GEA Nozzle Separators

Nozzle separators are continuously operating disk centrifuges. They are built as centrifugal clarifiers and separators and are more solids-orientated than self-cleaning separators. When they are configured to function as clarifiers, they are called concentrators. They are used to thicken solids from suspensions.

Nozzle separators are absolute specialists in the processing of fermentation products in biotechnology, the pharmaceutical and food industries. The separated solids are discharged continuously through nozzles fitted at the bowl periphery. The nozzle separators are equipped with a hydraulically operated ejection system which enables both partial and total ejections to be triggered during product separation.

The advantage: when processing difficult products, the separating time to the next CIP cycle can be extended. The time-controlled or process-dependent ejections additionally optimize cleaning of nozzles, bowl and disks.

In addition to models equipped with standard nozzles, GEA Westfalia Separator also offers separators featuring patented special Westfalia Separator® viscon® nozzles (viscosity controlled nozzles). In contrast to standard nozzles, they guarantee a virtually constant biomass concentration by means of an automatic, internal concentration regulation, even in the case of fluctuating feed volumes and concentrations. Volume streams of over 300 m³ per hour can be processed with the largest models in this series.

Nozzle separator with Westfalia Separator® viscon® technology (viscosity-controlled nozzles)