



# AHIGF

## Advanced Horizontal Induced Gas Flotation Unit

### Fully configurable state-of-the-art gas flotation system

Building on the foundation of our advanced degasser technology, the AHIGF represents the most flexible and current state-of-the-art gas flotation design currently on the market. The technology has been designed to ensure that it delivers the fundamental requirements of a gas flotation system but also offers a solution to applications where more traditional technologies struggle to perform. The AHIGF can be used in traditional onshore environments or for offshore applications (including floating facilities); different elements of the design are adjusted to best suit the conditions. Integrated pre-deoiling stages can be incorporated into the design to handle oil loadings that are in excess of what a typical IGF can sensibly manage. As with the majority of NOV's produced water technologies, the system can be retrospectively applied to existing units, converting simple horizontal vessels or weak IGF designs into a true high-performance asset.

#### Benefits:

- Fully configurable design engineered to meet the application, not a standard/rule-of-thumb approach.
- Suitable for floating facilities - ideal for very large flows when a vertical flotation unit becomes unattractive.
- Fully retrofittable to any horizontal vessel.
- Internals are inherently fouling resistant, offering much greater resilience compared to matrix packs, fiber coalescers, or perforated baffles.
- Ejectors are high performance bubble generators and non-fouling.
- Performance is well described by our flotation model.

#### Design specifications

Parameter	Value (per unit)
Flow capacity (per unit)	<10-2300 m <sup>3</sup> /h
Typical max. inlet OiW concentration (deoiling/polishing)	2000 ppmv/100 ppmv
Typical outlet concentration (deoiling/polishing)	100-200 ppmv/<10 ppmv
Lowest achievable outlet concentration	<5 ppmv
Operating pressure range	0-2 barg typically, can operate at any pressure
Typical skim rate	1-5 v%
Associated products	NOV ADOHC hydrocyclones, Mare's Tail®, nutshell filter
Gas induction type	Hydraulic



Ask us about which gas flotation type we recommend for your application

