

A tubular centrifuge is a high-speed, continuous separation device used for a wide range of applications, including the separation of liquids, liquid-liquid mixtures, and liquid-solid mixtures. Its efficient, effective, and compact design makes it an indispensable tool in various industries, such as pharmaceutical, biotechnology, food and chemical industries.

SeFluid's tubular centrifuge series of products have numerous advantages, making them a top choice for many industries. With their exceptional performance and reliable product quality, they have gained popularity among international users.

Principle Of Tubular Centrifuge

Tubular centrifuges work on the principle of sedimentation. When a mixture of liquids and solids is introduced into the centrifuge, it is rotated at high speeds, generating centrifugal force. The centrifugal force acts on the particles in the mixture, causing them to separate based on their density. The heavier particles move towards the bottom of the tube, while the lighter particles move towards the top. This separation is facilitated by the high centrifugal force generated by the rotation of the rotor.

The machine consists of a cylindrical rotor, which rotates at high speeds, and a series of tubes that are attached to the rotor. The sample is introduced into the tubes, and as the rotor spins, the heavier particles in the sample move towards the bottom of the tube, while the lighter particles move towards the top. The separated components can then be collected and used for further analysis or processing.

Benefits Of Sefluid's Tubular Centrifuge Series

The tubular centrifuge offers numerous advantages over other separation methods, making it the preferred choice for many applications. Some of the key benefits include:

High Efficiency

Its high rotational speed and large sedimentation area allow for rapid and efficient separation of components, even in complex mixtures.

Energy Efficiency

They are cost-effective and can be used repeatedly, making them a valuable investment for many industries. The tubes used in the centrifuge can be easily cleaned and reused, reducing the cost of consumables.

Compact Design

The machine's compact design saves valuable floor space in production facilities and allows for easy integration into existing process lines.

Ease of Operation and Maintenance

The machines have a simple design with few

moving parts, which makes them easy to operate and maintain. They have a long service life and require minimal maintenance, reducing downtime and operational costs.

Energy Efficiency

This centrifuge type consumes less energy compared to other separation methods, making them an environmentally friendly and cost-effective option.

Continuous Operation

Unlike batch centrifuges, it operates continuously, allowing for higher throughput and more consistent product quality.

Low Cost and Repeatedly

They are cost-effective and can be used repeatedly, making them a valuable investment for many industries. The tubes used in the centrifuge can be easily cleaned and reused, reducing the cost of consumables.

Applications Of Tubular Centrifuge

Tubular centrifuges are used in a wide range of industries and applications due to their versatility, efficiency, and compact design. Some of the key applications include:

Pharmaceutical and Biotechnology Industry

It is extensively used in the production of vaccines, antibiotics, and other biopharmaceutical products. They help separate cells, cell debris, and other impurities from the product stream, ensuring high quality and purity.

Food and Beverage Industry

In the food and beverage industry, it is commonly used for the clarification of juices, wines, and other products. They help remove solids, such as fruit pulp and yeast, to produce a clear, high-quality product.

Chemical Industry

Tubular centrifuges are used in the chemical industry for the separation of liquid-liquid and liquid-solid mixtures, such as separating water from oil or removing solids from a liquid suspension.

Environmental Applications

The centrifuges are utilized for various environmental applications, such as wastewater treatment and sludge dewatering. They help separate solid contaminants from water, allowing for efficient waste disposal and water recycling.



Specifications

MODEL SPEC	STC45	STC75	STC105	STC112	STC125	STC150
DRUM DIA. (MM)	45	75	105	112	125	142
DRUM RPM	10K-28K	19K	15620	16300	15K	13400
SEPARATION FACTOR	19800	15200	15700	16660	15750	14300
DRUM VOLUME (L)	0.4	2.2	6.0	7.0	8.0	11
CAPACITY (L/H)	100	600	1200	1400	1500	2500
POWER (KW)	0.4	1.5	2.2	3.0	3.0	3.0