Ensuring uptime and reducing the time needed for maintenance is key to maximizing efficiency in alumina refining operations. Outotec® EasyBox – which also includes our innovative Outotec EasyNozzles to reduce particle breakage and improve overall product quality – improves the availability and safety of your alumina calciner.

**OUTOTEC® EASYBOX FOR CFB ALUMINA FURNACES**

**BENEFITS**
- A clean, safe working environment
- Single-point drainage
- Elimination of piping and manifold duct
- Nozzle grate remains intact during nozzle exchange
- Easy accessibility for service inspections
- Significantly reduced service time
Why upgrade?
Outotec EasyBox for greenfield and brownfield plants is based on a single-nozzle replacement concept and the elimination of piping to improve maintainability and safety.

In contrast with older common manifold designs, which were time-consuming and required breaking the nozzle grate, Outotec’s new windbox solution only requires replacing the defective nozzles and leaves the nozzle grate intact. The optimal design will depend on the area available beneath the furnace; we offer a V-shaped or a U-shaped design.

A cleaner and safer working environment
Both windbox designs feature a single drainage valve at the bottom to avoid a situation where hot alumina collects and potentially leaks. In addition, the Outotec EasyBox is refractory lined to ensure a low surface temperature and a safe maintenance environment.

Whether you are considering a revamp or performing an annual shutdown, the Outotec EasyBox and accompanying furnace nozzles can be installed at the same time, saving costs and eliminating the need for additional shutdowns.

With over 60 plant references in the alumina industry, Outotec is a reliable partner for improving performance and efficiency throughout the entire lifecycle of your calciner.