



LuCA (Lubricant Condition Analysis)

Guidelines for use

KLÜBER
LUBRICATION
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How to Apply for LuCA

After ordering the oil/grease sampling kits please go on with the following steps:

Step 1

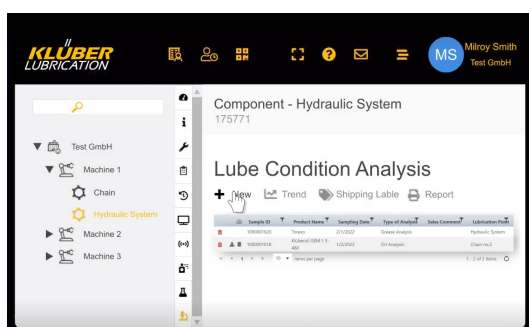
Please contact your Klüber or Summit representative who will create an account for you in the EfficiencyManager online service portal. You will then receive an email invitation allowing you to access your account.



www.efficiency-manager.com

Step 2

Create a machine tree: from the customer location to the production plant, to the application and component – you control the lubrication points of interest.



Step 3

Use the kit for taking samples and label the samples with the included Sample ID barcode.

For oil sample taking:

- Take the oil sample at operating temperature only; do not heat the sample container above 75 °C;
- Flushing of sampling point: reject the first small oil quantity taken and use the following oil as sample to be filled into the sample container;
- Take representative samples only, no deposit!
- Required sample quantity: approx. 100 ml (sample container 2/3 to full);
- Stick the barcode label (Sample ID) enclosed in the sample kit onto the sample container;
- Pack the sampling container in the enclosed plastic bag.

Note: It is also possible to make an analysis of another manufacturer's lubricant. In this case a fresh sample must also be provided for comparison.

Step 4

Take an oil or grease sample and scan the barcode on the sampling vessel for analysis. By pairing with a barcode scanner in EfficiencyManager or by manually entering the sample number, an application form opens.

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Step 5

Fill in a form with additional information such as name of lubricant, operating hours, operating temperature, etc.

The screenshot shows a web form titled 'Lube Condition Analysis'. It contains several input fields: 'Analysis' (dropdown), 'Manufacturer' (dropdown), 'Article Number' (text), 'Product Name' (text), 'Batch' (text), 'Technical Element' (dropdown), 'Lubrication Point' (text), 'Sample Condition' (dropdown), 'Sampling Date' (calendar), 'Date of last Lubrication Change' (calendar), 'Operating Hours' (text), 'Operating Temperature' (text with °C unit), 'Filling Quantity' (text), 'Special influences / requests / comments' (text), and 'Language of Expert Recommendation' (dropdown). A 'Send' button is at the bottom right.

Step 6

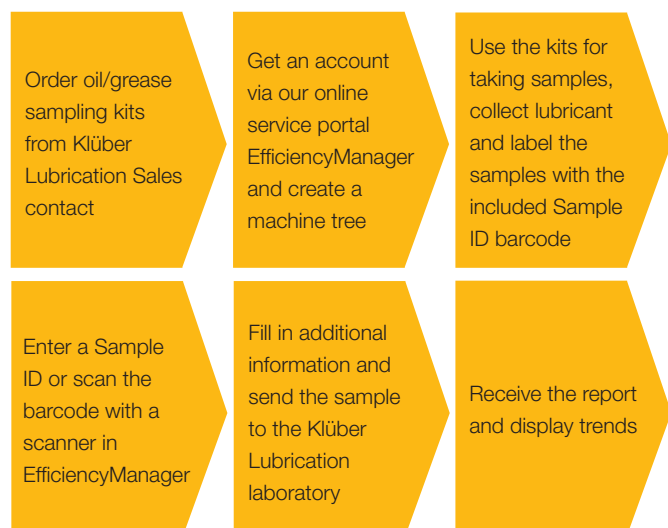
Send a sample to laboratory.

You receive a packing note and depending on your location the right Klüber Lubrication laboratory will be selected automatically. If samples are shipped from outside of the US, include the necessary shipping documents for customs.

Step 7

You will receive the results of the analysis in EfficiencyManager in a summarized report showing in user friendly form the actual operating condition of your lubricant, line, application and component. It's even possible to display trend and history reports flexibly for selected samples.

LuCA (Lubricant Condition Analysis) process



Benefits of LuCA:

- Efficient time-saving process by sending your lubrication analysis request online directly to the Klüber Lubrication laboratories
- Effective sample matching by using a unique barcode on the sample label and the machine (pairing)
- Easy and clean sampling by using our Klüber
- Lubrication oil and grease sampling kits
- Automated reminders for sampling based on your digital operation inspection plans
- Automated assignment of reports to your subsidiary, line, application and component
- Trend and history reports, flexible reports for custom time periods with focus on your various parameters

LuCA – Scope of Testing

LuCA are periodic lube analyses which are to be compared with former samples as well as fresh reference data and include the following tests:

An OCA analysis in detail includes (100 ml):

- **Chemical and physical parameters:** color, transparency, structure, consistency, kinematic viscosity at 40 °C, total acid number (TAN), water content
- **Basic additive analysis:** elemental analysis (ICP)
- **Basic wear metals analysis:** elemental analysis (ICP)
- **Optional:** purity level acc. to ISO 4406, MPC

A GCA analysis in detail includes (10* – 40 g):

- **Chemical and physical parameters:** color, structure, consistency, dynamic viscosity, water content
- **Basic additive analysis:** elemental analysis (ICP)
- **Basic wear metals analysis:** elemental analysis (ICP)

***Note:** 10g is a minimum quantity to make a grease analyses, but only one attempt is possible with this amount.



To get the LuCA guidelines in different languages, please scan the QR code