

▶ XCF Air-inflation Flotation Cell

Principle

When flotation cell is at work, the rotation of impeller makes the slurry all around via tank bottom absorbed from downside of impeller into inner-vanes of impeller, where low pressure air produced by the blower goes into via hollow shaft and the air distributor of impeller chamber at the same time. After fully mixture of the slurry and air among vanes, they are pushed out in inclined upward direction from upper half of the impeller around, and go into the tank via steady flow and orientation by the stator. Air bubbles rise to the foam stability area, and after concentration process, the foams overflow from the overflow weir into the foam tank. Another part of the slurry flows toward the lower part of impeller, then through the impeller agitation, they are mixed together to form mineral laden bubbles again, and the rest of the slurry will flow to the next tank to become tailings eventually.



Features

The structure and property are similar to that of KYF flotation cell. The difference is that a stator is specially set above the impeller to form a special negative pressure area. It has the function of automatic slurry suction with a little higher power consumption.

Special Tips

Mechanical agitation; automatic slurry but no air suction.

It can be combined with KYF flotation cell to be a set of flotation cells as suction tanks.

Application

XCF air-inflation 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)	Air Pressure of Blower (kPa)	Max. Air Inflation Volume (m ³ /m ² .min)	Motor Power for Agitation (kW)	Motor Power for Scraper (kW)	Weight (kg)
XCF-1	1	0.2~1	400	358	≥ 12.6	2	5.5	0.75	1154
XCF-2	2	0.4~2	470	305	≥ 14.7	2	7.5	1.1	1659
XCF-3	3	0.6~3	540	266	≥ 19.8	2	11	1.5	2259
XCF-4	4	1.2~4	620	225	≥ 19.8	2	15	1.5	2669
XCF-8	8	3.0~8	720	175	≥ 21.6	2	22	1.5	3868
XCF-10	10	4~10	720	192	≥ 21.6	2	30	1.5	4800
XCF-16	16	4~16	860	160	≥ 25.5	2	37	1.5	6520
XCF-24	24	4~24	950	153	≥ 30.4	2	37	1.5	8000
XCF-38	38	10~38	1050	136	≥ 34.3	2	55	1.5	11000