

# Froth Flotation



**Product Categories:** [Engineering Equipment](#), [Mechanical Operation Lab](#)

**Product Page:** <https://www.labappara.com/product/froth-flotation/>

## Product Description

Froth Flotation

### **DESCRIPTION:**

Mixed liberated particles can be separated from each other by floatation if there is sufficient difference in their wet ability. The floatation process operates by preparing a water suspension of a mixture of relatively finely sized solids. This is usually done in an agitated chamber open at the top. Fine bubbles of air are then dispersed through the agitated suspension to form a froth that rises to the top of the chamber. Particles that are radically wetted by water (hydrophilic) tend to remain in the water suspension. Those particles that are not easily wetted (hydrophobic) tend to be collected at the air bubble-water interface and rise to the surface attached to air bubbles. Thus differences in the surface chemical properties of the solids are the basis for separation. The set up consists of a agitated chamber open at the top. In the chamber, an impeller coupled to a shaft is fixed in a stationary diffuser. Low-pressure air is allowed to enter in the stationary diffuser through the air passage provided with the agitator. The collector coated mineral particles adhere to the rising bubbles and are carried to the top of the cell to be removed in the froth product.

### **TECHNICAL DETAILS:**

Flotation Chamber: Material Stainless Steel, Compatible capacity.

Agitator : Stainless Steel Impeller with Stainless Steel shaft coupled to FHP motor.

Diffuser : Material Stainless Steel holding the impeller.

Froth Collecting Tank: Material Stainless Steel, Capacity 20 Ltrs.

Control panel Comprises of: Standard make On/Off switch, Mains Indicator etc.

Instruction Manual : An ENGLISH instruction manual will be provided along with the Apparatus

A good quality painted rigid MS Structure is provided to support all the parts.

### **Control Panel:**

Standard make on/off switch, Mains Indicator