

Saur: Val D'Europe Nord Pumping Station

Potential Savings Available via optimisation of Pumping Schedule & Refurbishment

part of



saur

mission
water

Specific pumping cost (£/m³)

COST
REDUCTION

TARGET 26% ANNUAL SAVINGS
20% RESILIENCE IMPROVEMENT
ACHIEVE <1 YEAR PAYBACK

200 – 300	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900	900 – 1000	1000 – 1100	1100 – 1200	1200 – 1300	1300 – 1400	1400 – 1500	1500 – 1600	1600 – 1700
0.006	0.007	0.008	0.009	0.010	0.011	0.012	0.013	0.014	0.015	0.016	0.017	0.018	0.019	0.020



riventa

PUMP MONITORING AND OPTIMISATION

WHY OPTIMISE?

Permanently installed technology



DELIVER CRITICAL OBJECTIVES:

**Minimise
Energy
Consumption**

**Maximise
Reliability**

**Prioritise
And
Target
Maintenance**

**Optimise
Operating
Regime**

WHY OPTIMISE?

Permanently installed technology

PROVEN TECHNOLOGY

- Methodology to international standards BS EN ISO 9906 & ISO 5198
- Typical Accuracy of Efficiency $\pm 0.5\%$ and Flow rate $\pm 1.0\%$
- All sensors calibrated to international standards
- Measurements not impacted by site factors
- Real-time monitoring of all parallel pumps in each system [permanently installed]
- Safe and simple wired or wireless installation

PRIMARY MEASUREMENTS

- Suction temperature (mK)
- Discharge temperature (mK)
- Suction pressure (m)
- Delivery pressure (m)
- Electrical power (kW)

REAL-TIME DATA

- Pump efficiency (%)
- Motor power (kW)
- Flow rate (MLD)
- Pump head (m)

PROVEN DELIVERABLES

- Pump refurbishment business case
 - Detect Pump wear & cavitation
 - Oversizing & impeller trim requirements
 - Measured system curve
 - Benchmark current operating regime
 - Identify optimum operating regime [pump schedule]
 - Real-time trending, reporting & operational monitoring via HydraNet platform
-

KNOW WHAT'S HAPPENING IN YOUR PUMP

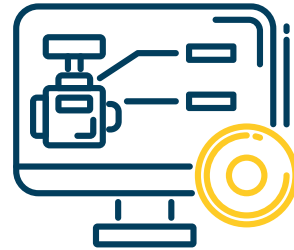
Pump Monitoring and Optimisation enables whole life cost to be minimised for high energy pumping systems. Plan maintenance and optimise pump operation to always meet demand at least cost.

READY TO GO IN THREE EASY STEPS:



1

INSTALL
on pumps,
in stations



2

MONITOR
efficiency &
performance



3

SAVE
get data,
make decisions



1 INSTALL

MINIMISE WHOLE LIFE COSTS

Once you've selected your site, our easy to install FREEFLOWi4.0 pump monitoring system (as shown below) can be up and running with minimal disruption to operations.

Following installation the pump monitoring equipment will provide real-time data, enabling both pump maintenance intervals and pump operation to be optimised.

**ACCURATE
DATA 24/7**



2

MONITOR

REAL-TIME PERFORMANCE DATA

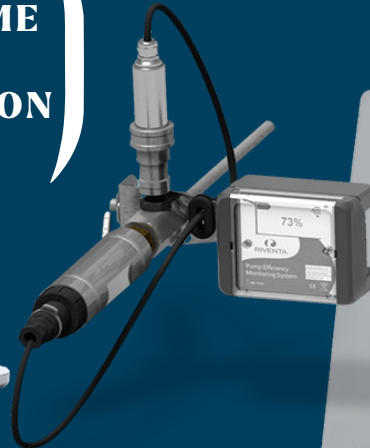
Your real-time data for each asset can be visualised, trended and evaluated, with information-driven insights highlighting performance issues and supporting decisions. You have the option to have instant data and diagnostics flowing into your SCADA system or cloud platform.

Ours is a game-changing approach compared to traditional instrumentation, where each pump's flow-rate and efficiency is measured to high precision so operational performance is maximised.

HOW IT WORKS:

Our FREEFLOWi4.0 pump monitoring system is permanently installed on-site, directly assessing actual operational performance, continuously gathering data and driving on-going optimisation. It's a complete solution for measuring efficiency across pumps, blowers, fans, and turbines.

REAL-TIME DATA COLLECTION



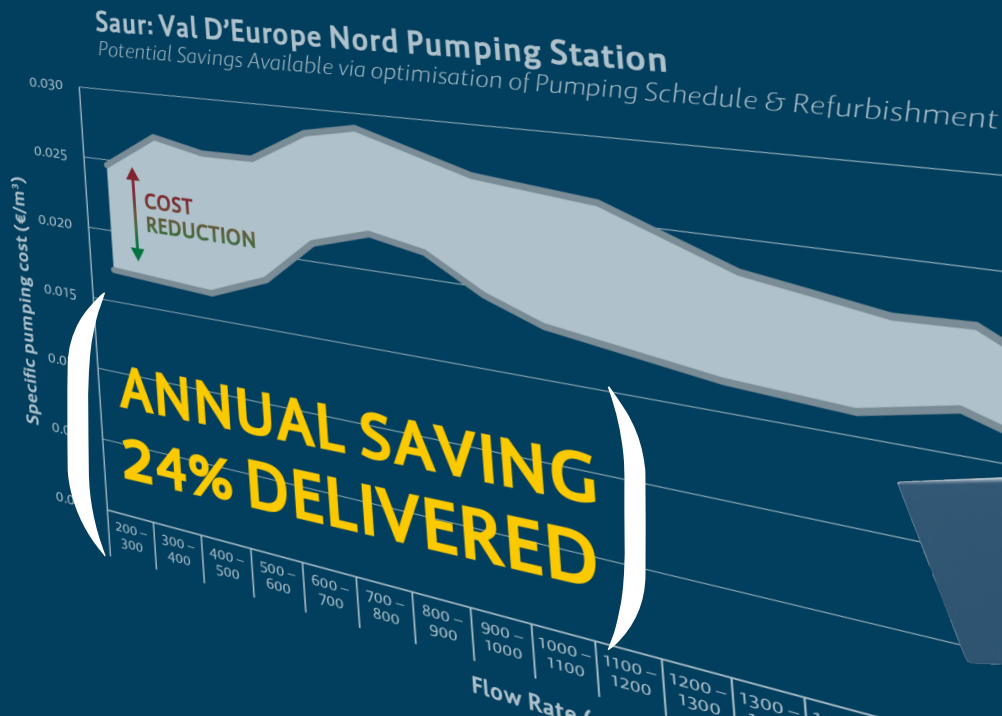


SAVE

ANALYSIS & RESULTS TO DRIVE SAVINGS

Following deployment, we provide a comprehensive report outlining best practice recommendations, realistic payback calculations and a business case for moving forward – all backed by precision measurement and innovative analytics.

We appreciate payback often relies on the ability to implement recommendations quickly. Here, our consultants can assist with extra workload by helping to liaise with pump suppliers regarding pump specifications for example.



OPTIMISE YOUR UTILITY, ONE STATION AT A TIME

See how Saur let Pump Optimisation as a Service flow through its network, delivering outstanding results

Starting with a station pilot and scaling to 66 stations and an entire network,
we achieved a less than 12-month payback for Saur,
the multi-national water utility company.

Get in touch if you want to hear more about the work we implemented
and how we achieved such amazing results.

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