

▶ JJF Mechanical Agitation Flotation Cell

Principle

The rotation of impeller produces the eddy in vertical tube and draft tube that forms the negative pressure, and the air is absorbed from the air inlet pipe, mixing with the slurry from draft tube in the impeller and stator area. The motion of slurry-gas mixing flow generated by impeller is along the tangential direction, and then it is converted to radial motion under the effect of stator, and evenly distributed in flotation cell. Mineral laden bubbles will rise to the foam layer, and become foam products by the scraper.



Features

Shallow tank type, small impeller diameter, low rotating speed and low power consumption.

The clearance between impeller and stator is big, and the stator is a cylinder with oval hole, which makes for the mixture and dispersion of air and slurry.

The stator is lower than the impeller, which makes large circulating amount of slurry that is 2.5 times that of ordinary flotation cell.

Umbrella-shaped scattered cover with hole can separate the eddy produced by impeller from foam layer in order to keep the slurry surface stable.

Large circulating amount of ore slurry that is 2.5 times that of ordinary flotation cell makes for the mineralization of air, medicament and ore.

Large amount of air suction and good effect of dispersion.

Proper stir intensity, good effect of solid particle suspension, no sediment and no need of discharge when stopping;

Wide range of processible particle size and high recovery rate of mineral dressing.

Special Tips

Mechanical stirring, automatic air but no slurry suction, and ladder in necessity during operation (Drop height: 300mm - 400mm).

It can be combined with SF flotation cell as a set of flotation cells, in which SF one serves as a suction tank and JJF one serves as a direct flow tank.

Application

JJF mechanical agitation flotation cell can be widely used in the mineral classifications of non-ferrous metals, black metals, and non-metals. It is suitable for roughing and scavenging in large and medium flotation plant.

Technical Parameters

Model	Effective Volume (m ³)	Capacity (m ³ /min)	Impeller Diameter (mm)	Impeller Revolution (r/min)	Motor Power for Agitation (kW)	Motor Power for Scraper (kW)	Single Tank Weight (kg)
JJF-4	4	2.0~4	410	305	11	1.5	2303
JJF-5	5	2.0~6	410	305	11	1.5	2416
JJF-8	8	4.0~12	540	233	22	2.2	4507
JJF-10	10	5.0~10	540	233	22	1.5	4820
JJF-16	16	5.0~16	700	180	37	1.5	7657
JJF-20	20	5.0~20	770	180	45	1.5	8505