Fletcher short retention time clarifier

→ Boost your clarification process
→ Pay back your installation in the shortest time
→ Convert your conventional clarifier

Exceptional performance
• Short retention time
• Uniform juice residence time throughout
• Higher throughput
• Mud density increased
• Sucrose losses significantly reduced
• Reduction of turbidity
• No purity drop detectable
• Robust design
• Proven technology, many references worldwide

Safe operation
• Simple trayless design
• Collection and mud discharge fully automatic
• Mechanical and electrical protection thanks to inverter control of drive motor

Fives Cail / Fives Fletcher offer
• Local or on-site manufacturing at the factory (fast and inexpensive delivery)
• Simple conversion of multi-tray clarifiers to Fletcher trayless design (operation and performance improved)
• Possibility of keeping the existing control system (we can upgrade existing systems)

The most cost effective solution
• Low operating requirements
• Very low lime and flocculant quantities required

Sugar losses reduction up to 65%*

* Compared to conventional technologies

For more than 200 years, Fives Cail and Fives Fletcher have been leaders worldwide, supplying the sugar and bioenergy industries with a range of equipments dedicated to sugar cane, beet and refineries. In 1972, Fives Fletcher launched his first short retention time clarifier. Since then, over 50 Fletcher short retention time clarifiers have been installed worldwide.

Our new generation of clarifiers combines now Fives Fletcher technology and Fives Cail expertise. With significantly reduced sugar losses and without loss of purity, the Fletcher short retention time clarifier is now an equipment of excellence in terms of clarification of juice.
Fletcher SRT clarifier features

Trayless design
• Improved mud settling
• Easy liquidation and clarified juice removal
• Small footprint
• Foundation or supports in structural steel or reinforced concrete

2 to 4 juice tangential inlets
• Reduced juice inlet velocity
• Designed for extremely low level of turbulence
• Improved distribution of incoming juice

Scope of supply
• Clarifier and flash tank designs
• Manufacturing
• Drive unit
• Floc pack unit
• Specifications for piping, instrumentation and control system
• Mud pump
• Optional integral clear juice tank design available

Juice circulation

Benefits of Fletcher SRT clarifier

Short retention time
- Minimization of losses (minimal pH drop, low lime usage, less reducing sugars, reduced color formation, optimization of residence time dispersion)
- Filters efficiency improved (high density mud)

Smaller, simpler, cleaner
- Very low maintenance requirements
- Simple mud withdrawal system
- Mud also suitable for with direct use in diffusers

Planetary gear box + Inverter
- Simple control with great flexibility of operation
- Monitored mud level and discharge
- Safe and reliable drive unit
- Robust design

Flocculant control
- Higher efficiency of flocculant dosing and improved mud settling
- Efficient mixing and distribution of the flocculant

Elevation of the flash tank relative to the clarifier
- No control valve between flash tank and clarifier
- Simple, efficient and safe design

To keep in mind
- Option of simple conversions of multi-tray clarifiers to Fletcher trayless design
- Option of keeping the control system in place
- Reduction of losses in mud and undetermined losses
  → Sugar quantity increased

A wide range

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<tr>
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<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>Clarifier diameters (m)</td>
<td>6.7</td>
<td>14</td>
</tr>
<tr>
<td>Flash tank diameter (m)</td>
<td>2.5</td>
<td>5.2</td>
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Low Operating Cost
Ease of Use
Cleanliness/Hygiene
Yield/Productivity
Safety