



GF Tubular Bowl Centrifuge

High-speed tubular bowl centrifuge for liquid-solids and liquid -liquid separation



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A tubular bowl centrifuge is a device that uses centrifugal force to separate liquids or fine particles from liquids. The working principle is that when the bowl rotates at high speed, different materials experience different centrifugal forces and move to different positions in the vertical tubular bowl. Tubular Centrifuges comprises of bowl, AC motor & starter. The bowl rotates at 14000-17000 r.p.m. generating a centrifugal force of 15000-23000 times the gravitational force.



Working principle

GF Tubular Bowl Centrifuge Working principle: The motor transmits the power to the driven wheel through the transmission belt and the tension wheel, so that the bowl rotates around its own axis at high speed, forming a strong centrifugal force field. The liquid mixture to be separated enters the nozzle of the Centrifuge placed at the bottom base. The Centrifugal force acts on the liquid entering to their specific gravities. The lighter liquid forms the inside layer and heavier liquid forms the outside (Toward wall to bowl) layer. Since the Mixture is entering continuously in the bowl, two phases are discharged continuously from two separate holes provided on the top portion of the bowl. During clarification job, one discharge hole of the bowl is closed and continuous discharged on clarified liquid is possible. Solids accumulated inside the bowl can be removed manually after stopping the machine.

Typical applications

The tubular centrifuge is finding an increasing number of applications because of the ultra-high centrifugal force, typical uses are as follows:

- purification of vaccines
- purification of lubricating and industrial oils
- clarification and purification of food products
- separation of plasma and blood fractionation
- separation of immiscible liquids

Designation	Bowl ID	Bowl Volume	Bowl Speed	G-force	Hydraulic capacity	Motor	Weight	Dimension
	mm	L	r/min	g	L/h	kw	kg	mm
GF105	105	6	16000	15000	1200	3	550	800*450*1620
GF142	142	11	17000	23000	2000	3	950	910*620*1770