



**Glanua Mobile Water  
Treatment Solutions**

**Design • Build • Operate • Optimise**

**Glanua**  
For a cleaner planet



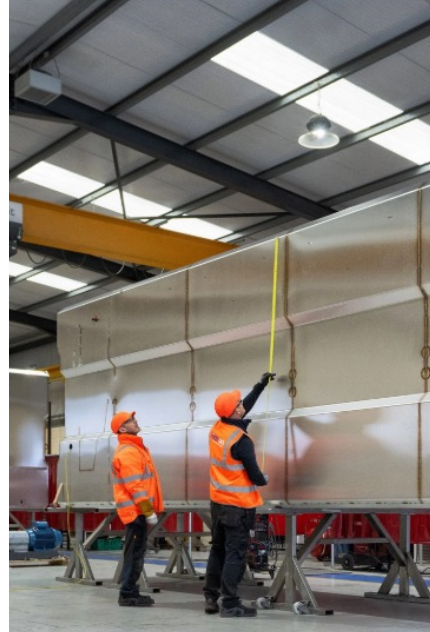
# Glanua Mobile Water Treatment Solutions

Water utilities and industrial operators are under increasing pressure to deliver safe, compliant water within a rapidly evolving operating environment.

## Key Challenges Include:

- Stricter regulatory compliance requirements for turbidity, colour, TOC and disinfection by-product control
- Water scarcity and climate variability, resulting in fluctuating raw water quality and demand peaks
- Ageing infrastructure and limited network storage, increasing the risk of service interruption
- The need for improved operational efficiency, reduced capital expenditure and accelerated project delivery
- Constraints on space, programme and carbon associated with traditional civils-heavy construction

Conventional fixed infrastructure often lacks the flexibility, speed and resilience required to respond effectively to these challenges.



## The Solution

Glanua Mobile Water Treatment Solutions are fully modular treatment systems engineered to deliver rapid, reliable and compliant water treatment, even for the most challenging raw water sources.

Based on proven technologies including Dissolved Air Flotation (DAF), Adsorption Clarification (AC) and Rapid Gravity Filtration (RGF), these systems provide complete end-to-end treatment capability from coagulation and clarification through to final filtration.

## Key features:

### Efficient Treatment

Tailored process design based on feed water characteristics delivers high treatment performance while minimising energy, chemical consumption and operational costs.

### Durable Design and Build

Robust, corrosion-resistant stainless steel construction engineered for harsh outdoor environments and long service life.

### Modular for Easy Integration

Skid-mounted modular units allow rapid installation, phased expansion and seamless integration alongside existing assets.

### Flexible Installation Options

Designed for outdoor installation with appropriate corrosion protection and weather-proofing, or indoor installation within new or existing buildings, providing maximum flexibility to suit site constraints.

### Fully Automated Operation

Integrated PLC control, alarms and SCADA compatibility support stable, low-intervention operation.

### Rapid Deployment

Off-site fabrication and testing enables mobilisation, installation and commissioning in weeks rather than months.

### Mobility and Re-use

The modular and mobile nature of the systems allows relocation, redeployment and re-use across multiple sites, maximising asset value.

# Why Choose Glanua

## Industry-Proven Performance

Successfully deployed on live sites, maintaining uninterrupted supply during major upgrades and permanent installations.

Glanua Mobile Water Treatment Solutions provide a flexible, resilient and future-ready approach to water treatment delivery, ensuring compliance, continuity of supply and confidence in even the most challenging operating conditions.



## Key Benefits of Glanua Mobile Wastewater Treatment Solutions

- Consistently achieves low turbidity and high levels of organic removal, ensuring compliant drinking or process water
- Multiple configurations and combinations available to suit raw water quality and site constraints
- Reduced operational and maintenance costs through efficient process design and automation
- Enhanced reliability during adverse raw water events
- Supports regulatory compliance and reporting requirements
- Reduced programme risk through off-site manufacture and minimal site works
- Lower carbon impact compared to traditional construction through reduced concrete use and reusability

## Typical Applications:

- Municipal Water Treatment Plants
- Temporary, emergency or permanent capacity support during upgrades or demand growth
- Industrial Water Treatment Systems
- Process water treatment, resilience support and compliance-driven upgrades
- Emergency and Resilience Deployment
- Rapid response to raw water deterioration, boil water notices, THM formation issues or asset failures

## Designed to Meet Water Industry Standards:

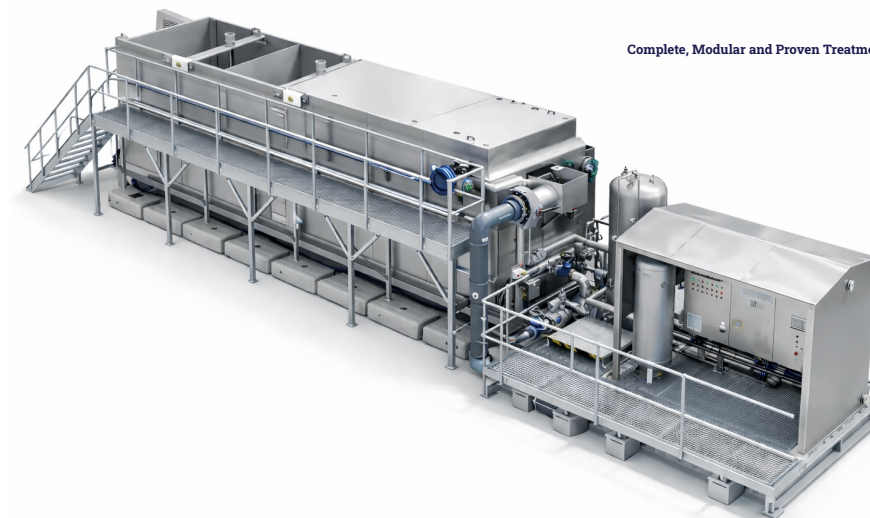
- Engineered to meet stringent drinking water regulations, ensuring full compliance with national and EU environmental standards including WRAS and DWI
- Designed and monitored in compliance with European Union Drinking Water Regulations 2014 (SI 122)
- Incorporates advanced monitoring, control, and automation systems (SCADA/telemetry) to provide real-time performance tracking and auditable compliance reporting
- Designed in line with best practice process engineering and MEICA standards, ensuring safe, efficient, and robust system performance across all operating conditions
- Supports Environmental and Health Executive reporting requirements through integrated data capture, early warning systems, and automated reporting tools
- Utilises proven and industry-recognised treatment technologies to deliver reliable removal of contaminants and consistent water quality
- Enables process optimisation and continuous improvement through data-driven insights, ensuring ongoing compliance and performance efficiency
- Designed to align with sustainability and circular economy principles, supporting water reuse, reduced emissions, and long-term environmental protection

## DAF Series- Dissolved Air Flotation Pre-Treatment Systems

### Technical Overview:

The Glanua DAF Series utilises proven Dissolved Air Flotation technology combined with controlled coagulation and flocculation to remove high levels of organics, algae and low-density solids from surface waters. The system is specifically designed for raw waters with high organic loadings and provides an effective pre-treatment stage ahead of final filtration.

The DAF Series can operate as a standalone clarification process or be paired with Glanua F Series filtration units to form higher-capacity treatment solutions.



### Operating Range:

- Suitable for raw water organic loadings of up to 15 mg/l TOC and solids loadings of up to 25 NTU
- System flows from 25 to 100 m<sup>3</sup>/h, with modular configurations available

Model	No. of Cells	Rated Flow (m <sup>3</sup> /hr)	Approximate Footprint	
			Length (m)	Width (m)
DAFF25	1	25 m <sup>3</sup> /hr	12.0 m	2.4 m
DAFF50	1	50 m <sup>3</sup> /hr	15.0 m	2.4 m
DAFF75	1	75 m <sup>3</sup> /hr	16.0 m	2.6 m
DAFF100	1	100 m <sup>3</sup> /hr	18.5 m	2.6 m

\*Clients should contact Glanua to discuss specific flow requirements and system sizing options.

### Key Technical Features:

- High-rate dissolved air flotation clarification process
- Inlet flow measurement with automated feed control
- Raw water monitoring including turbidity, pH and UVT, tailored to client requirements
- Chemical injection options for acid, alkaline and coagulant dosing with static mixing
- Dual-stage mechanical flocculation chambers with 20-minute retention time
- Integrated whitewater generation and recirculation system
- DAF sludge collection and pumping system
- Clarified water monitoring including turbidity and pH
- Fully integrated on-board control system compatible with Glanua chemical dosing systems

### Typical Applications:

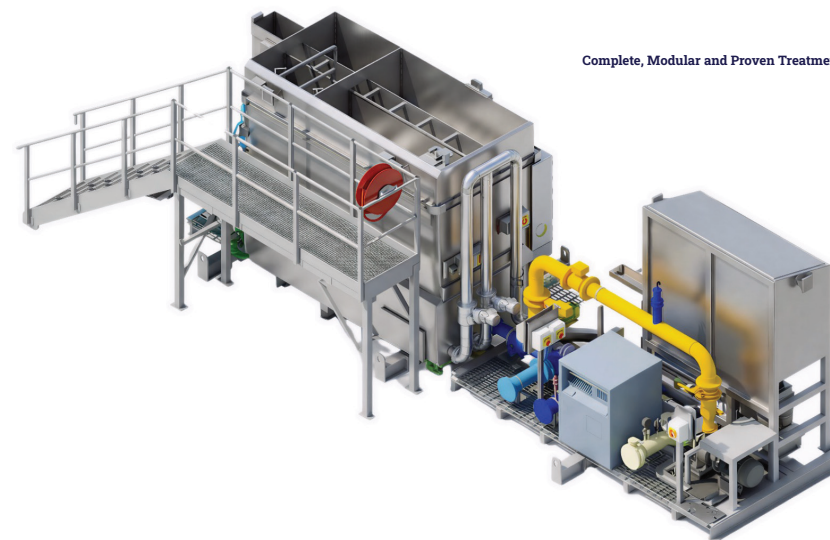
- High-organic surface water treatment
- Algae-rich raw water sources
- Pre-treatment upstream of filtration systems
- Temporary, emergency or resilience deployment

## AC Series - Adsorption Clarifier Pre-Treatment Systems

### Technical Overview:

The Glanua AC Series utilises contact coagulation and adsorption clarification to remove turbidity and moderate levels of organic content from raw water. Chemically conditioned water flows upward through a granular adsorption bed, providing effective solids and organic capture prior to downstream filtration.

The AC Series is well suited to variable but moderately loaded raw water sources and can be paired with Glanua F Series filtration units to form complete treatment solutions.



### Operating Range:

- Suitable for raw water organic loadings of up to 7 mg/l TOC and solids loadings of up to 20 NTU
- System flows from 50 to 200 m<sup>3</sup>/h, depending on raw water quality and treatment configuration

Model	No. of Cells	Rated Flow (m <sup>3</sup> /hr)	Approximate Footprint	
			Length (m)	Width (m)
AC50	1	50 m <sup>3</sup> /hr	5.7 m	2.2 m
AC100	1	100 m <sup>3</sup> /hr	6.8 m	2.2 m
AC150	2	150 m <sup>3</sup> /hr	7.2 m	2.6 m
AC200	2	200 m <sup>3</sup> /hr	8.2 m	2.6 m

\*Clients are encouraged to contact Glanua to assess sizing requirements and modular configuration options.

### Key Technical Features:

- Contact coagulation and adsorption clarification process
- Inlet flow measurement with automated feed control
- Raw water monitoring including turbidity, pH and UVT
- Chemical injection options for acid, alkaline and coagulant dosing with static mixing
- Granular adsorption clarification bed with integrated backflush system
- Clarified water monitoring including turbidity and pH
- Fully integrated on-board control system compatible with Glanua chemical dosing systems

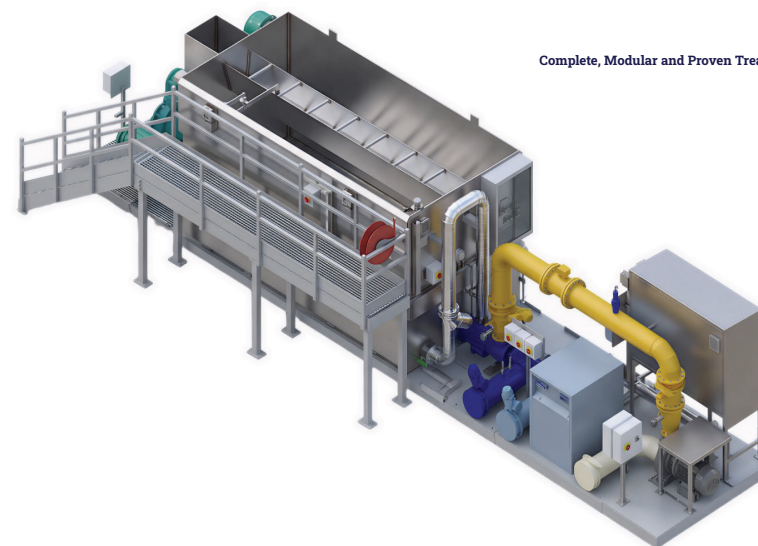
### Typical Applications:

- Surface water sources with moderate organic and turbidity loading
- Variable raw water conditions requiring stable performance
- Compact pre-treatment systems for municipal and industrial supplies
- Temporary or permanent treatment capacity increases

## F Series - Rapid Gravity Filtration Systems

### Technical Overview:

The Glanua F Series utilises proven Rapid Gravity Filtration technology to provide final-stage polishing for potable or process water treatment applications. Units can be installed as standalone filtration systems or integrated with Glanua DAF or AC Series processes to form complete clarification and filtration solutions.



### Operating Range:

- Suitable for influent water with turbidity of less than 1 NTU
- System flows from 50 to 400 m<sup>3</sup>/h, with scalability achieved through modular and parallel arrangements

Model	No. of Cells	Rated Flow (m <sup>3</sup> /hr)	Approximate Footprint	
			Length (m)	Width (m)
F50	1	50 m <sup>3</sup> /hr	10.0 m	2.6 m
F75	1	75 m <sup>3</sup> /hr	11.2 m	2.6 m
F100	1	100 m <sup>3</sup> /hr	12.5 m	2.6 m
F200	2	200 m <sup>3</sup> /hr	9.5 m	7.0 m
F300	3	300 m <sup>3</sup> /hr	13.5 m	7.0 m
F400	4	400 m <sup>3</sup> /hr	15.0 m	7.5 m

\*Clients should contact Glanua to define final system sizing based on treated water requirements.

### Key Technical features:

- Rapid gravity filtration with suspended plenum floor and filter nozzle system
- Single-media or dual-media filtration configurations
- Constant head, constant level filter control for steady performance
- Fully automated backwash system incorporating air scour and water wash
- Final treated water monitoring including turbidity, pH and UVT
- Fully integrated on-board control system

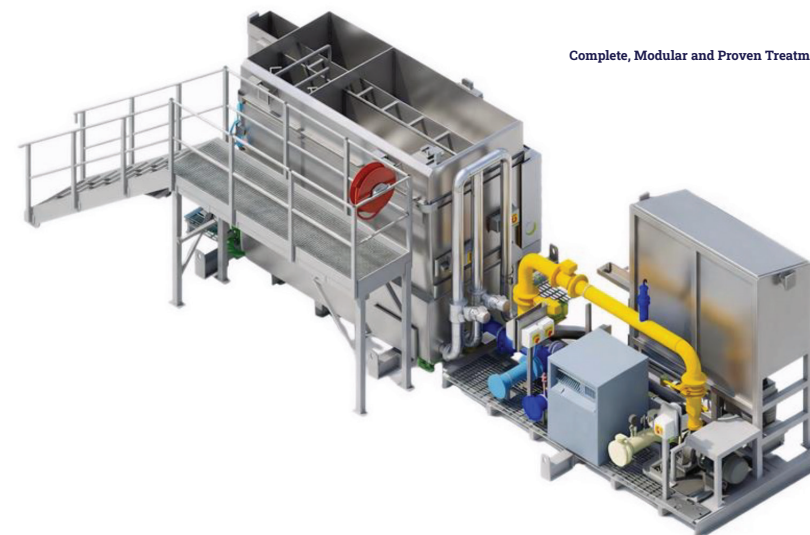
### Typical Applications:

- Final polishing of clarified water or filtration of high-quality groundwater sources
- Capacity upgrades to existing treatment plants
- Standalone filtration for new or upgraded sites
- Permanent or temporary supplemental filtration capacity

## ACF Series - Adsorption Clarifier and Filtration Systems

### Technical Overview:

The Glanua ACF Series combines adsorption clarification with rapid gravity filtration to provide a compact, fully integrated potable water treatment system. Following clarification, water is polished through a dual-media filter to achieve consistent treated water quality.



### Operating Range:

- Suitable for raw water organic loadings of up to 7 mg/l TOC and solids loadings of up to 20 NTU
- System flows from 25 to 50 m<sup>3</sup>/h, with adaptable configurations available

Model	No. of Cells	Rated Flow (m <sup>3</sup> /hr)	Approximate Footprint	
			Length (m)	Width (m)
ACF25	1	25 m <sup>3</sup> /hr	8.3 m	2.2 m
ACF50	1	50 m <sup>3</sup> /hr	10.2 m	2.6 m
ACF75	1	300 m <sup>3</sup> /hr	13.5 m	2.6 m
ACF100	1	400 m <sup>3</sup> /hr	20.2 m	2.6 m

\*Clients should contact Glanua to discuss bespoke sizing and integration options.

### Key Technical features:

- Complete treatment system including coagulation, clarification and filtration
- Granular adsorption clarification bed with backflush capability
- Dual-media rapid gravity filtration with automated backwash
- Comprehensive water quality monitoring throughout the process
- Fully integrated on-board control system compatible with Glanua chemical dosing systems

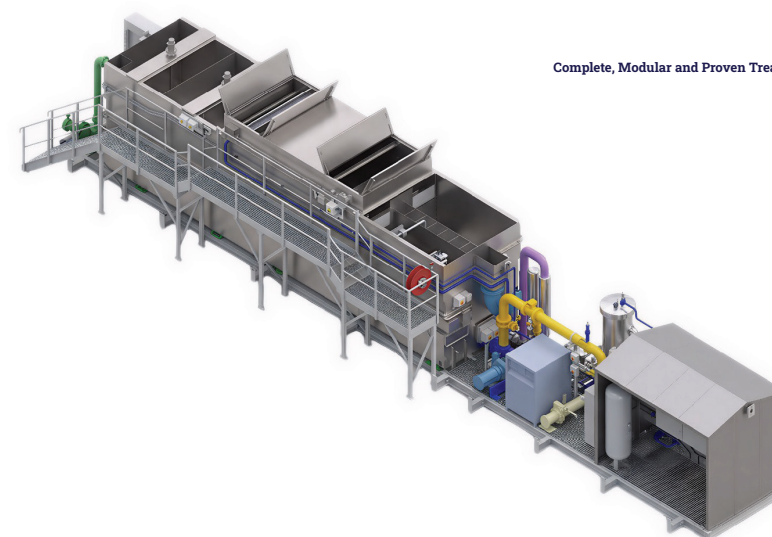
### Typical Applications:

- Small to medium potable water supplies
- Compact fully integrated treatment systems
- Groundwater sources with periodic surface water influence
- Temporary or permanent capacity augmentation

## DAFF Series Dissolved Air Flotation and Filtration Systems

### Technical Overview:

The Glanua DAFF Series provides a fully integrated end-to-end water treatment solution by combining Dissolved Air Flotation clarification with rapid gravity filtration in a single modular system. It is designed to treat high-organic surface waters and deliver a high-quality potable water output.



### Operating Range:

- Suitable for raw water organic loadings of up to 15 mg/l TOC and solids loadings of up to 25 NTU
- System flows from 25 to 100 m<sup>3</sup>/h, with flexibility to configure multiple units or integrate additional DAFF units

Model	No. of Cells	Rated Flow (m <sup>3</sup> /hr)	Approximate Footprint	
			Length (m)	Width (m)
DAFF25	1	25 m <sup>3</sup> /hr	15.0 m	2.6 m
DAFF50	1	50 m <sup>3</sup> /hr	20.2 m	2.6 m
DAFF75	1	75 m <sup>3</sup> /hr	23.5 m	2.6 m
DAFF100	1	100 m <sup>3</sup> /hr	28.5 m	2.6 m

\*Clients should contact Glanua to discuss bespoke sizing and integration options.

### Key Technical features:

- Complete treatment train including coagulation, flocculation, clarification and filtration
- Dual-stage mechanical flocculation chambers with 20-minute retention time
- Dissolved air flotation clarifier with whitewater recirculation system
- Final-stage dual-media rapid gravity filtration in separate cell to DAF
- Fully automated filter backwash system
- Comprehensive raw, clarified and final water monitoring
- Fully integrated on-board control system compatible with Glanua chemical dosing systems

### Typical Applications:

- Potable water treatment from high-organic surface water sources
- Replacement of conventional clarification and filtration systems
- Maintaining supply during live treatment plant upgrades
- Compact treatment solutions for constrained sites

## Chemical Dosing Cabinet

### The Challenge:

Water and wastewater operators face increasing pressure to maintain precise chemical-dosing accuracy while ensuring safety, regulatory compliance, and system reliability. Incorrect dosing can lead to process inefficiencies, equipment damage, and non-compliance with statutory water-quality standards. Harsh operating environments, chemical corrosion, and restricted space demand robust and compact dosing solutions.

### The Solution:

Glanua Chemical Dosing Systems provide a pre-engineered, fully enclosed dosing solution designed for safe, accurate, and reliable chemical dosing. The cabinet integrates pumps, pipework, bunding, controls, and instrumentation into a compact, secure and easy-to-maintain package.

### Technical Overview:

- **Precision Dosing Performance:**  
Ensures consistent and accurate chemical delivery while minimizing overdosing costs
- **Durable, Corrosion-Resistant Construction:**  
Built using chemical-resistant plastics for harsh operational environments
- **Fully Bunded Design for Safety:**  
Provides safe chemical containment and environmental compliance
- **Modular and Customisable:**  
Options for multiple pumps, duty/standby, instrumentation, and SCADA integration
- **Secure and Operator-Friendly:**  
Clear internal layouts and optional lighting



### Key Technical features:

- Enhances water quality and dosing accuracy
- Improves operator safety and reduces spill risk
- Reduces operational costs through reliable, low-maintenance design
- Supports environmental and industry regulatory compliance
- Simplifies installation with a pre-assembled, plug-and-play cabinet

### Typical Applications:

- Municipal water treatment plants
- Wastewater treatment facilities
- Industrial process water systems
- Sludge dewatering applications

### Operating Ranges & Configurations:

- Operating flow ranges from 7.5 – 940 l/hr
- Diaphragm or Peristaltic Pumps available deepening on client needs
- Duty/Standby & Duty/Duty/Standby Configurations available
- Cabinet Construction from Polypropylene or Stainless Steel 304/316 on request
- Pipework available in various materials depending on application chemical
- Calibration pots & priming systems
- Pressure relief and pressure sustaining valves
- Digital flow monitoring available on request
- Drip tray and bund return connection for environmental protection (bund alarm available as option)
- Sliding door splash protection guarding
- Full safety signing and hazardous chemical signage tailored to application
- Power & Controls brought back to client terminals external to cabinet

For a  
cleaner  
planet



**Our commitment as a complete solutions provider**

At Glanua, we are dedicated to transforming water and wastewater infrastructure with technical excellence, environmental stewardship and innovative thinking to build a cleaner planet.

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