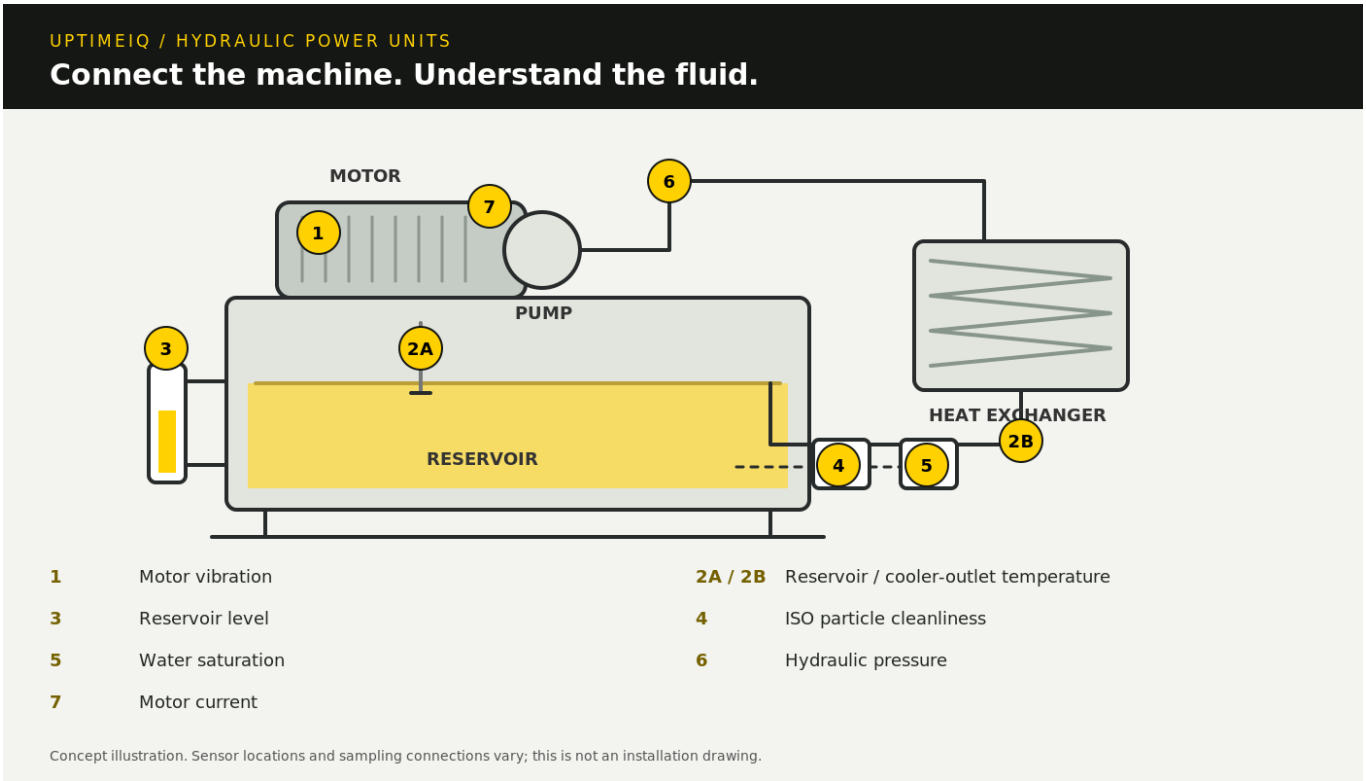
Hydraulic Power Unit Monitoring

Connect the machine. Understand the fluid.

Connect motor vibration, reservoir and heat-exchanger outlet temperatures, fluid level, ISO particle cleanliness, water saturation, pressure and current to UptimeIQ dashboards and alerts.



A connected view for maintenance

Bring mechanical condition, hydraulic operation and fluid health into a shared dashboard. Follow trends together and receive configured alerts when conditions move outside the limits selected for your power unit.

Cloud or on-premise dashboards • Wired or wireless connections

Sensor locations and sampling arrangements are engineered for the HPU. On-premise data hosting uses customer-supplied hosting hardware.

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Seven measurements. One connected HPU view.

1. **Motor vibration**
   Motor and suitable pump or bearing locations; trend changes against an operating baseline.

2. **Fluid temperature**
   Separate readings in the reservoir and at the heat-exchanger outlet. Add an inlet reading for comparison when useful.

3. **Reservoir level**
   Follow level and selected high/low limits using a sensor suited to the tank, fluid and installation.

4. **ISO particle cleanliness**
   Trend ISO 4406 cleanliness against the machine target using a compatible sensor and engineered sampling connection.

5. **Water saturation**
   Follow relative water saturation (% saturation) and temperature. This separate reading is temperature-dependent and is not water content in ppm.

6. **Hydraulic pressure**
   Monitor selected supply or critical lines; choose ranges and connections for operating pressure, fluid and expected spikes.

7. **Motor current**
   Add operating-load context to pressure, temperature and vibration trends.

Plan the points. Connect the signals. Set practical alerts.

Share the fluid specification, normal pressure, reservoir dimensions, cooling arrangement and monitoring goals. UptimeIQ engineering selects compatible sensors, interfaces, sampling arrangements and alert thresholds for your application.

Monitoring supports maintenance decisions and does not replace protective controls or inspections. Particle and moisture readings complement laboratory fluid analysis. Final system design and quotations require UptimeIQ engineering approval.

Technical references

Banner Engineering — Hydraulic Power Unit Monitoring
HYDAC — Machine-specific cleanliness targets
HYDAC — Water Saturation Sensors

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