



High energy savings with the same technological results

Rebuild to LowEnergyFlotation

Rebuild of E-Cell & EcoCell to LowEnergyFlotation LEF

Flotation systems with LEF are the latest in de-inking flotation for removing ink and hydrophobic contamination from recovered paper. Using state-of-the-art technology, LEF satisfies customer yield requirements while consuming the smallest amount of power necessary – cutting energy costs by as much as half. This technology works with all graphic and tissue paper production. Conventional E-Cells and EcoCells can be converted to LowEnergyFlotation by replacing the injectors

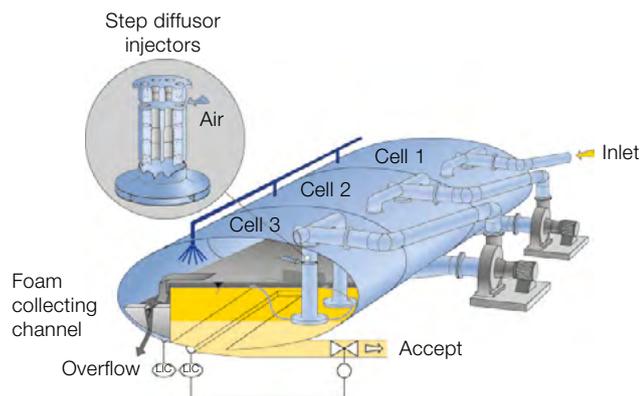
and pump impellers. With E-cell flotation machines, energy savings of up to 30 percent and capacity increases up to 15 percent can be achieved. Rebuilding EcoCell systems allows for energy savings of up to 50 percent.

Areas of application

Conversion of all E-cell and EcoCell systems for graphic and tissue paper.

Cell structure principle

Example size ECC 3/38



Customer benefits

- + Easy conversion of E-Cell- oder EcoCell flotation systems
- + High energy savings, with at least the same technological results. Additional increase in capacity of up to 25 percent with rebuilds from E-cells.
- + Separation of inks over a broad particle range (approx. 5 – 15 µm)
- + 2-stage system structure, with primary and secondary flotation, because separate optimization of these functions facilitates removal of impurities with minimal fiber loss
- + Low energy requirement – between 10 and 15 kWh/ton
- + Easy to operate, self-containing, low-maintenance, and no wearing parts
- + FlowFlexYield includes patented secondary-foam return for the highest yields

Sizes of EcoCell with LEF

Size ECC-LEF	1/38	2/38	3/38	2/44	3/44	4/44	5/44	6/44	8/44	10/44
Accept quantity of standard plant up (t/24h)	85	170	255	230	350	460	580	766	930	1 160
Specific power consumption (kwh/t)	10 – 15									

3/38: 3 = Number of aeration elements per cell respectively length of cell (m)

38 = Horizontal elliptical diameter of cell (dm)

Standard plant: 5 primary cells / 1 secondary cell for one loop

Number of primary and secondary cells can vary depending on raw material, production yield and technological result

Options and possible combinations

- Rebuilding kit 1 for all cell sizes:
Injectors and speed-controlled pumps (frequency converter) (not possible for hydrodynamic sealings)
- Rebuilding kit 2 for all cell sizes:
New injectors + new impellers for pumps

Maintenance intervals and services

Self-cleaning, obstruction-free, low-maintenance, and wear-free system.

References

- 26 rebuilds in Europe
- 7 rebuilds in Asia

Voith Group
St. Poeltener Str. 43
89522 Heidenheim
Germany

www.voith.com

Contact:
Phone +49 7321 37-0
paper@voith.com



VOITH
Inspiring Technology
for Generations