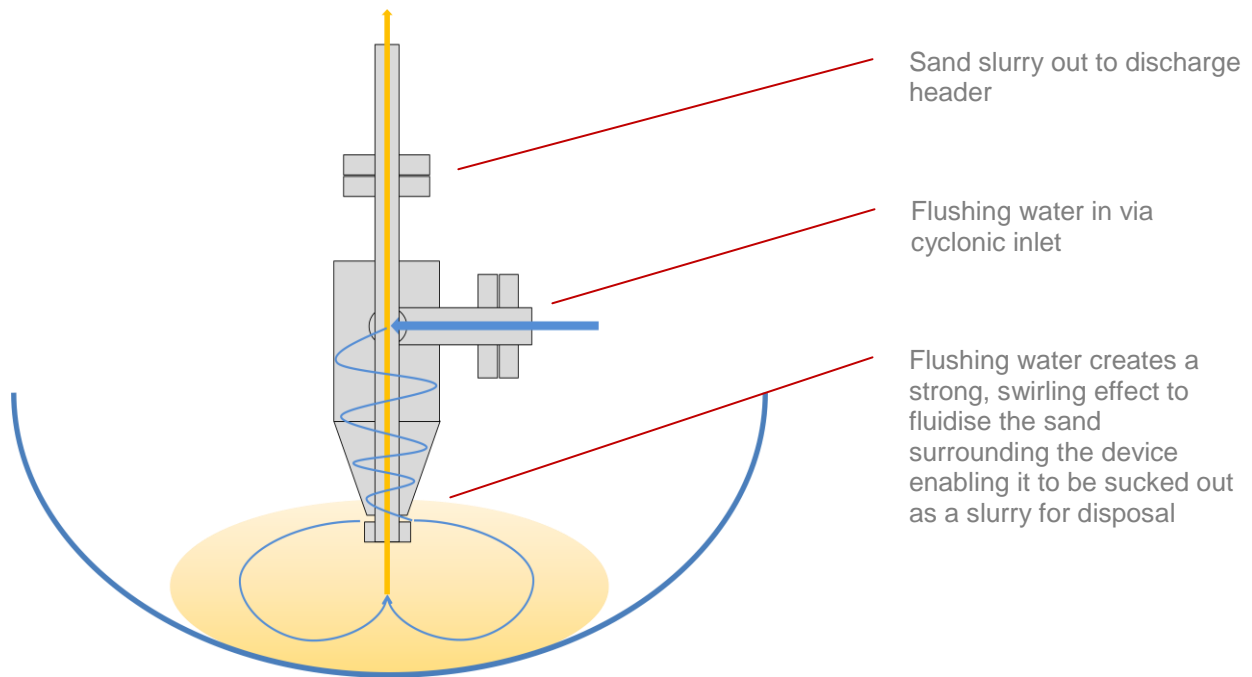


KSRS™ Sand Removal System



KIRK KSRS Swirl Desanders

The **KSRS™** is a centrifugal device used in horizontal and vertical production separators where there is a requirement for effective sand removal.

Competitively priced against traditional jetting systems, the KSRS offers good performance at a reduced flushing water consumption and pressure, which can be important.

HOW IT WORKS

Flushing water is introduced tangentially via the inlet port, which is fitted with a unique profile to induce a strong swirling motion in the water. As the water flows down towards the exit port, it accelerates due to the reduction in cross sectional area, creating a faster spin. Thus upon exit the flushing water contains sufficient energy to locally fluidise the surrounding sand and form a slurry suitable for extraction.

The sand slurry is withdrawn through the centre of the device vertically upwards, where it flows to the discharge piping or header arrangement for exit from the vessel. It is important to maintain this slurry velocity above approx 2-3 m/s to maintain the suspension, but not too fast to cause excessive erosion.

As the local area is cleared of sand, more sand that is built-up adjacent to the device can fall into the active zone for removal.

The effective coverage of the standard 1" SRS unit is around 1m² and the water consumption is some 3-4 m³/h at a pressure of 0.7 bar above operating.

