LUBExpert®

A complete ultrasound solution to manage your acoustic lubrication and condition monitoring program.

LUBExpert tells us when to grease… and when to stop.

Grease reduces friction in bearings. Less friction means longer life. LUBExpert alerts you when friction levels increase, guides you during re-lubrication, and prevents over and under lubrication.

LUBExpert Dynamic connects the Lube Team with the ConMon Team.

LUBExpert Dynamic delivers advanced analysis of bearing condition. During grease replenishment, dynamic data is captured in the background. These outcomes are fed to the condition monitoring team to help assess real-time bearing condition.

Grease Bearings Right

Right Grease
Stops lube-techs from mixing incompatible greases.

Right Outcome
LUBExpert knows the condition of the grease and the bearing. Now you do too!

Right Asset
On-screen instructions guide lube techs to the correct asset every time.

Right Schedule
LUBExpert's data-driven outcomes help strategists establish the best lubrication intervals.

Right Amount
Put an end to over and under lubrication once and for all.

LUBExpert Features

Bearing Database
LUBExpert maintains a database of all your assets including bearing type and dimensions.

Guided & Free Modes
Lube techs can choose between "FREE" and "GUIDED" modes to grease bearings right.

Shopping List
LUBExpert reminds you to bring the right grease type, gun, and quantity for the day's lube tasks.

Automation
LUBExpert removes the guesswork by automatically calculating the stabilization time between grease pumps.

Work Orders
The workflow inherent in LUBExpert restores order and discipline to your lubrication program.

System Messaging
LUBExpert uses messaging to document each decision made by the lube-tech. I.E. "satefy risk", "asset not in operation".
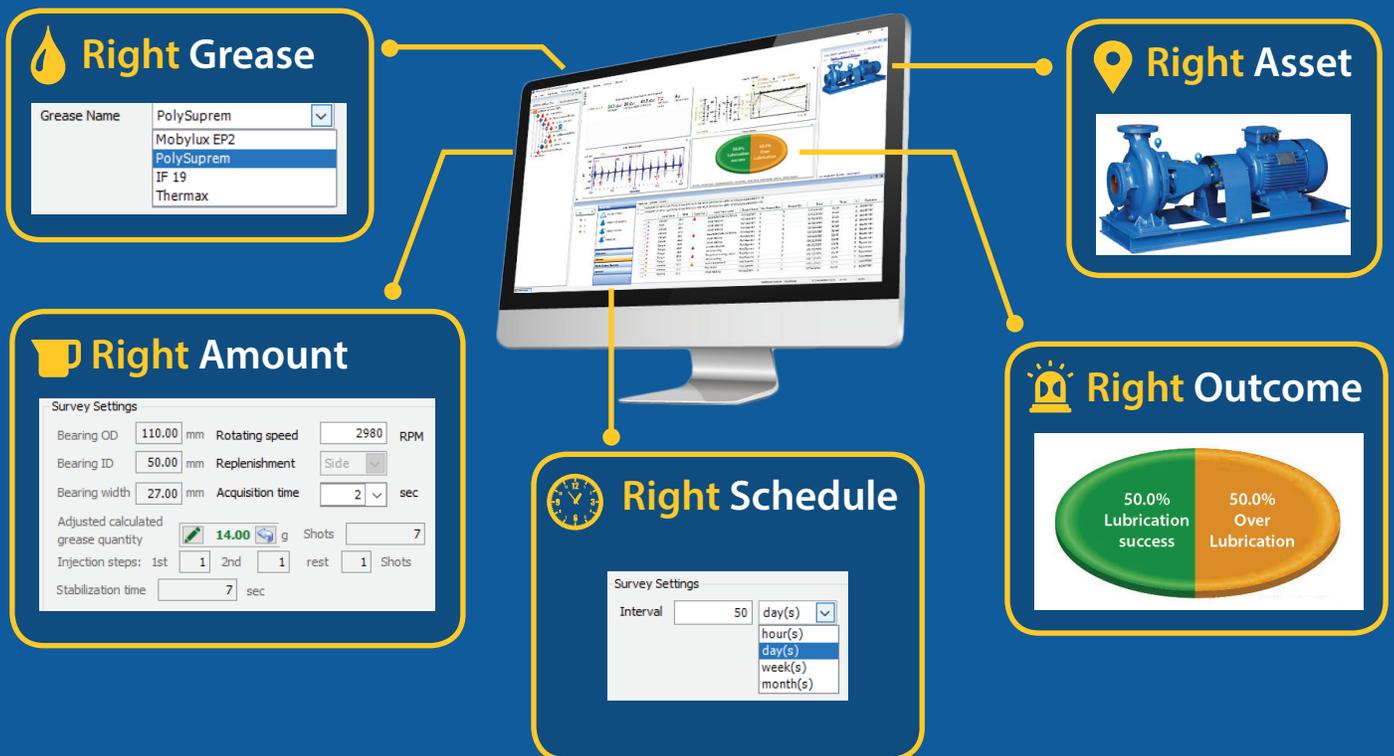
LUBExpert Dynamic
With the **Dynamic Option**, you'll reduce data collection time while increasing the efficiency and communication between the lube and condition monitoring teams.

Ultranalysis® Suite 3

Manage, trend, and analyze your ultrasound data.

- Create hundreds of databases and surveys
- Track grease types and grease consumption
- Precise diagnosis with SDT's 4 Condition Indicators
- Sort assets by status: lubrication success/failure, over greased, shorten interval, suspected bearing failure, …

During any lube task, the **Dynamic Option** collects analytics in the background, thereby providing asset condition data to both the lube and condition monitoring teams. This is a win for communications, efficiency and overall reliability.

Right Grease

Grease Name	PolySuprem
	Mobylux EP2
	PolySuprem
	IF 19
	Thermax

Right Asset

Right Amount

Survey Settings

Bearing OD	110.00	mm	Rotating speed	2980	RPM
Bearing ID	50.00	mm	Replenishment	Side	
Bearing width	27.00	mm	Acquisition time	2	sec

Adjusted calculated grease quantity 14.00 g Shots 7
Injection steps: 1st 1 2nd 1 rest 1 Shots
Stabilization time 7 sec

Right Outcome

50.0% Lubrication success | 50.0% Over Lubrication

Right Schedule

Survey Settings

Interval	50	day(s)
		hour(s)
		day(s)
		week(s)
		month(s)

Break Down the Silos

Dynamic data collected by LUBExpert is displayed in UAS3 in the Time and Frequency domain.

This dual reliability benefit saves time while removing information silos.

The lubrication team can now collect dynamic data for the condition monitoring team.

Asset condition information is now transparent across departments.

The **Dynamic Option** completely removes the information gap between lubrication and condition monitoring teams. By having the Lube Team collect and (if necessary) monitor Dynamic data, it becomes an integral member of the Condition Monitoring Team.

LUBExpert Kit

- LUBExpert Standard Device
- Universal Battery Charger
- Ultranalysis Suite 3 (UAS3) Master
- Headphone, Neckband
- Shoulder Strap and Leather Belt Holder w/ Clip
- USB Cable
- SDT USB Memory Drive
- LUBExpert Custom Carrying Case
- LUBEsense1 Contact Sensor w/ Cable and Magnetic Bases
- LUBEAdaptor
- Grease Gun Mounting Cradle

LUBExpert Specifications

General	
External Sensor(s)	SDT LUBEsense1 only
Internal Sensor(s)	Infrared Temperature
Software Compatibility	Ultranalysis Suite 2 Ultranalysis Suite 3
System	
Operating System	Linux
CPU	ARM9
Data memory	256 Mb
Signal Processing	
Dynamic range	109 dB
Resolution	16 bits
Sampling rate	256 kHz
Response time	<10 ms
Ultrasound Measurement	
Measuring Range	-15 to 120 dBµV
Resolution	0.1 dBµV
Signal to Noise Ratio	-6 dB
Bandwidth	36.1 to 40.4 kHz
Condition Indicators	RMS, maxRMS, Peak, Crest Factor
Heterodyne Sampling Rate	8000 Samples/s (dynamic version)

Temperature Measurement	
Measuring Range	-70 to +380°C /-94 to +716°F
Accuracy (0 to 50°C / 32 to 122°F)	± 0.5 °C / ± 32.9 °F
Field of View (attenuation of 50%)	10°
Data Collector	
Memory Capacity	More than 10,000 data distributed over more than 10,000 measurement locations
Mechanical Characteristics	
Display	Graphic Backlit LCD (128 x 64)
Housing	Extruded Aluminum, Shockproof Rubber Protection
Dimensions	226 x 90 x 40 mm / 8.90 x 3.54 x 1.57 in (L x W x H)
Weight	830 g / 29.3 oz
Operating and Storage Temperature	-15 °C to +60 °C / 14 °F to 140 °F
IP rating	IP 40
Power	
Battery	Rechargeable NiMH battery.
Nominal Capacity	4.4 Ah
Autonomy	+8 Hours
Recharge Time	6 Hours
Battery Charger	110-230 VAC, 50/60 Hz
Headphone	
Noise Reduction Rating	25 dB

SDT Mission

SDT provides ultrasound solutions that help our customers gain a better understanding about the health of their factory. We help them predict failures, control energy costs, and improve product quality while contributing to the overall reliability of their assets.

SDT Ultrasound Solutions
HEAR MORE

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