



# Tri-Phase System

In the oil industry, multiphase pumping refers to the transfer of fluid containing any combination of gas, liquid and solids from the wellsite or satellite to a central processing facility.

The prohibitive capital and lifecycle costs associated with traditional pump technology and separation equipment at each wellsite is the driving force behind the development of our multiphase transfer solution: the Tri-Phase™ system. This innovative, patented, engineered system is based on our field-proven progressing cavity pump. Incorporating advanced technology, superior design and proprietary manufacturing processes, the Tri-Phase system offers the best value, and the most effective pumping solution for the difficult and fluctuating conditions often encountered in multiphase fluid flow. The package is complete with pump protection for maximum performance and long life.

## Capital Benefits

- Eliminates or minimizes the number of satellite separation facilities/batteries needed
- Provides lower maintenance costs as compared to alternate technologies
- Extends fluid transfer distance capability to facilities several miles away, accounting for the wells drilled further away from existing separation facilities

## Production Benefits

- Increases well production rate by reducing bore hole pressure
- Extends life cycle of your artificial lift equipment
- Extends productive life of marginal fields

## Environmental Benefits

- Eliminates need to flare gas at well site
- Eliminates local water storage, disposal
- Exhibits small environmental impact
- Reduces footprint, lowers noise emissions, increases efficiency

## Features

- Supplied as a complete system
- Sized small enough for well to well transportation
- Automated controls and remote monitoring
- Prevents vapor lock
- Moves abrasive fluids allowing sand particles to roll along the surface (no scrape and abrade)
- Easier and faster separation
- Designed to API 676 intent with API676 features available upon request

## Specifications

- Inlet pressures from 5 to 1000 psig
- Differential pressures up to 750 psig
- Flow rate of up to 63,000 BPDe
- Materials of construction:
  - Stainless steel
  - Hastelloy
  - Other materials by request
- Handles broad range of fluids and variations in GVF, GOR, GLR, viscosity, and solids content