SF Flotation Machine

Brief Introduction

Flotation cell is widely used for separating non-ferrous metal, black metal, noble metal, non-metal mineral, raw body and materials of chemical industry, which are subject to coarse separation, swept separation, fine separation and flotation, so the useful ore are reclaimed.

Production capacity : 0.2-24 m^3/min

Applicable material : non-ferrous metals, ferrous metals and non-metallic mineral sorting

When the impeller is revolving, the pulp in the impeller cavity can be swing out at the centrifugal force by the impeller blades and be negative pressure zone in the impeller cavity. Meanwhile, the pulp in the top of the cover can be inhaled to the impeller cavity through the circulatory hoses on the cover and then the

pulp can be circulating upward. The pulp in the bottom of the impeller can be swing out and supplement to the center so it forms the circulating downward. Air is inhaled from the inhalation pipe and center pipe to impeller cavity and mix with the pulp and then arise a lot of small bubbles. The bubbles go through the cover and evenly disperse in the cells and form the mineral bubbles. Mineral bubbles float to the forth section and be scraped out to be forth product.

Note: Mechanical agitation, self air inhalation and pulp suction, it can be combined with JJF cells to be the suction cell.

Advantages and Characteristics

- Two sides backward blades of the impeller make the pulp bicirculating in the cell
- Large space between impeller and cover can have large air inhalation
- Low rotation speed of impeller extends the service life of the spare parts
- Forward tank and blind angel make the forth moving quickly
- Large air inhalation and low energy consumption
- Long life of the spare parts
- Good for the coarse particles flotation.

Main Technical Parameters

Model	Effective volume (m^3)	Capacity (m^3/min)	Diameter of impeller (mm)	Impeller rotation (r.p.m)	Power of impeller (Kw)	Weight of each cell (Kg)
SF-0.37	0.37	0.2-0.4	300	352-442	1.5	470
SF-0.7	0.7	0.3-1.0	350	336	3	970
SF-1.2	1.2	0.6-1.2	450	312	5.5	1400
SF-2.8	2.8	1.5-3.5	550	280	11	2120
SF-4	4	2-4	650	235	15	2600
SF-6	6	3-6	760	191	30	3000
SF-8	8	4-8	760	191	30	4292
SF-16	16	5-16	850	169-193	45	7415
SF-20	20	5-20	730	186	30×2	9823

Application

Flotation equipment used for mineral processing