



Your project - Together we succeed

Digitalization in Mass Production: Online Condition Monitoring

INITIAL SITUATION

It is one of the main goals for factories engaged in mass production to ensure that the production process is not interrupted.

Regular investments are made in predictive maintenance of hydraulic systems to reduce the frequency of stops, to prevent unplanned downtime and to keep productivity high. The biggest source of failures and problems in hydraulic systems is oil contamination.

Regularly measuring the condition of hydraulic oil by taking samples causes both extra loss of time and additional labor, and it also does not allow timely detection of contamination.

ARGO-HYTOS emphasizes and raises customer awareness of the need for a system that continuously measures and remotely displays the oil condition of machinery.

SOLUTION

As a solution to this situation, ARGO-HYTOS measured the temperature of the oil in the customer's machines, the relative humidity and the service life of the oil with its LubCos series sensors (LubCos H₂O+ for temperature, relative humidity, RUL (Remaining Useful Lifetime); LubCos Level for oil level), and the contamination with measuring devices such as the OPCom Particle Monitor. Sensors and devices are connected to each other via CANopen interface, and the measured values are collected via a remote gateway (LubMon Connect) and sent to the ARGO-HYTOS cloud.

This data can be viewed from any location via the Internet. Automated messaging can be provided when the set limits are exceeded.

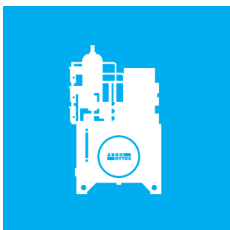
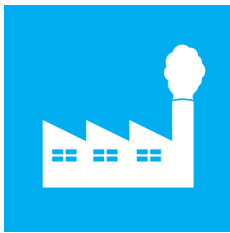
CUSTOMER BENEFIT

- Measurements are taken continuously at 2-minute intervals and full control is provided. Online measuring shows the present status, not the time of sampling
- Serviced when needed, reducing service costs
- Early warning prevents possible damage
- Longer machine lifetime
- Avoidance of unplanned downtime
- Increased machine efficiency
- Uninterrupted mass production is ensured

CONDITION MONITORING OF SCHULER LINE					
LubCosVis+	NOV 12:52:46 Node ID: 1	LubCosVis+	PROVASTAR Node ID: 1	OPCom II	PROVASTAR Node ID: 1
Serial Number 2525	Permittivity [pF/m]	Serial Number 2596	Permittivity [pF/m]	Serial Number 8814	Flow Index 187
Temperature [°C] 25.3 °C	2.302	Temperature [°C] 45.9 °C	2.288	ISO Spm 11	ISO Spm 10
Viscosity [mPa·s] 329.8 mm ² /s	334.2 mm ² /s	Viscosity [mPa·s] 38.5 mm ² /s	49.7 mm ² /s	ISO Spm 10	ISO Spm 9
		LubCosH2O+II	PROVASTAR Node ID: 1	OPCom II	PROVASTAR Node ID: 1
		Humidity [%] 2.3 %r-e1	Conductivity [pS/m] 11500 pS/m	Serial Number 8672	Flow Index 228
		Temperature [°C] 43.9 °C	Permittivity [pF/m] 2.284	ISO Spm 16	ISO Spm 15
		RSD [%] 2312 h	Alarm Process [s] 1.2 %	ISO Spm 15	ISO Spm 15



APPLICATIONS



Curious?

Do you have a similar challenge for us? Our expert Mr. Erhan will be happy to advise you!



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