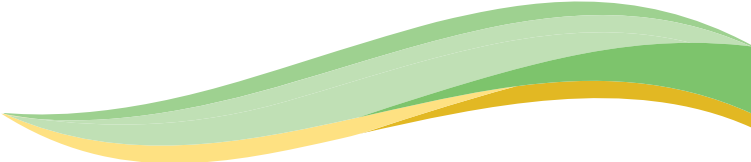


Improve anaerobic digester performance and lower feedstock costs



SUMWIN
INSIGHTS THAT WORK

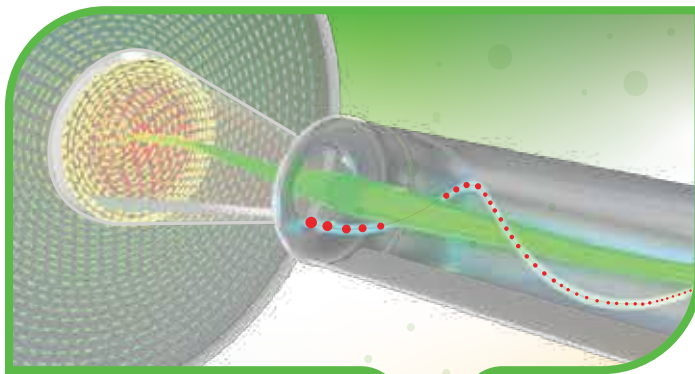
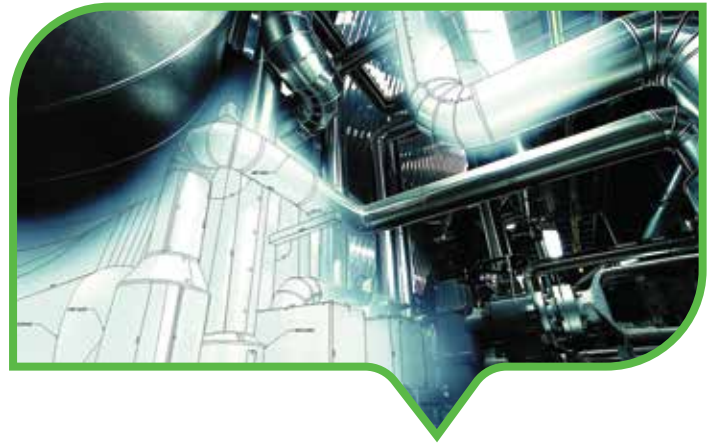


Introducing **VO@AB**® Cavitation

About Us

SUMWIN GLOBAL is an innovative technology company with a proven track record in R&D commercialisation.

The company offers sustainable products and services which deliver outstanding value propositions to the market.



What is **VO@AB**® ?

VoCaB® = **Vortex Based Cavitation for Boosting Biogas**. It is a patented technology without motors or moving parts that can boost biogas production from feedstocks by 10-20%.

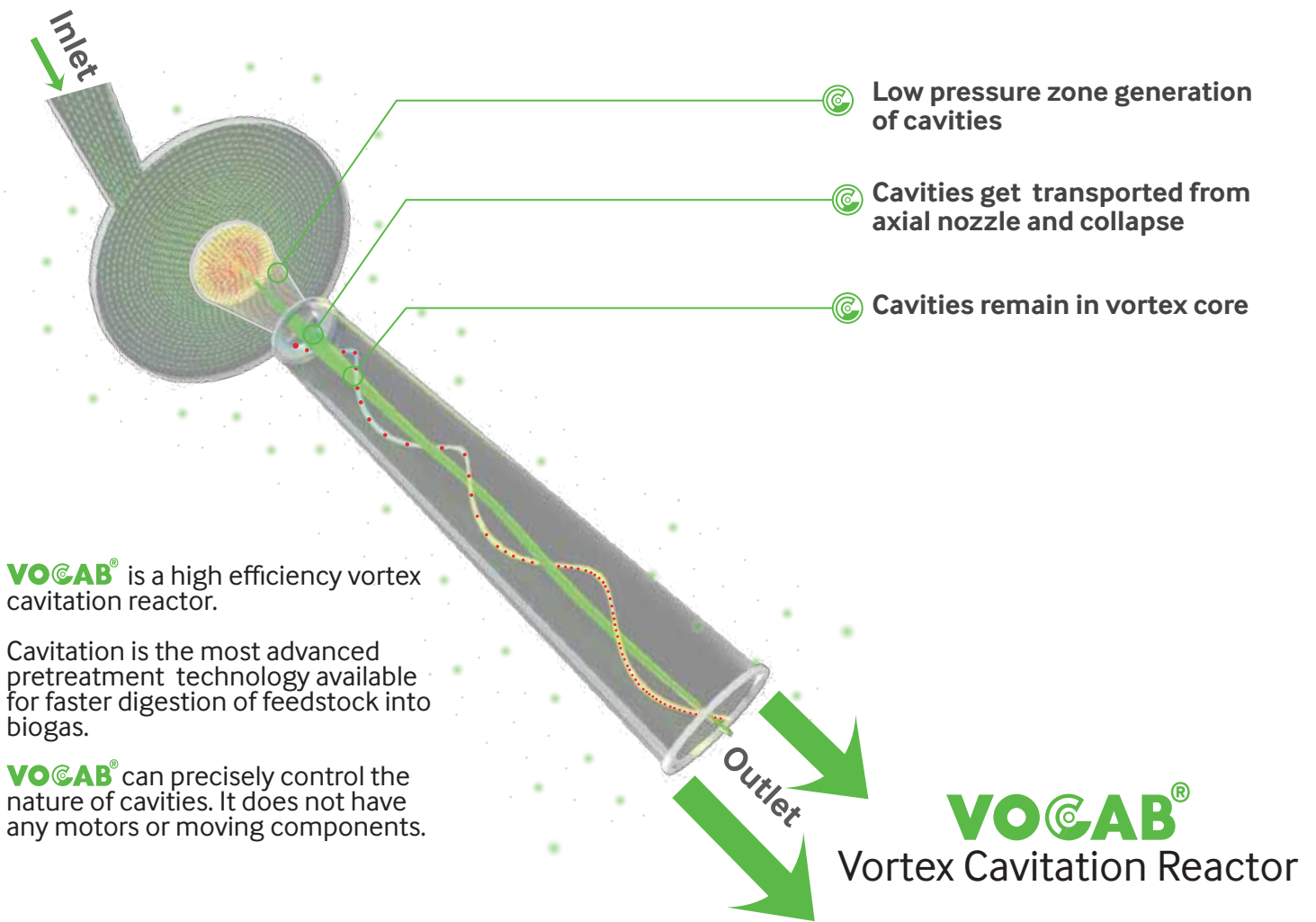
VO@AB® - Language for Boosting Biogas

- Ⓒ Improves digester yield
- Ⓒ Realises more biogas per m³ of feedstock
- Ⓒ Reduces CapEx of new plants by improving process efficiency
- Ⓒ Improves digestate quality
- Ⓒ Easy to install, small footprint
- Ⓒ Lowers digester viscosity for easier mixing and pumping and reduced OpEx



VO@AB® will boost your biogas output by up to 20% at zero cost to you!

VOGAB® Cavitation Pre-Treatment



VOGAB® is a high efficiency vortex cavitation reactor.

Cavitation is the most advanced pretreatment technology available for faster digestion of feedstock into biogas.

VOGAB® can precisely control the nature of cavities. It does not have any motors or moving components.

Key Advantages

SMALL FOOTPRINT

- ☉ In-line fitting, with by-pass

NO COST TO YOU

- ☉ No CapEx.
- ☉ Performance based royalty payments

ROBUST & FLEXIBLE

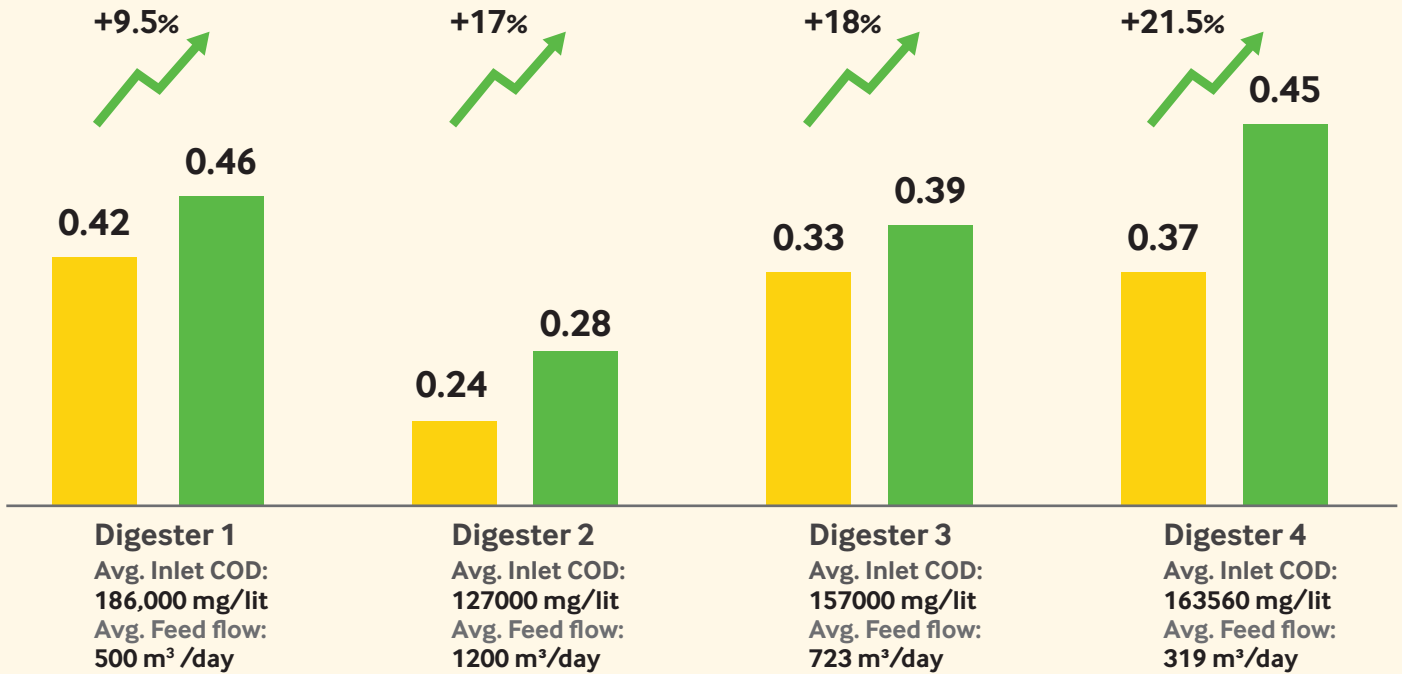
- ☉ Processes a wide range of slurried feedstocks
- ☉ Excellent performance, with no moving parts to block or wear out



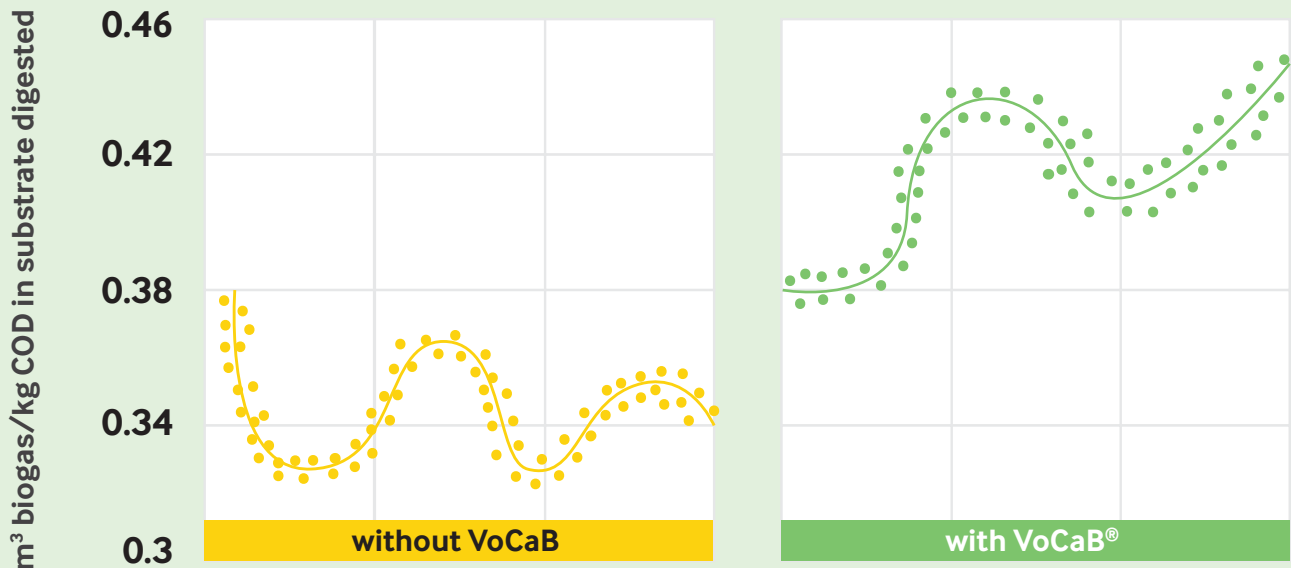
Can be synergistically combined with other technologies.

Consistent Performance Over Multiple Installations

Average Gas Yield Nm³ / kg inlet COD – with and without VoCaB.



Biogester Performance (over 50 days)



Typical comparative measured improvement in plants with and without **VOGAB[®]**

VOCaB® FAQs



How much extra biogas will be produced?

You can expect increased biogas generation of 10 to 20% depending on your system and inputs. Extensive field reports have established that VoCaB® typically enhances biogas production by around 15%.

What kind of inputs does it work on?

VoCaB® works on feedstocks that have been homogenised into a liquid, before pumping into your digester.

How easy is it to install?

VoCaB® is extremely easy to install as it is just an in-line pipe fitting on the pump discharge line going to the Anaerobic Digesters. Installation of VoCaB® involves minimum disruption to the plant.

How quickly will I see results?

Typically you can expect to see increased biogas after just two digester residence cycles.



Will it need special maintenance or training to use it?

No. Once installed VoCaB® requires hardly any maintenance. Any skilled AD plant operator can carry out routine maintenance for VoCaB®.

How much will it cost to install VoCaB®?

Nothing! Sumwin will cover the installation costs of VoCaB® under a royalty model. We absorb the CapEx and installation costs for VoCaB®. In return Sumwin receives a profit share - only on the portion of additional biogas generated and profit achieved due to VoCaB®.



Get in touch to
arrange a plant trial at
no financial risk to you !

VOCAB[®]
LANGUAGE FOR BOOSTING BIOGAS



Increase
biogas
production
and/or reduce
feedstock
costs

Improve
your
digester
efficiency

Enhance
substrate
mixing &
pumping

Optimise
your
digester
performance



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