Subsea separation controls & instrumentation

VetcoGray has a significant experience in providing control & instrumentation sub-systems for subsea separators

Key features & benefits

- Fiber optic data transmission - the use of fiber optics the subsea electric motor variable speed drive communication cables located in the seabed umbilical completely eliminates the effects of crosstalk interference from power cables also contained in the umbilical
- Hi-bandwidth data rate facilitates closed loop control
- Interfaces to level sensors which are able to differentiate the levels of:
  - Water
  - Oil/Water emulsion
  - Oil
  - Oil/Gas foam
- Maximum utilization of standard control system components based on a long track record of supplying field proven control systems for subsea oil and gas production systems

- Controls strategies refined to balance the re-injection of produced water and the delivery of separated oil & gas to surface facilities
- Continuing development of sand management tools and interfaces to sand monitoring sensors
- Subsea separation to modify the composition of produced fluids, and optimize subsea facilities through closed loop control - leading to full 'e-field' implementation
- Application of parallel and dissimilar redundancy strategies to maximize the system availability over the life of the field
- Availability of all industry standard instrumentation data bus configurations for sensor interfaces including SIIS
- Control strategies for separator fluids recirculation to present booster pumps from running hot and dry