

ExH2OTM: Bulk water removal system Produced water debottlenecking to unlock production

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Introduction



- ExH2O[™] Bulk water removal system is a compact system which utilises cyclone technology in a twostep approach
- ExH2O[™] is made up of the following units in series:
 - **Preseparation Hydrocyclone**: where partial separation of bulk fluids takes place
 - **Deoiling Hydrocyclone**: where oil-in-water separation takes places
 - Depending on well fluid characteristics and required produced water specification, additional equipment might be necessary
- **Simple** system with minimal facilities
- Low cost alternative to large residence time systems
- Extends the operating envelope of existing processing facilities







- Preseparation hydrocyclones can only successfully process streams in the water continuous phase - typically > 60% water cut.
- Preseparation hydrocyclones are **very tolerant** to the presence of gas. They can accommodate up to **30% GVF** without the need for an upstream degasser.
- The steadier the inlet water cut, the greater the maximum separated water fraction.
- The units have a minimal residence time and therefore are not effective at processing streams with slugging flow regimes.





PRESEPARATION Crude + Free Gas



ExH20TM *Typical package GA*





ExH20TM *Typical package GA*





ExH20TM *Typical package installation*





Production fluids (BPD)



