

Virgin Pulp	Graphic/ Speciality	Raw Material Handling	Pulping	Screening	Centrifugal Cleaning	Deinking	Washing Dewatering	Fiber treatment	Approach Flow System	Water, Sludge, Reject
Recovered Paper	Board & Packaging									
Broke + Approach Flow System	Tissue									
ProEnergy ++++		ProQuality ++++		ProCapacity ++		ProYield ++++		ProSpace +++		ProEnvironment ++++

Rebuild of E-Cell & EcoCell to LowEnergyFlotation (LEF)

High energy savings with the same technological results

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.

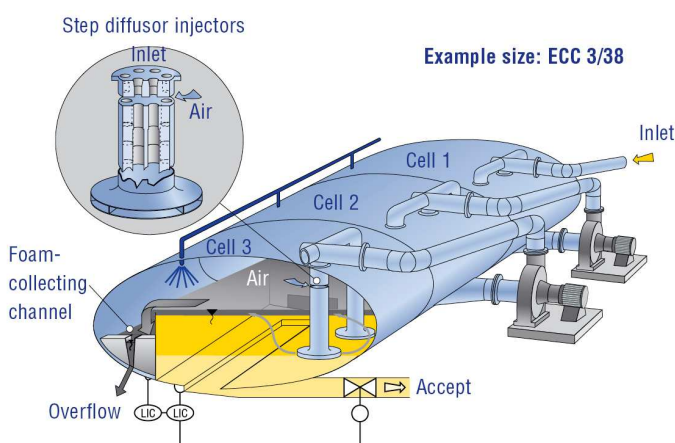
Conventional E-Cells and EcoCells™ can be converted to LowEnergyFlotation™ by replacing the injectors and pump impellers. With E-cell flotation machines, energy savings of up to 30 percent and capacity increases of up to 15 percent can be achieved. Rebuilding EcoCell systems allows for energy savings of up to 50 percent.

Customer benefits

- + Easy conversion of E-cell or 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 (ca. 5 – 500 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-cleaning, low-maintenance, and no wearing parts
- + FloFlexYield includes patented secondary-foam return for the highest yields

1 Cell structure principle

2 Newsprint facility for 700 tons/day



1



2

R05

Areas of application

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

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	1160
Specific power consumption [kwh/t]	10 - 15									

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 ECC1/38.P up to ECC 5/44.P:

new injectors + new impellers for pumps.

Maintenance intervals

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

References, success stories

The first new system for production of 800 tons/day is already running successfully.

Four rebuilds to LEF producing 300 tons/day are already installed.

Altogether more than 15 systems have been sold.

Further information

- Link to product finder:
www.voith.com/paper