



MULTI-PHASE PUMP

Novomet multi-phase pump is a gas handling solution allowing continuous operation of ESP systems in extreme gas conditions. It is designed for applications with 65% of free gas at pump intake.

How does it work?

Multi-phase pump creates excessive pressure at pump intake to the level which ensures stable operation of ESP system. This gas handling device eliminates gas locking and allows successful pumping of well fluids with high gas content.

When free gas content does not exceed 65% at intake multi-phase pump stages do not have left or right zones of unstable operation beyond recommended operating range. However, when free gas concentration increases by 10% head created by multi-phase pump goes down.

Benefits.

- ▶ It is the key to continuous operation of ESP systems in extreme gas applications with 65% of free gas at intake.
- ▶ Free gas is not pushed out into the well annulus and MPP provides increased head per stage and better efficiency due to gas-lift effect.
- ▶ ESP system with a combined multi-phase pump operates without pressure pulsations when pumping gassy fluids so current chart of ESP motor is stable.
- ▶ Multi-phase pump has better abrasion-resistance characteristics than ESP.

Multi-phase pumps are available in the following series:

Series	Maximum rate, m ³ /day	Maximum rate, BPD
3.19"	200	1260
3.38"	300	1890
3.62"	300	1890
4.06"	125, 320, 700	790, 2000, 4000

