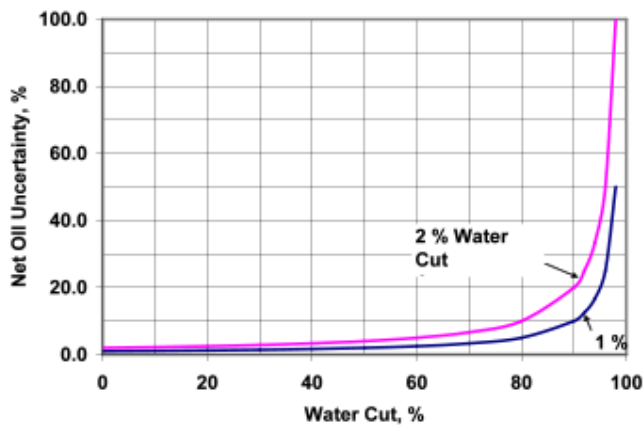


3PJR SERIES

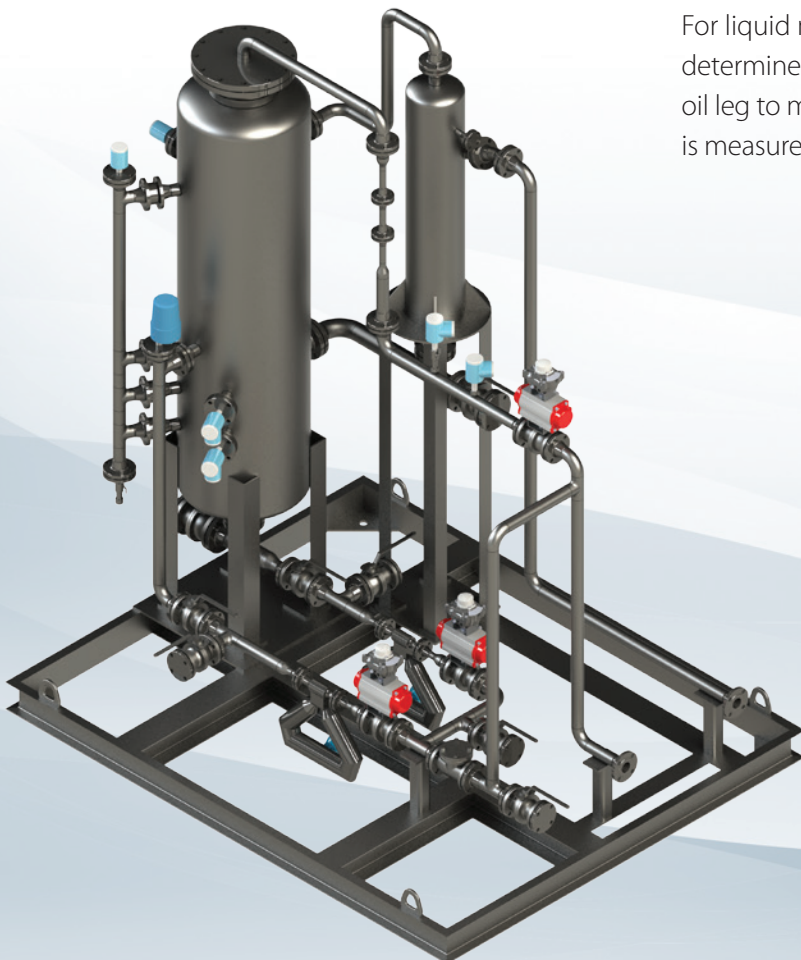
High water cut conditions can occur in water and steam flood productions as well as in maturing reservoirs. Measurement uncertainty of Net Oil using a 2-Phase separator increases exponentially at high water cuts (>85%).



The Accuflow 3-Phase JR separation metering system addresses this issue of measurement uncertainty at high water cuts, by taking an additional step of separating water from oil. The Accuflow 3P-JR consists of an initial vertical pipe and a horizontal pipe sections connected together as shown. Production fluid (oil, water and gas) enters the vertical pipe tangentially, creating a cyclonic action in the pipe where the majority of the gas is separated and flows upward to the gas flow line above.

The liquid then flows into a secondary vertical pipe section where free water is dropped out on the front side of a baffle plate. The baffle plate serves to prevent disturbance of the water/oil interface from the incoming fluid. On the back side of the baffle plate, oil/water interface is monitored. Depending on the height of the interface, either the water leg will dump or the oil leg will dump.

For liquid measurement, a coriolis meter is used to determine flow rate and as well as a water cut meter in the oil leg to measure any remaining water in the emulsion. Gas is measured by typically either ultrasonic, vortex or coriolis.



Features

- Simple and compact design
- Entire system made of common steel pipes; no pressure vessels required
- All components are commercially proven technologies
- Very low pressure drop (<3psi)
- Low liquid inventory and fast response

Benefits

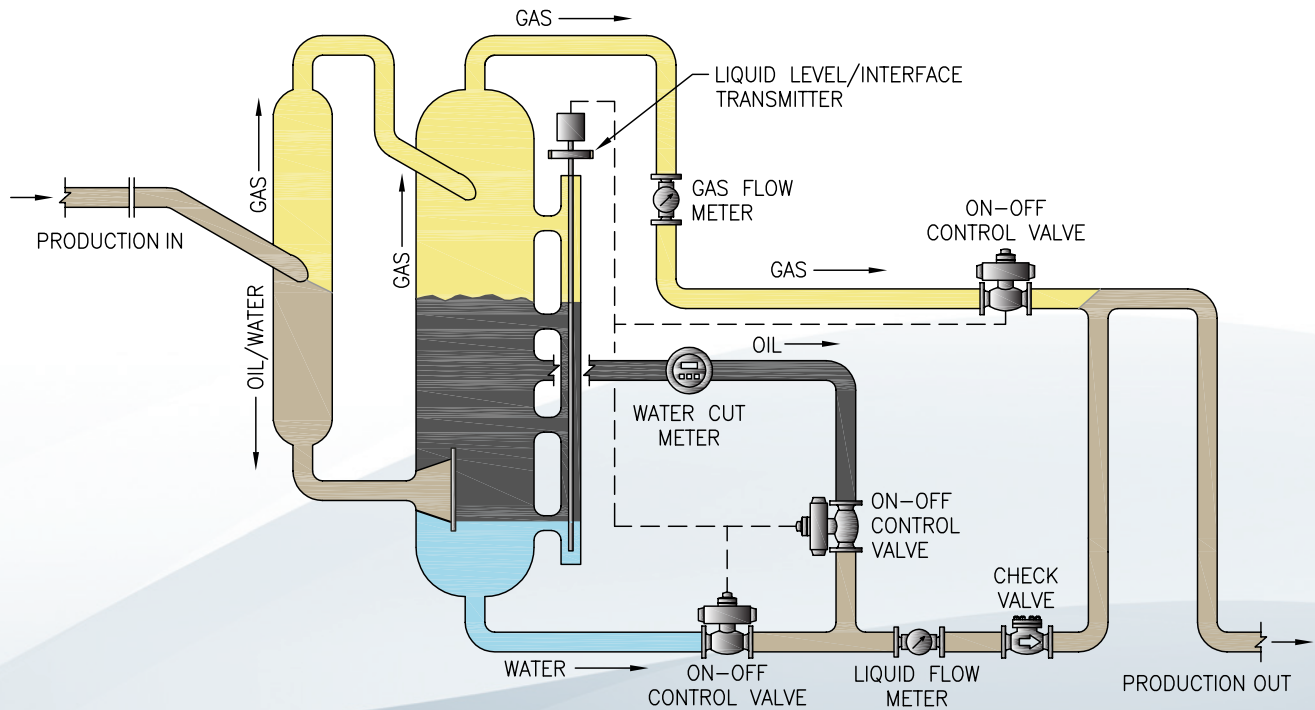
- Low operating cost
- Easy to transport, install & operate
- Very low maintenance
- Accurate Net Oil measurement for very high water cut production
- Handles wide range of flow rates
- Applicable for 0 to 100% water cut
- Applicable for 0 to 100% gas fraction
- Frequent well testing

Anticipated Accuracy

- Liquid flow rate: 1% of reading
- Gas flow rate: 5% of reading
- Water cut in liquid: 2% absolute

Specification

- Footprint: 6'W x 8'L (typical)
- Height: 12'
- Liquid Rate: consult factory
- Gas Rate: consult factory
- ANSI rating: 150#, 300#, 600# and 900#



Accuflow 3P JR trailer mounted for mobile applications



Three-phase JR in Duplex Stainless Steel



Three-phase JR in the field