

CYCLIC STEAM STIMULATION

TECHNICAL BROCHURE

The performance of Rotoliptic's novel patented positive displacement pump is not impacted by the varying downhole conditions associated with a Cyclic Steam Stimulation (CSS) well.

ANY VISCOSITY

The unique Rotoliptic pump principles allow for an all-metal Progressive Cavity (PC) pump configuration with a much tighter clearance at the seal lines than a typical PC pump while maintaining a lower operating friction torque and having tighter clearance results in higher volumetric efficiency with low viscosity fluids, commonly encountered at each end of the CSS production cycle.

Rotoliptic pumps can handle a wide range of viscosities, experiencing even higher volumetric efficiency as fluid viscosity increases. Regardless of the fluid viscosity at the pump inlet, Rotoliptic will pump it, making it an excellent choice for the varying viscosities associated with lifting CSS operations.

ANY TEMPERATURE

With a maximum operating temperature rating of 350°C (660°F), the temperature fluctuations associated with steam cycles have no impact on Rotoliptic pump performance.

ANY PHASE

Rotoliptic can also transport multiphase fluids where free gas/vapor is present at the pump inlet. This ensures consistent downhole pump performance and eliminates adverse effects due to free gas interference by moving the gas up through the pump and into the tubing, preventing gas locking.

Rotoliptic's ability to retain efficient pump performance throughout the entire production cycle range of temperature and viscosities, along with the multiphase flow capability, makes Rotoliptic the preferred lifting solution for challenging CSS conditions.

