



FLOTATION, IPF

Compact dissolved air flotation



The intelligent Dissolved Air Flotation (i-DAF) system is based on the Nijhuis innovative and intelligent aeration system (i-AIRATION) which forms fine air bubbles that support and increase the separation of particles. For decades the Nijhuis Dissolved Air flotation unit has been known as the most robust and best DAF unit available on the market. The compact i-DAF with plate packs, type IPF, can either be integrated in a total solution or offered as a single product for your wastewater.

APPLICATIONS

- Compact **pre-treatment solution** for industrial and municipal wastewater (with or without flocculation system).
- **Activated sludge** solution for a continuous biological treatment system for industrial and municipal wastewater.
- **Smart removal** of suspended solids, oil and greases and coagulated & flocculated particles.

CUSTOMER BENEFITS

1. Proven and robust technology
2. Minimal footprint requirements, compact unit with plate pack.
3. High level of standardisation and efficient, state of the art production
4. Laminar flow through unit for optimal removal efficiency.
5. Intelligent DAF design:
 - Lower sludge discharge costs, higher dry solids content
 - Better effluent quality
 - i-AIRATION system to control & monitor the aeration process
 - Optimized chemical costs by use of a Nijhuis i-DOSE.



TECHNICAL DESCRIPTION

In the stainless steel Intelligent DAF, type IPF the separable particles will float to the surface. The floating particles will be removed automatically and continuously by a scraper mechanism.

A lamella plate pack is installed to increase the separation area of the unit and ensures that even the smallest flocs are removed from the wastewater. This makes the Intelligent DAF, type IPF unit very compact.

The on-built recirculation system & aeration system (i-AIRATION) is equipped with unique and patented non clogging aeration devices and will form air bubbles who will support the separation of particles. The unit is equipped with automatic sediment removal valves for removing any settled material.

The unit selection and the stainless steel material selection is based on the type of wastewater, the hydraulic and sludge handling capacity.

Type, Series	Hydraulic Capacity m ³ /hr	Sludge Load m ³ /hr	Length mm	Width mm	Height mm	Weight Empty - Full	Power kW
IPF 005E	5	0,2	2470	968	2089	700 - 1750	4,2
IPF 010E	10	0,4	2470	1468	2089	850 - 2950	4,2
IPF 015E	15	0,6	2470	2027	2089	1130 - 4300	5,7
IPF 020E	20	0,9	2470	2527	2089	1950 - 7800	5,7
IPF 030E	30	1,0	4838	1537	3386	1950 - 7800	5,7
IPF 045E	45	1,0	4838	1537	3595	2000 - 9600	7,7
IPF 090E	90	2,0	4838	2590	3595	2800 - 17600	7,7
IPF 135E	135	3,0	4868	3644	3595	3700 - 25900	11,2

