Kalabas

Build For The Water You've Got

Delivering Utility-Scale Water Treatment
Fast, Affordable, Modular.

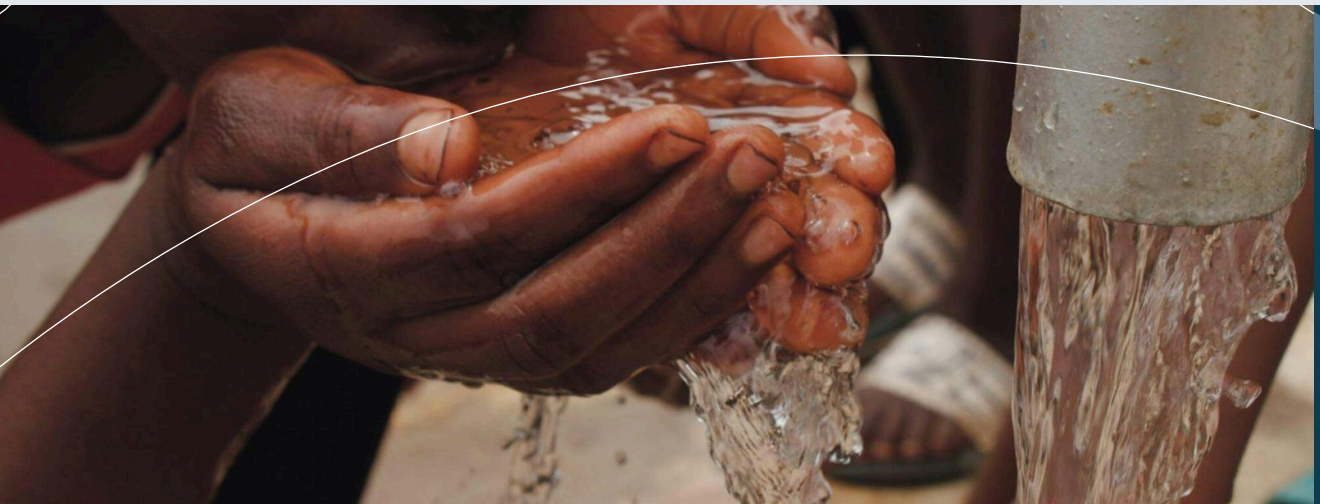
THE **CHALLENGE** WITH TRADITIONAL PLANTS

Fragmentation creates complexity

In traditional water treatment plants, each process stage is typically delivered as a separate structure. Dosing, grit removal, sedimentation, flocculation, flotation, filtration, and disinfection are often spread across multiple tanks, foundations, and pipe networks.

Each additional structure introduces:

- A separate design and procurement cycle
- Additional construction interfaces
- Advanced Dissolved Air Flotation (DAF) achieving 98–99% NTU removal efficiency — even under high-load conditions.
- New risk and cost centres



KALABAS
DESIGNED FOR SCALE

A Shift From Bespoke Builds To Repeatable Systems

A shift in infrastructure philosophy

Instead of designing bespoke systems for every site, Kalabas integrates multiple treatment stages into a single engineered module. This marks a move away from assembling individual process units on site toward deploying repeatable, integrated infrastructure.

Operating Variable	Kalabas	Conventional Plant
Energy use	< 50 kW/ML	100–150 kW/ML
Chemical use	~50% less coagulant	Standard dosing
Water loss	< 5%	10–15%
Equipment count	±75% fewer parts	Full complement
Operation mode	Automated	Manual/semi-manual

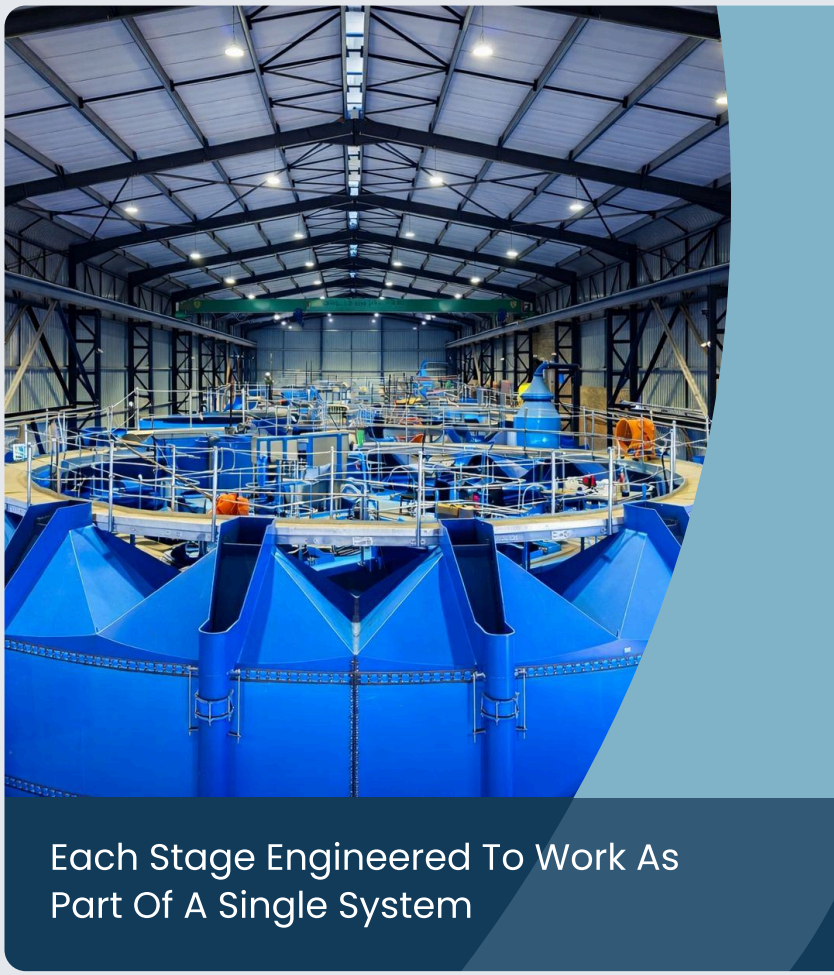
The focus shifts from managing many independent assets to operating a unified system designed for consistency, reliability, and long term performance.

SEVEN
INTEGRATED STAGES

One module. Seven integrated treatment stages.

The Kalabas modular system integrates the following treatment stages within a single engineered structure:

1. Dosing
2. De-gritting
3. Desilting
4. Flocculation
5. Flotation
   (DAF – Dissolved Air Flotation)
6. Filtration
7. Disinfection



Each Stage Engineered To Work As Part Of A Single System

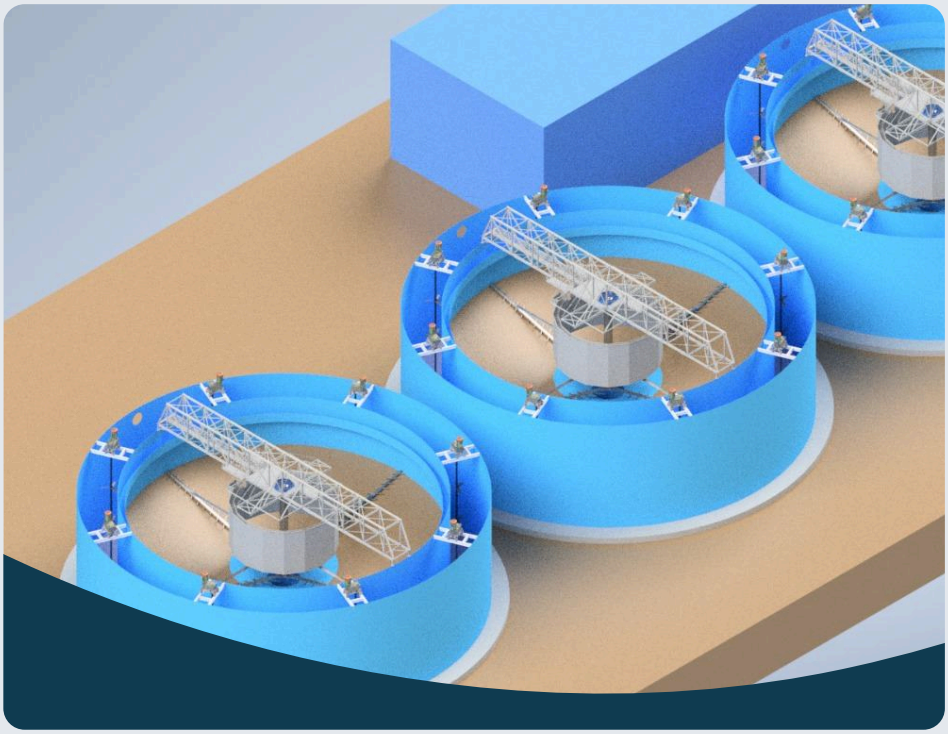
By consolidating these stages into one module, Kalabas removes the need for multiple standalone process units and the complex interconnections between them.

The result is a reduced footprint, simplified process control, and a more coherent treatment system.

REDUCING STRUCTURAL AND DELIVERY COMPLEXITY

Fewer structures. Fewer interfaces. Lower risk.

What conventionally requires four to five separate structures can be delivered as a single integrated module.



This eliminates the need for:

- Dedicated sediment removal tanks
- Separate flocculation chambers
- Multiple structural foundations
- Complex interconnecting piping

By reducing the number of physical assets and interfaces, Kalabas helps lower construction risk, shorten delivery timelines, and simplify commissioning and long-term operation.

DESIGNED FOR LONG-TERM OUTCOMES

Built for repeatability, scalability, and performance

Kalabas modular systems are designed to support long-term infrastructure outcomes rather than one-off project delivery.

The integrated approach enables:

- Repeatable deployment across multiple sites
- Scalable capacity without full plant redesign
- Clearer alignment between technical, operational, and financial considerations

CONTACT US

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