

EKATO FLUID

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SIDE ENTRY AGITATOR ES 2000 for BIOFUELS



- **Equipment deliveries for pilot and plant scale**
- **Experienced in fundamental research**
- **Proper scale-up based on detailed process know-how**
- **Laboratories for individual tests**
- **Involved in 2nd generation Green-house Ethanol development (Lignocellulose saccharification)**
- **Cooperation with european research institutes**
- **Large scale plant of 450,000 TPY bioethanol equipped with EKATO FLUID agitators**

The new ES 2000 Side-entry agitator

New EKATO FLUID agitator series / reliable seals / „shut-off“ device allows seal maintenance and removal even with full vessel / suitable for vessel volumes up to 50,000 cubic meters.

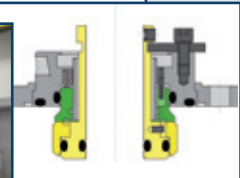
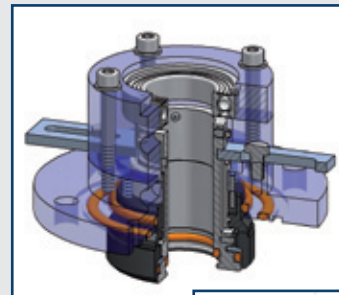
In contrast to top entry models, the side entry units type ES 2000 are fixed to the vessel shell near the vessel bottom with an agitator shaft that is almost horizontal.



- Impeller diameter up to 1,300 mm
- Shaft length up to max. 1,100 mm
- Motor power up to 30 kW

Special attention should be given to the selection of a reliable mechanical seal. EKATO FLUID apply the existing know how of the EKATO GROUP by using mechanical seals of EKATO.

Single acting product lubricated mechanical seals or, optionally double acting mechanical seals with barrier liquid can be used. Both seal types are of cartridge design.



Advanced Process Solutions



THE EKATO SERVICE

provides a broad range of services: „Service on site“, installation, start-up, trouble shooting and availability around the clock including instruction and training of the operation personnel. EKATO also has the required expertise for plant optimization and preventive maintenance.