



centriair

CLEANER AIR. FEWER RESSOURCES.



Centrifuges

High performance particle separation

Application

From vegetable to meat products and from sunflower to palm oil our centrifugal separators Lina, Petra and Olga are in operation today on a large number of very large to small frying lines, combining a high performance particle separation and recovery of resources like heat, particles and water with stable operating, low maintenance a short period of investment payback.

Particle separation

Our centrifugal separators Lina, Petra and Olga remove entrained solid particles and liquid droplets as well as mixtures of dry and wet particles from contaminated air streams up to 3.000 m³ / h per centrifuge. Larger flow rates are handled by several machines in parallel. A rotating disc stack separates 100% of all the particles down to 1nm and 82% of all particles down to 0.75 nm along with a percentage of the smaller particle sizes.

Energy recovery

To allow the reusing of energy for other purposes, like heating of process water or to heat the building, our centrifuges can be equipped with efficient plate heat exchangers.

Particle recovery

Automated washing and “clean in place” are included where required, allowing the recovered material to be reused.

Water recovery

Recovered water is free of any traces of oil and can be reused.

Low maintenance

Centrifuges are delivered with a “plug and play” automatic flushing device that cleans the disc stack should any material deposit on interior surfaces, ensuring virtually maintenance free operation even in high load or “sticky” applications. Centriair offers preventive maintenance with remote monitoring and on-site intervention for all our installations.

Modular Design

Production increases as well as tighter demands can easily be handled by the modular design of the centrifuges, allowing for flexible upgrades.



Centrifuge operating principle



High separation efficiency: 50 times higher than in a cyclon

No filters inside – continuous and maintenance free operation

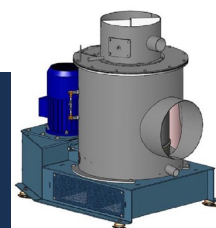
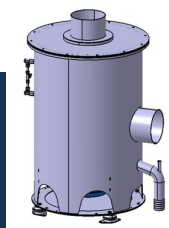
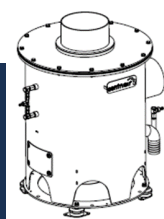
Insensitive to contamination load

Handles separation of liquid and solid aerosols in one operation

Benefits

HIGH SEPARATION EFFICIENCY	LOW MAINTENANCE	95% LESS CO ₂ EMISSIONS COMPARED TO INCINERATORS	>95% ODOUR REDUCTION RATE	< 2,5 YEAR RETURN ON INVESTMENT WHEN REPLACING INCINERATION	30% SAVINGS IN OPEX COMPARED TO BIO-FILTER AND ACTIVE CARBON
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Centrifuge Module Program



	Lina	Petra	Olga
Application	Particle Separation	Particle Separation	Particle Separation
Optimal airflow	500 m ³ /h	1 500 m ³ /h	3 000 m ³ /h
Maximum airflow	500 m ³ /h	2 000 m ³ /h	4 000 m ³ /h
Weight	50 kg	105 kg	350 kg
Material	ANSI 304	ANSI 304	ANSI 304
Electrical Connection	380-400 V/50 A three phase + Neutral 50 Hz	380-400 V/50 A three phase + Neutral 50 Hz	380-400 V/50 A three phase + Neutral 50 Hz
Connection flange	125 mm	160 mm in, 200 mm out	350 mm straight flange
Operational Power	0,75 kW	0,9 kW	3,1 kW
Operating Temperature	90 °C	105 °C	110 °C