



SEPARATION

REDUCING OPERATING COSTS AND ECOLOGICAL FOOTPRINT TO A MINIMUM

PUSHER CENTRIFUGE ecoOne

ANDRITZ

ENGINEERED SUCCESS

Reliability, efficiency, flexibility, and ease of maintenance

ANDRITZ is introducing its latest innovation to the market – the ANDRITZ pusher centrifuge ecoOne, based on the well known Krauss-Maffei pusher centrifuge technology.

The machine retains the “old” virtues of pusher centrifuges, such as reliability and washing efficiency, but at the same time raises energy efficiency, flexibility, and ease of maintenance to an unprecedented level and thus reduces operating costs and downtime significantly.

And as if this weren't enough, the machine weight, machine footprint and ecological footprint of the centrifuge have been reduced substantially compared to previous generations.

MAIN FEATURES

- PreFiltration (integrated thickening)
- GentleFeeder™ feeding system (wear-reducing feed system)
- ecoOne motor, lowering the installed and absorbed power
- Cartridge design (rotating assembly can be removed in one piece for quick and easy maintenance)
- High-pressure pushing system (reduced oil consumption)



Unique cartridge design for maximum convenience and minimum downtime

How does the ecoOne lower operating costs ?

Electricity costs are reduced thanks to the ecoOne motor. While traditional centrifuges have separate pusher and drive motors, pusher centrifuges with the ecoOne drive have only one motor for both functions.

The ecoOne technology allows the reserve capacity available for pushing to be used for accelerating the basket during the start-up process, while the reserve capacity available for the start-up process can be used for pushing during stationary operation. This results in significantly lower installed power and a motor that operates in the optimum efficiency range at all times. Hence, the total power consumption is reduced, typically by 10 to 20%.

Furthermore, the new high-pressure pushing system cuts the consumption of hydraulic fluid by 40%, which means significantly lower costs for replacement and disposal.

MAXIMUM FLEXIBILITY WITH MINIMUM MAINTENANCE EFFORT

Despite the robust design and the many years of experience with selected alloys for special applications, regular inspections and maintenance work are essential in order to guarantee efficient and reliable operation of the centrifuge over the decades. In this respect, ANDRITZ pusher centrifuges rely on the unique cartridge technology. With this system, the entire rotating unit is pulled out of the centrifuge in one piece without having to detach the machine's pipework. A replacement cartridge from stock can be installed during maintenance work, with the result that the break in production operations is generally less than one shift.

Furthermore, the baskets in an ecoOne pusher centrifuge are designed in a way that is easy to convert the centrifuge from two-stage to three-stage design and vice versa. This takes the flexibility of the centrifuge in operation to a new level as the design can always be adapted to give the best performance, even if upstream requirements change over the years or production is campaign-based.

SOME POSSIBLE APPLICATIONS

Bulk chemicals

- Sodium Chloride
- Sodium sulfate
- Soda
- Mixed salts/ZLD
- Lithium hydroxide
- Sodium chlorate
- Sodium bicarbonate

Agrochemicals

- Ammonium sulfate
- Monoammonium phosphate (MAP)
- Potash

Plastics

- ABS
- Paraxylene
- Polycarbonate
- Adipic acid



ANDRITZ pusher centrifuge ecoOne combining pushing and drive motor



WHAT'S YOUR SEPARATION CHALLENGE?

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years, we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals. As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge. **Ask your separation specialist!**

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