GEA Self-Cleaning Disk Separators

As with disk separators with solid-wall bowl, the disk separators with self-cleaning bowl are equipped with a stack of conical disks to create a large equivalent clarification area within a relatively small bowl volume. These separators are likewise available as versions for clarification and separation.

Separators with self-cleaning bowl are able to periodically discharge the separated solids at full speed. For this purpose, several ports are spaced evenly around the bowl periphery. These ports are opened and closed by means of a movable sliding piston located in the bowl bottom. The opening mechanism is actuated hydraulically. Water is normally used as a control medium; in special cases, low-viscous organic fluids can also be used.

This opening mechanism enables both partial ejections and total ejections. Total ejections involve discharging the entire contents of the bowl with closed feed valve. In the case of a partial ejection, by contrast, only part of the bowl contents is ejected with open feed valve.

Westfalia Separator® hydrostop

Westfalia Separator® hydrostop is a special system developed by GEA Westfalia Separator which can be adjusted to specific requirements in terms of solid concentration exactly and reproducibly. This patented ejection system makes it possible to optimise the ejection cycle to the shortest possible time.

The Westfalia Separator® hydrostop system reduces the actual ejection time to less than a tenth of a second and permits partial ejections to be performed in a 30 second rhythm. By this means, it is assured that even small volumes of 1.5 to 2 litres are discharged reproducibly with a margin of error of less than 10 percent. This innovative technology enables precise, fast ejections and hence significantly higher and qualitatively better yields.