor measure corrosion rate?

Risycor can be used anywhere as long as its technical limits are not exceeded, even in a fishing pond or on the Eiffel tower in Paris. However, some environments have very high corrosion rates by design, limiting Risycor's usability.

How long will the probe last?

At the tip of the Risycor probe is a pure iron coupon, initially $50\mu m$ thick. The measuring principle detects its loss of mass over time and converts it into a corrosion rate in $\mu m/y$ ear. Experience has shown that well-designed, properly installed, commissioned and maintained closed heating or cooling systems have an AYCR (Average yearly corrosion rate) well below $7\mu m/y$ r, often less than $1\mu m/y$ r, even without any chemical or other treatment (see TT24), just by preventing oxygen ingress. Consequently, the life of the probe in such systems exceeds 10 years. However, with an AYCR of $100\mu m/y$ the probe could be finished in approx. 6 months, and in open systems AYCR can go up much higher, resulting in a short lifetime of the probe.

Can I adjust the alarm threshold?

Yes, the default value of 24µm/yr can be changed via the dashboard to any value.

Does it make sense to install a Risycor in an open system?

Resus can't answer that question for you, but you should ask yourself the following:

- How frequently will I have to replace the probe? Is the cost acceptable?
- If I already know I have high corrosion rates what benefit is there to install a monitor?
- Why do I want to know the corrosion rate if I can't change it anyway? Do I really need to monitor continuously?
- If the corrosion rate is too high, can I do anything about it?
- Do I want to sponsor Resus by frequently replacing probes? :-)

