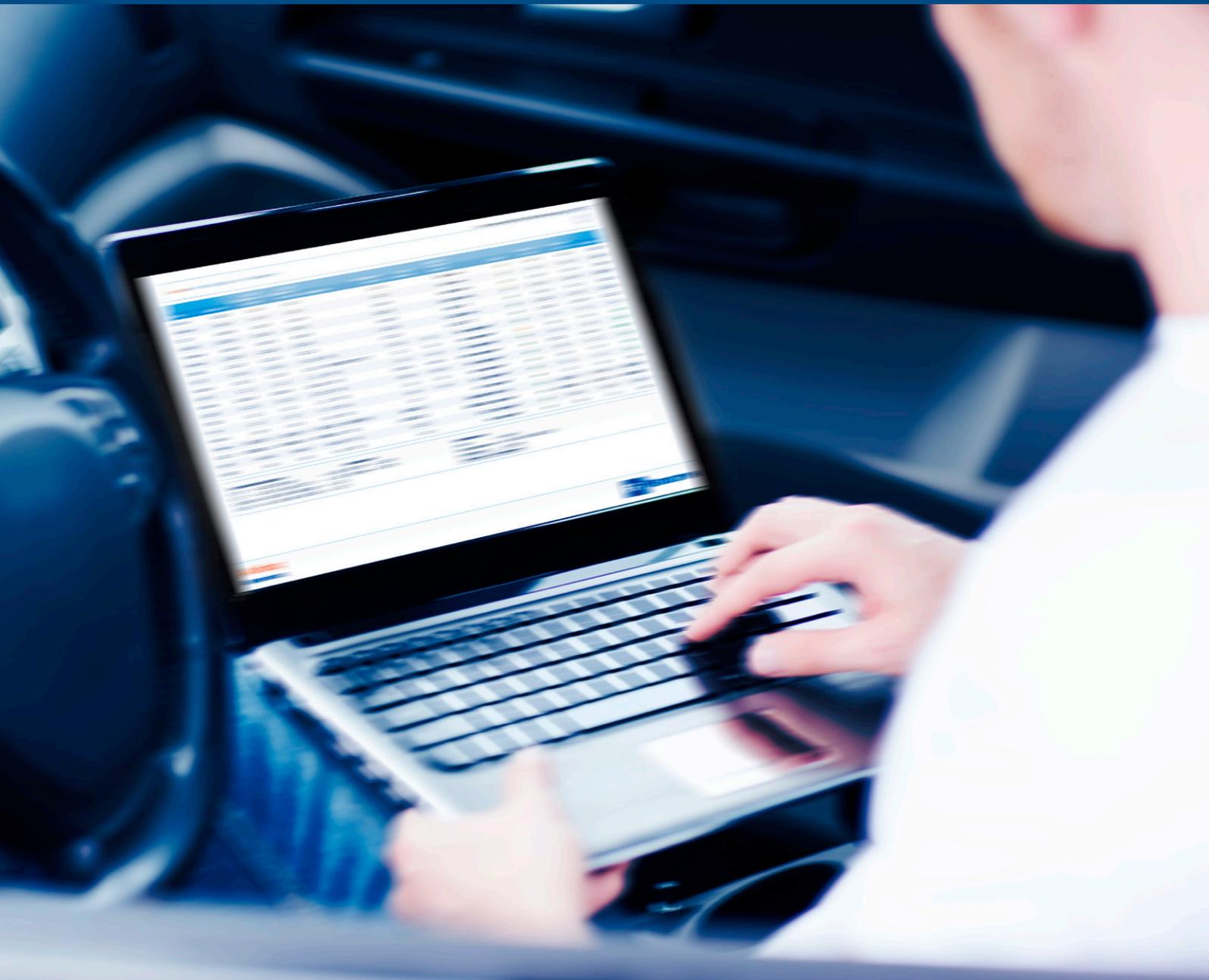


One Source

ReportLoq
Environmental reporting:
– whenever and wherever you want



Airloq
gas analysis



ReportLoq

Environmental reporting: – whenever and wherever you want

FLSmidth's web-based environmental reporting system for waste incineration plants, large combustion plants and cement factories sets a new standard for data collection and emissions reporting.

FLSmidth's many years of experience and wealth of know-how in the area of emissions reporting forms the basis for the new system, which combines tried and tested technologies with new cloud technology.

ReportLoq allows employees with responsibility for the environment to extract up-to-date reports and monitor the system wherever and whenever they want. The application can be launched from any browser and any portable unit, thereby

providing a whole new degree of flexibility. This makes for simple and easy access to emissions data from home, the office and the control room and via tablets or mobile units.

All data is securely stored on FLSmidth's servers, which also ensure automatic backup. ReportLoq also removes the need for operation and maintenance of local server solutions, resulting in a flexible, more secure solution than traditional analysis systems provide.

With its user-friendly interface and wide range of reporting functions, ReportLoq also provides new possibilities for the proactive use of data. And multiple users can be set up in the system as needed.



ReportLoq is monitored 24/7 and the system is updated regularly in accordance with current standards. ReportLoq is available at an attractive subscription price, covering all software costs associated with operation and maintenance of the system.

Sparring partner for industry

Waste incineration plants, large combustion plants, cement factories and many other industries need to comply with all kinds of regulations and requirements on emissions reporting.

FLSmidth participates in the standardisation process in the EU. This process ensures that we keep up-to-date at all times with the latest information in the area of emissions: gas analysis, reporting, upcoming

legislation etc., which is a huge benefit for our customers.

Secure data collection

ReportLoq consists of an on-site PC that collects all environmental components from the analysis equipment. All analysis data is transferred, via a secure connection, to FLSmidth's server farm, where all environmental reports are generated.

The analysis system communicates with the on-site PC using a controller. Thus, it is possible to input corrective calculations directly into the industrial control system (ICS).

Data security

Should the internet connection go down between the on-site PC and

Any questions? Please call FLSmidth Airdog at: +45 70 10 22 77

Name	Raw value	QoS calibrated value	QoS calibrated value	Correction	Corrected value	Confidence interval	Quality status	Valid	10 min. avg.	30 min. avg.	1 day avg.
flin	30.0	30.0	30.0		30.0		30.0 min.	✓	30.0	30.0	30.0
Filter	30.0	30.0	30.0		30.0		30.0 min.	✓	30.0	30.0	30.0
O2	7.92	7.92	7.92		7.92		7.92 Vol%	✓	7.49	7.75	7.78
H2O	23.40	23.40	23.40		23.40		23.40 Vol%	✓	23.56	23.23	23.48
Temp	78.7	78.7	78.7		78.7		78.7 °C	✓	78.9	78.4	78.9
Press	1.223	1.223	1.223		1.223		1.223 hPa	✓	1.222	1.222	1.218
EBK	1.058	1.058	1.058		1.058		1.058 °C	✓	1.052	1.051	1.129
CO	14.3	14.3	14.3	*K_O2	11.0	5.0	6.0 mg/Nm ³	✓	7.8	10.9	13.5
Dust	0.7	0.7	0.7	*K_H2O*K_O2*K_P*K_T	0.7	3.0	0.0 mg/Nm ³	✓	0.0	0.0	0.0
HCl	4.7	4.7	4.7	*K_O2	3.6	4.0	0.0 mg/Nm ³	✓	0.0	0.0	0.1
NOx	188.9	188.9	188.9	*K_O2	144.4	40.0	104.4 mg/Nm ³	✓	90.3	94.4	112.2
SO2	28.6	28.6	28.6	*K_O2	21.9	10.0	11.9 mg/Nm ³	✓	12.7	11.5	20.7
TOC	0.6	0.6	2.7	*K_O2	2.0	3.0	0.0 mg/Nm ³	✓	0.0	0.0	0.0
HF	0.8	0.8	0.8	*K_O2	0.6	0.4	0.2 mg/Nm ³	✓	0.2	0.2	0.1
NH3	0.9	0.9	0.9	*K_O2	0.7		0.7 mg/Nm ³	✓	0.6	0.7	0.6
Flow	174.059	174.059	174.059	(K_H2O*K_O2)	174.421		174.421 Nm ³ /h	✓	178.567	174.033	174.575
CO2	308.931.6	308.931.6	308.931.6	*K_O2	236.150.1		236.150.1 mg/Nm ³	✓	234.715.5	236.278.0	235.743.1
NO	123.5	123.5	123.5	*K_O2	94.4		94.4 mg/Nm ³	✓	85.1	87.8	99.4
NO2	0.0	0.0	0.0	*K_O2	0.0		0.0 mg/Nm ³	✓	0.0	0.2	0.1

Correction factors: K_P = 0.933 (P act) Constants: O2_ref = 11.00
 K_T = (273 + T_act) / 273 O2_max = 17.00
 K_H2O = 100 / (100 + H2O_act) K_O2 = 1.11
 Delay = 30 sec.

Information: Line = Line 1
 Last updated = 05-03-2014 08:53:39
 Delay = 30 sec.

FLSmith, the collection of data will continue on the on-site PC, which has the capacity to store up to a year's worth of raw values.

The internet connection can thus be re-established without any loss of raw data. As an extra security function in the ReportLoq system, the installed controller can also store raw values for up to 30 days.

Real-time monitoring

ReportLoq ensures that operating technicians can monitor the current emissions values – not only traditional raw values, but also QAL3- and QAL2-corrected, normalised and validated values. Everything is easily

monitored from ReportLoq's innovative and simple user interface.

Trends can be quickly and easily generated according to user needs, be they emissions components or desired time intervals.

Instances of environmental exceedings will appear as alarms which can be commented on directly in ReportLoq. These comments can be printed as environmental exceeding reports and forwarded directly to the environmental authorities or used internally.

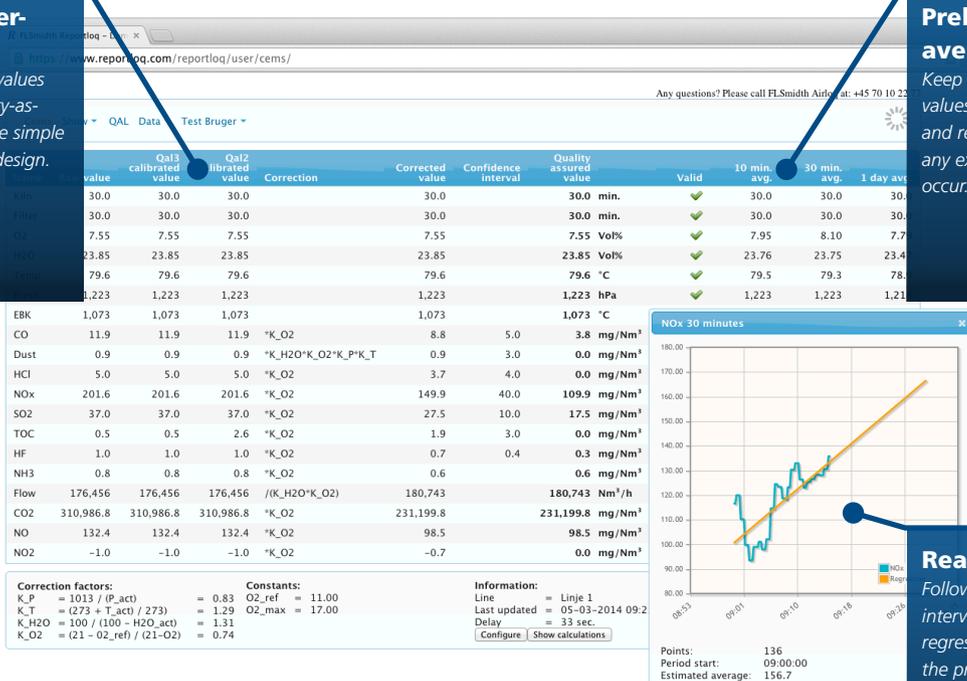
Advanced prevention alarms, based on projections of current emissions data, enable the operator to respond

Detailed overview

Follow measured values from raw to quality-assured values in one simple and user-friendly design.

Preliminary average

Keep an eye on interval values as they progress and receive alarms before any exceeding incidents occur.



Real-time graphs

Follow the progression of interval values and see the regression analysis behind the projected values.

appropriately in order to avoid non-compliance with environmental requirements.

Quality assurance EN14181

ReportLoq has integrated functions for controlling and recalculating data in connection with QAL2 and QAL3 calibration functions, and the values can be entered via a web browser. ReportLoq registers and calculates QAL3 adjustments based on the CUSUM method specified in EN14181.

Data validation

Our ongoing development of ReportLoq incorporates advanced data validation methods, ensuring that the quality of every single data set is precise.

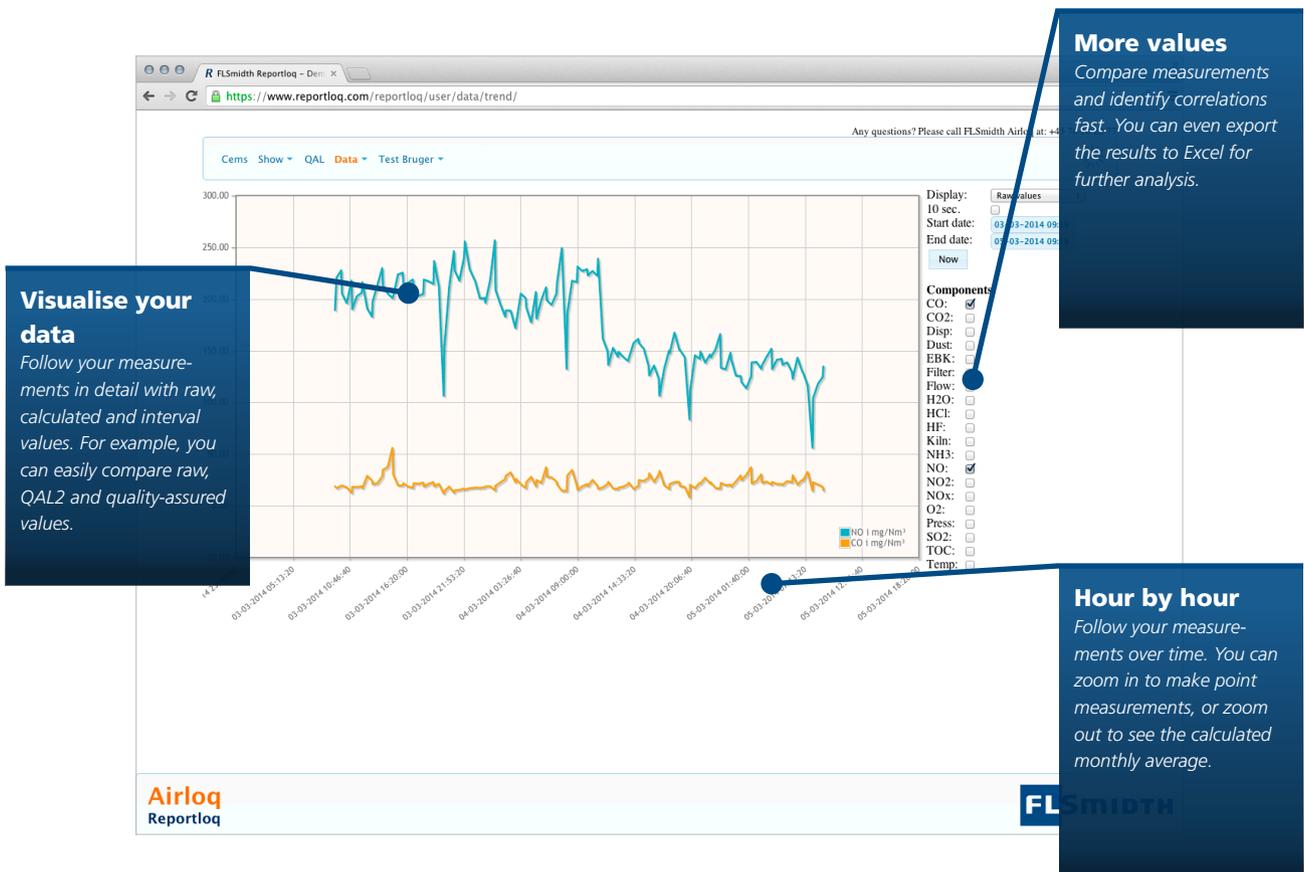
These validation methods are continuously used in connection with system updates, guaranteeing that all data is correct and functional.

Ongoing maintenance

Backup and data protection of all environmental data are carried out by FLSmidth's IT department.

Monitoring of site data – age of logged data, controller status, on-site PC, etc. – is carried out by experts from our reporting department to prevent any problems.

Similarly, the ReportLoq system will be regularly adjusted and updated with functionality improvements.



Visualise your data

Follow your measurements in detail with raw, calculated and interval values. For example, you can easily compare raw, QAL2 and quality-assured values.

More values

Compare measurements and identify correlations fast. You can even export the results to Excel for further analysis.

Hour by hour

Follow your measurements over time. You can zoom in to make point measurements, or zoom out to see the calculated monthly average.

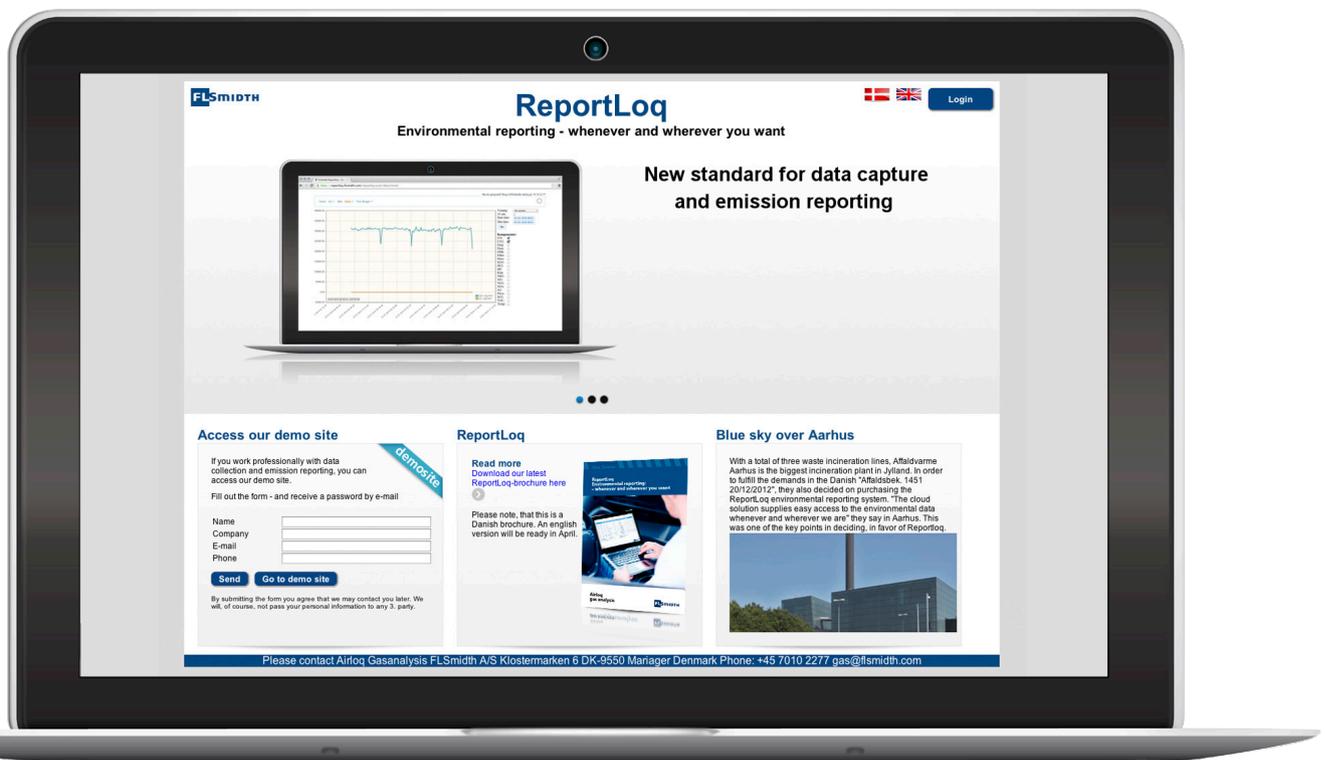
Subscription for security

Check out our demo site

At www.reportloq.com, you can find out more about ReportLoq and log onto our demo site, which will give you a detailed introduction to the system's many functions and advantages.

ReportLoq is a subscription-based system that covers all software costs associated with operation, service and maintenance of the system.

ReportLoq helps organise your environmental reporting and ensures a maintained solution that complies with the specific statutory requirements.



Features

- Environmental reporting with extra flexibility
- System access via browser
- Based on FLSmidth's experience and knowledge base for reporting
- Reporting in compliance with the Directive 2010/75/EU on industrial emissions, Annex V (large Combustion plants) and Annex VI (waste incineration plants)
- Separate reporting system dedicated to environmental reporting
- Quality assurance in compliance with EN 14181
- Continuous adjustments and functionality improvements implemented in the system
- User-friendly display of emissions values
- Advanced data validation methods
- Quality assured emissions values
- Graphic data for raw values, QAL3, QAL2 and normalised values
- Integrated backup
- QAL3 calculations and corrections
- Direct comments on non-compliance incidents
- Simple and intuitive user interface
- Guaranteed secure data storage for 5 years

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