

# HYDROFLUX

industrial

 **HyDAF**

DISOLVED AIR  
FLOTATION SYSTEMS  
HYBRID GT RANGE



## A unique hybrid wastewater treatment system for shopping centres and food courts...

- ▼ The Hydroflux GT-DAF system is designed to be installed in any commercial or retail premises that would otherwise use one or multiple grease traps.



- ▼ The treated wastewater is suitable for a compliant and low cost discharge to most sewer systems. The wastewater can also be further treated and reused within the complex.

## Avoid costly pipe blockages...

- For many decades, grease traps have been installed to treat wastewater from commercial kitchens and over this time the design has hardly changed. Unfortunately the oils and detergents have leaving the grease trap outdated and lacking in performance.



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## Install a Hybrid GT-DAF...

- Many thousands of dollars are spent every year unblocking pipe work discharging from commercial premises due to greasy wastewater.

Installation of a Hydroflux hybrid GT-DAF can result in the removal of over 90% of the total grease in the wastewater to be removed eliminating costly blockages.

COMPACT AND DESIGNED FOR URBAN COMPLEXES



## The only Hybrid DAF system designed exclusively for retail

### ▼ SCRAPER<sup>1</sup>

The GT-DAF Scraper is a heavy duty, low maintenance roller chain system with multiple blades that minimises the water content in the removed float.

### ▼ ENCLOSURE<sup>2</sup>

The scraper system is fully enclosed and facilitates odour control and extraction and contains all wash-water overspray with a completely clean smooth exterior.

### ▼ BEARINGS<sup>3</sup>

Externally mounted bearings that allow maintenance without removal of guards.



### ▼ INLET<sup>4 5</sup>

The inlet comprises a sealed inspection opening and overflow to ensure inlet water does not back up in drainage pipework.

Wastewater flows into the primary inlet chamber where grease and solids separate under gravity in the gross grease separation zone prior to the dissolved air injection zone.

### ▼ DISSOLVED AIR<sup>6</sup>

Dissolved air is injected after the gross grease separation zone in the GT-DAF.

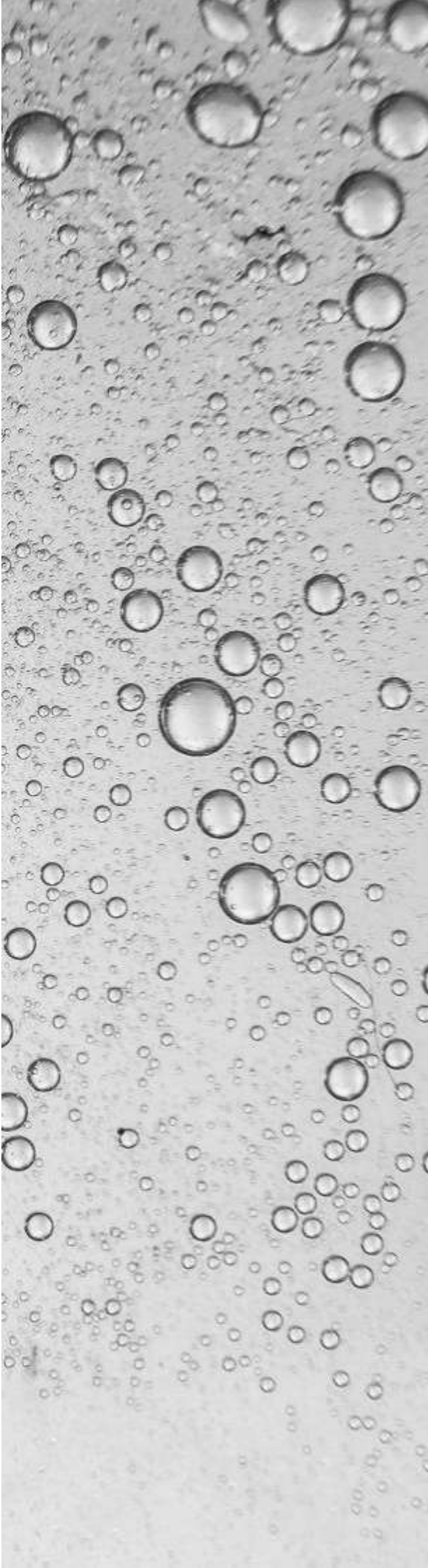
This feature reduces the amount of dissolved air required, thus reducing the power requirements and the overall size of the GT-DAF.

Treated wastewater from connection 8 is used to create the dissolved air stream.

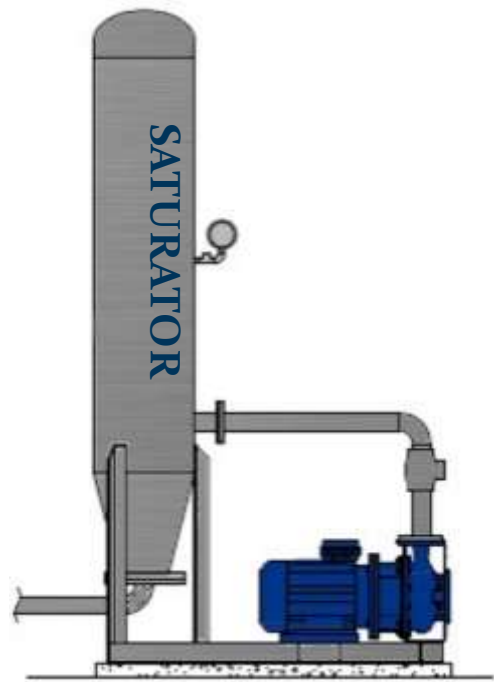
### ▼ SLUDGE<sup>7</sup>

Sludge is scraped from the surface of the GT-DAF into the sludge hopper 7 from where it is pumped or gravity flows to a sludge storage tank for disposal.

Sludge collected in the base of the unit 9 can also be pumped to the sludge tank or removed by tanker.



**High efficiency, low power and extremely small air bubbles for maximum performance.**



- ▶ A recycle stream of treated effluent is taken from the discharge end of the GT-DAF and is pressurised to 450 kPa.

This pressurised flow is injected into a specially designed Hydroflux dissolved air saturator. Air is added to the saturator to maintain a “headspace” which acts to provide contact between the air and the treated effluent and it is here that air is dissolved into the recycle stream.

To precipitate the dissolved air back into the effluent as microscopic air bubbles, the pressure is relieved through a unique pressure regulating valve. This promotes perfectly sized microscopic bubbles to maximise performance.

So simple, compact and effective

- ▶ The GT DAF system is designed for use in shopping centres and food courts
  - The system is at least 30% smaller than traditional DAF systems.
  - The recycle pump uses less than half the power of standard DAF systems resulting in significant operating cost savings.
  - A submerged high level inlet with overflow ensures that upstream pipework will not flood.
  - A specially designed hopper base to allow automatic de-sludging of the system without full draining is available.
  - Designed with solid guarding to prevent splashing during clean down and to contain odours.
  - Unique integrated demulsification process can be installed to enhance grease removal. Non hazardous chemicals are supplied in 15L pails, so no bulk deliveries are required.
  - Fully internally welded stainless steel construction.



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## We know that every plant is different...

- ▶ The location and logistics of wastewater treatment and the associated sludge handling and disposal can be quite different.

The Hybrid GT-DAF system is the hardware of the wastewater treatment plant, but it is surrounded by expertly designed ancillary components that ensure the overall treatment system is simple to operate and maintain whilst achieving optimum performance.

Whether the GT-DAF is being installed in a new facility or being used for upgrading existing grease trap systems, we will always recommend and provide the complete and ideal solution.

Our engineers have installed hundreds of DAF systems and have invaluable design and operating experience that will ensure that your system is designed specifically for your facility.





## More than a Hybrid DAF...

▼ The complete greasy wastewater treatment system comprises more than just the Hybrid GT-DAF system. Consideration is given to:

- Sludge storage is typically in a self cleaning agitated tank to suit disposal vehicles capacity is supplied.
- Treated water transfer pumps stations are often required when the system is below the sewer grade.
- Immediate access for waste sludge disposal vehicles is not always possible where the GT-DAF is located, so we have developed a unique self cleaning sludge disposal system that can allow sludge disposal to occur some distance from the treatment plant.
- Hot water is used for intermittent and automatic flushing and cleaning of the various components of the treatment plant to prevent a build up of grease.



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## Designed and manufactured in Australia



Model	Capacity	L (mm)	B (mm)	H (mm)
GT-10	10 kL/hr	2600	1200	1000
GT-30	30 kL/hr	2900	1700	1375
GT-60	60 kL/hr	4950	2200	1375
GT-100	100 kL/hr	6500	2500	1450

- ▶ The range of GT-DAF capacities are compact and designed to treat wastewater from Australia's largest commercial complexes.



- Engaging a professional wastewater treatment company to look after the entire wastewater project is a convenient, economical and hassle free option for industry.

Hydroflux Industrial can provide all process design works, manufacture and fabrication, construction and even complete operation of your wastewater treatment plant.

When Hydroflux Industrial provides complete solutions, we can either undertake a contract on a turnkey basis or work together with building services engineers and other construction professionals to ensure that the project is delivered smoothly, without interruption and on time.



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Hydroflux Industrial is GRS Certified to the following standards

### ISO 45001 SAFETY MANAGEMENT SYSTEM



Certificate Number: 47714001610008

### ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEM



Certificate Number: 47745001610008

### ISO 31000 RISK MANAGEMENT SYSTEMS



Certificate Number: 477310006176001