

Ephyra® optimises and maximises the capacity for existing and new sludge digestion tanks by introducing a flexible plug flow in a civil construction combined with process control.

This technology increases the removal of organic material and biogas production on mesophilic temperature. It makes it possible to reduce the hydraulic retention time resulting in smaller tank volume or an increased capacity of the existing tank.

Ephyra® has better pay back times and relative low investment costs compared to competitive systems.



Visit **royalhaskoningdhv.com/ephyra** for more information

### **Advantages Ephyra®**

Advantages of Ephyra® compared to a WWTP with a traditional sludge digestion concept:

- Enhanced (20% to 30%) biogas production, due to a higher breakdown of sludge
- Lower use of chemicals (polyelectrolyte) for sludge thickening
- Better dewaterability of the digested sludge
- Smaller reactor, due to a higher sludge concentration in the reactors
- Expansion of sludge processing capacity by 50-80% without placing additional reactor volume
- Up to 20% improvement of the total energy balance of the WWTP

#### Get in touch and meet us

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# Ephyra® results

In comparison to a conventional sludge digestion installation, the Ephyra® installation has demonstrated to break down 20% to 30% more organic substance for different sludge types. This results in more sustainable energy in terms of biogas and a lower amount of residual sludge.

Based upon full scale performance results, compact construction, ease-to-operate and a favorable energy balance of the Ephyra®, the payback time will often be only 2 to 5 years.



# **About RoyalHaskoningDHV**

**Royal HaskoningDHV** is an independent, international engineering and project management consultancy with 135 years of experience.

Backed by the expertise and experience of 6,000 colleagues all over the world, our professionals combine global expertise with local knowledge to deliver a multidisciplinary range of consultancy services for the entire living environment in some 150 countries.

By showing leadership in sustainable development and innovation, together with our clients, we are working to become part of the solution to a more sustainable society now and into the future.

