

MICRO – BUBBLE FLOTATION PUMPS

NIKUNI - DAF PUMPS

These are efficient, reliable, durable pumps, that are used to DAF flotation process – system of removal of suspended solid and other impurities from water slurries – by means of micro air bubbles dissolved in water slurries.

NIKUNI-DAF pumps offers unique, patented system of generating highly saturated dissolved air, where micro air bubbles are of the size **20-30 µm** (traditional system generates bubbles 200-300 µm). The flotation efficiency getting higher the smaller bubbles are generated.

NIKUNI-DAF pump
type NPD



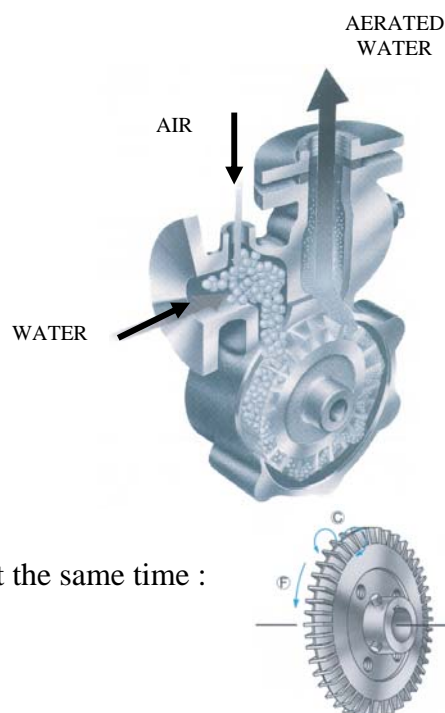
NIKUNI-DAF pump type SP

TECHNICAL PARAMETERS

- Pump efficiency: **1m³/h ÷ 42 m³/h.**
- Microbubbles size **20 µm – 30 µm**
Process of flotation is much more efficient, thanks to higher factor of water saturation with micro bubbles.

CONSTRUCTION:

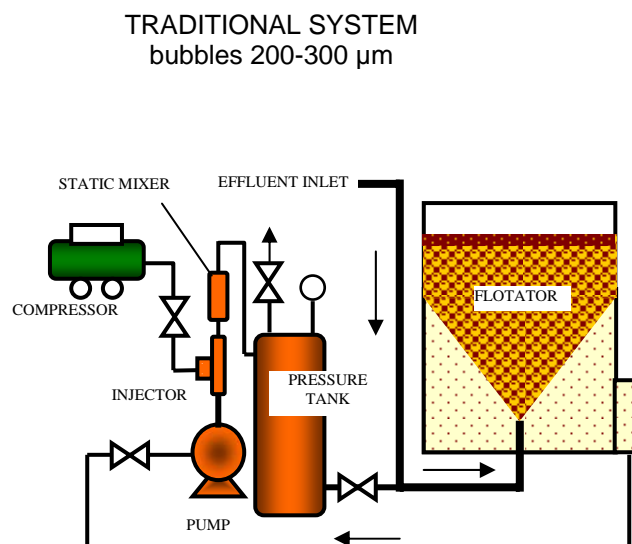
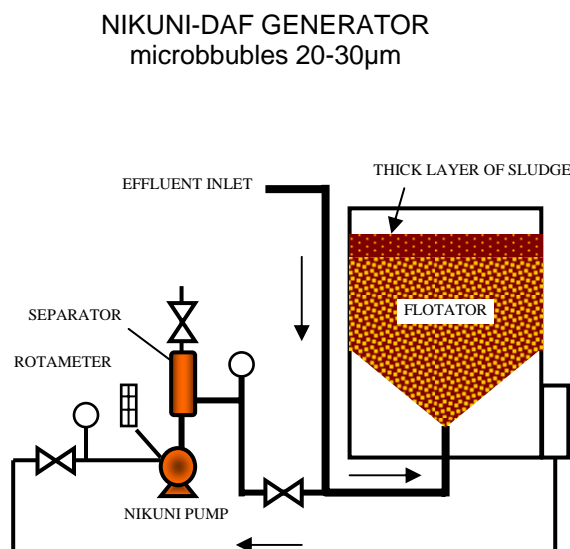
- NIKUNI-DAF pump replace complex, traditional system (turbine, air compressor injector, static mixer, big pressure tank etc.) of generating water-air fluid
- Excellent bubble generator for exercising three functions at the same time : suction, mixing and force-feed function.



FUNCJONALITY, PERFORMANCE, SERVICE

- Ready to operate immediately after switching on. Saturated liquid reaches the operating parameters within seconds.
- Electric energy demands lower, up to 50%, compares to traditional systems.
- Easy operation , no need to monitor Nikuni DAF unit parameters.
- Low service and maintenance costs

NIKUNI-DAF GENERATOR AGAINST TRADITIONAL DAF SYSTEM



MODERNIZATIONS

Nikuni DAF pumps, thanks to exceptional high operating parameters, in comparison with traditional systems, are also used to modernization of existing flotators. Excellent Nikuni regenerative turbine pumps give better efficiency, minimise operational, maintenance and service costs.

Nikuni DAF pumps can operate in parallel multiple systems, everywhere bigger productivity demands occur.

RANGE OF NIKUNI-DAF UNITS

| Type | Efficiency (m ³ /h) | Motor (kW) |
|--------|--------------------------------|------------|
| 20NPD | 1.0 | 0.75 |
| 25NPD | 1.5 | 1.5 |
| 32NPD | 3.0 | 2.2 |
| 40NPD | 4.8 | 3.7 |
| 50SP-1 | 8.0 | 5.5 |
| 50SP-2 | 12.0 | 7.5 |
| 50SP-3 | 15.0 | 11.0 |
| 65SP-2 | 20.0 | 15.0 |
| 80SP | 42.0 | 22.0 |



Nikuni DAF pumps
cellulose – paper industry