

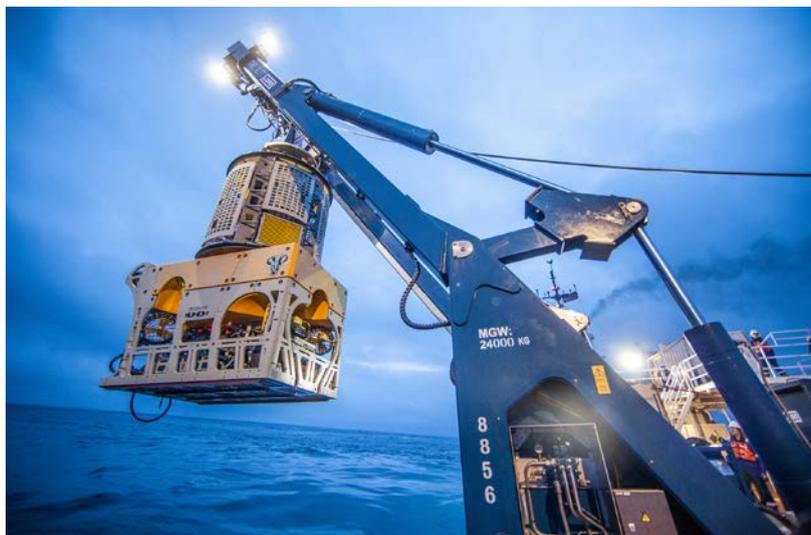
# Schilling Robotics ISOL-8 Pump

- ISOL-8 pump offers 150-hydraulic horsepower auxiliary output
- Meets the full requirements of the API 53 standards for BOP intervention for less than 45-second ram closure, including shearing operations
- Isolated Hydraulic Power Unit integrated into the ROV (no separate pumping skid)
- Consists of eight double acting, servo-controlled, duplex pump modules/pistons
- Each pump module is an independent machine and the array is controlled and synchronized through the control system
- Capable of pumping multiple fluids, including sea water, at high flow rates
- 60-minute maintenance; each module removable



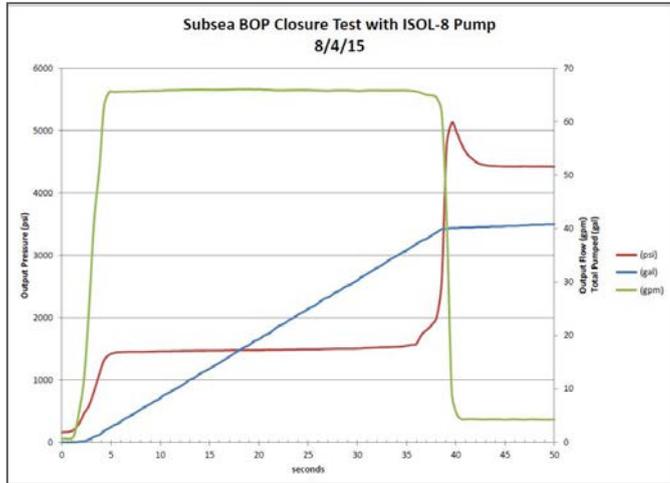
UHD-III configuration with HPU and ISOL-8 pump

The UHD-III remotely operated vehicle with ISOL-8 pump, delivers market-leading performance for the most difficult deepwater applications. The UHD-III vehicle is equipped with the ISOL-8 pump, making it the only work-class ROV that can meet the full requirements of the API 53 standards for secondary BOP intervention, without the need for any additional equipment. The integrated ISOL-8 pump provides 150-hydraulic horsepower available for intervention applications, delivering combined pressures and flows that cannot be achieved with conventional ROV tooling systems. This capability also enables users to perform other demanding tasks, including well intervention, using multiple fluids that can be carried onboard.

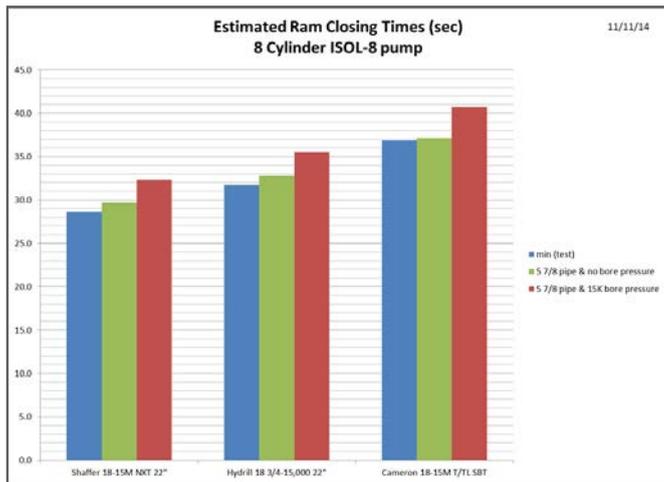


UHD-III

To meet the most demanding intervention requirements, the pressure and flow of the ISOL-8 pump can be controlled from the surface. The pump is capable of producing a maximum output of 50-gpm at 5,000-psi, sufficient to actuate BOP shear rams and achieve full closure in 45-seconds or less as specified by API 53. This level of performance is attained through an eight piston reciprocating pump that can operate with hydraulic fluid or even seawater.



Pressure and flow achieved during BOP closure test



Estimated shear ram closing time per BOP models

## SPECIFICATIONS

### Fluid Compatibility:

- Hydraulic Oil
- Water- Glycol (min. 5% glycol)
- MEG
- Seawater ((intermittent use)

### Input Pressure

- Standard: 4,000psi (275bar) max.
- Intermittent: 5,000psi (345bar) max.

### Output (typical)

#### Eight piston configuration:

- 50 gpm @5,000 psi (189LPM @ 345bar)
- 66 gpm @3,000 psi (250LPM @ 207bar)
- 70 gpm @2,000 psi (265LPM @ 138bar)

#### Four piston configuration:

- 19 gpm @5,000psi (72LPM @ 345bar)
- 33 gpm @3,000psi (125LPM @ 207bar)
- 40 gpm @2,000psi (151LPM @ 138bar)
- 46 gpm @1,000psi (174LPM @ 69bar)

Pump and optional tooling valve pack are capable of pumping two isolated fluids simultaneously

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